Background Noise
Second Edition

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Perspectives on Sound Art

By

Brandon LaBelle

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Preface to the Second Edition

The project of *Background Noise* developed out of a personal moment: having pursued an artistic practice increasingly focused on sound and the auditory, I was equally inspired to nurture fuller understanding and reflection on a history of sound art. This spirit of investigation and curiosity was charged by my involvement in the sonic cultures taking place in Los Angeles in the 1990s. In short, I felt motivated by the friends and colleagues around me, whose work in experimental sound, performance, and noise music echoed and encouraged my own. As a participant, it felt important to deepen critical and historical views so as to enrich the creative vitality of this work; to further encourage and cohere the collaborations and exchanges an ever-growing group of us were involved in, as well as to be curious about future possibilities.

This developed through two different activities, one being the establishment of Errant Bodies Press in 1995 (for which I continue to work as editor), and the second, launching the Beyond Music Sound Festival in 1997. These projects were spurred on by a feeling for the importance of self-organization, and for creating contexts that would support experimental sound practices and related discourses. Through this work I hoped to further contribute to what I saw as an important group of artists working in Los Angeles, while also creating links to an international community. The resulting series of sound festivals I organized at Beyond Baroque literary arts center (located in Venice Beach, and in collaboration with the director at the time, Fred Dewey), and the subsequent anthologies I co-edited, *Site of Sound* (with Steve Roden, 1999), *Writing Aloud* (with Christof Migone, 2001), and *Surface Tension* (with Ken Ehrlich, 2003)—these were extremely important and enriching sources of research and exchange, as well as inspiration and encouragement. Undertaking these projects afforded highly generative opportunities for questioning and imagining what a sound art could be, materially, theoretically, culturally. In particular, the annual festival created a physical site for grouping together a diversity of sound works and social activities, and through a practice-based situation filled out a range of thoughts with materiality, including the intensities of direct interactions and conversations occurring in and around events, and between artists and audiences. It was through bringing together practitioners from around the world alongside local artists to perform, install, activate, and intervene within

a particular building, and within a particular cultural moment, that I experienced first hand the promising dynamics of an art of listening, one that for me continues to offer a radical base for cultural production and reflection, not to mention public life.

After this intense period of sited work in Los Angeles, culminating in 2002 with the final festival, I felt it necessary to locate myself within another frame, one that would provide a space for more academic study and interdisciplinary contact, where I might research, write, and reflect upon what I had grown to see and hear as a vital practice. At the London Consortium I found such an opportunity, where I subsequently spent four years developing and writing *Background Noise* (under the inspiring supervision of Steven Connor and Allen S. Weiss).

My doctoral work was always about formulating a history of sound art, yet I also felt it necessary to do so by explicitly staying close to artistic works: to widen the frame of understanding by getting closer to particular sonic expressions, and their historical figuring, and yet also, as always, searching for productive points of contamination and association. This took shape mostly by incorporating questions of spatiality and spatial practices. I had always felt the extremely close kinship between sound art and aspects of installation, site-specific, and contextual methodologies to be of extreme importance, and *Background Noise* is deeply shaped by such a view. In this regard, my research led to a greater appreciation for sound art in relation to questions of environment, location, site, and architecture, all of which loop in and out of the selected projects and histories I examine. Such an ambition was also motivated by the desire to bring sound art into more overt conversation with the legacies of conceptual, installation, and performance art, and their contemporary iterations. To supplement, as a reminder and remainder, these artistic discourses with sound's historical and crucial figuring.

Returning to *Background Noise* now, after more than ten years from starting the work, I'm of course full of new thoughts, experiences, and discourses as well as ambitions and collaborations; much has also changed since that time, as a great deal more works and voices have appeared to contribute to the emergence of sound studies, and the establishment of multiple sound art pedagogies, not to mention new sonic art forms. These are exhilarating developments, which I'm happy to continue to find myself a part, within this now expanded community. It makes me realize that a lot has changed since my time in Los Angeles, where a diverse group would gather at various clubs and backrooms in the city, to work out a sonic art, one which often did not have a particular name (and definitely no laptops, not yet), and that carried great curiosity and inventiveness, as well as hesitation. While we may resist labels, it is the formulation of certain articulations that may also enable and enrich, leading to greater cultural movement. The question may be to bring forward continual energy and critical reflection onto how those articulations come to live in the world. It is such a view that leads to this second edition of *Background Noise*. My intention has been to revisit the work by way of a new essay focusing on the "subnatural" and the "non-human." This appears as an

extended appendix and quite literally is envisioned as a further dimension to the book, adding new material that may further expand understandings of the relational reach of sound art. I have also taken the liberty of reviewing and giving correction to various historical and grammatical errors, as well as errors of citation, all of which no doubt arose from my own inexperience at the time as a researcher, as well as from the often overwhelming strain doctoral candidates find themselves in. It is these changes and additions that I hope can contribute to future readings.

Looking back over *Background Noise* from my current vantage, I also begin to relearn much of its lessons; as a reader I take from it a particular education on valuing sound art as an expanded practice whose hybridity and experimental ethos marks it as a generatively diversifying project. From its pages I come to recognize sound art as a key historical as well as contemporary cultural form by which many voices may be heard, yet in a way as to bring forward an investigation for the ways in which such voices realize themselves and find their audience—sound, place, and materiality, along with the dynamics of address. As a practice, it defines strategies by which the inanimate may come to life, and the animate may grab us more fully. In this way, sound art is a practice of primary animations, yet one equally tied to multiplicity, noise, and excess, as well as slow attention, silence, and elongated durations, giving rise to a politics of the aural sense and the sensible. I would underscore "background noise" as that which supports our inhabitations and our conversations, our emotional and social communities by delivering often unexpected interaction and confrontation. In this regard, I'm interested to insist more completely on the vibrant dynamics instigated by sound art through which background and foreground truly collapse, and the center and periphery come to meet.

Introduction: Auditory Relations

Sound is intrinsically and unignorably relational: it emanates, propagates, communicates, vibrates, and agitates; it leaves a body and enters others; it binds and unhinges, harmonizes and traumatizes; it sends the body moving, the mind dreaming, the air oscillating. It seemingly eludes definition, while having profound effect.

Sound art as a practice harnesses, describes, analyzes, performs, and interrogates the condition of sound and the processes by which it operates. It has been my intention to historically follow the developments of sound as an artistic medium while teasing out sound's relational lessons. For it teaches us that space is more than its apparent materiality, that knowledge is festive, alive as a chorus of voices, and that to produce and receive sound is to be involved in connections that make privacy intensely public, and public experience distinctly personal. In this way, this writing attempts to describe what sound is always already doing, yet as framed by the eccentric and productively rich context of art and music and their respective experimental edges.

In writing such history, I have been interested in engaging with specific artists, their specific works, and their auditory operations and intuitions so as to lend more thorough consideration onto instances of sound art at its most social, its most spatial, and within its most public moments, where it is brought self-consciously into play with the intention of performing with and through surrounding space, places, and the perceiving body, inside crowds and through acts of charged listening. To register sound in the effects on perception and the hearing subject, to mark it as spatial and architectural, and therefore integral to the built environment, to speak it so as to shatter the acoustical mirror in which the self and sound bring each other into relief. And to listen intently to all that comes back. For sound itself has drawn my attention to the stirrings of interaction, the intensities of the voice, the resonances of architectures, and the potential of cultural production to address an audience.

It is my view that sound's relational condition can be traced through modes of spatiality, for sound and space in particular have a dynamic relationship. This no doubt stands at the core of the very practice of sound art—the activation of the existing relation between sound and space. It is my intent to contribute to this

understanding by supplying the very equation of sound and space with degrees of complexity, detail, and argument.

Engaging the dynamic of sound and space initially leads us to a number of observations and realizations, which may at first open up perspective on sound art. First, that sound is *always* in more than one place. If I make a sound, such as clapping my hands, we hear this sound here, between my palms at the moment of clapping, but also within the room, tucked up into the corners, and immediately reverberating back, to return to the source of sound. This acoustical event implies a dynamic situation in which sound and space converse by multiplying and expanding the point of attention, or the source of sound: the materiality of a given room shapes the contours of sound, molding it according to reflection and absorption, reverberation and diffraction. At the same time, sound makes a given space appear beyond any total viewpoint: in echoing throughout the room, my clapping describes the space from a multiplicity of perspectives and locations, for the room is here, between my palms, and there, along the trajectory of sound, appearing at multiple locations within its walls, for "the sound wave arriving at the ear is the analogue of the current state of the environment, because as the wave travels, it is charged by each interaction with the environment."[1] Thus, what we hear in this clapping is more than a single sound and its source, but rather a spatial event.

Second, sound occurs among bodies; that is, clapping my hands occurs in the presence of others, either as actual people in the room, directly in front of me, or in the other room and beyond, as eavesdroppers, intentional or not. Sound is produced and inflected not only by the materiality of space but also by the presence of others, by a body there, another there, and another over there. Thus, the acoustical event is also a social one: in multiplying and expanding space, sound necessarily generates listeners and a multiplicity of acoustical "viewpoints," adding to the acoustical event the operations of sociality. Such an observation reminds acoustics that material presence is also determined by the material intervention of social events, physical movements, and the ebb and flow of crowds. Bodies lend dynamic to any acoustical play, contributing to the modulation of sound, its reflection and reverberation, its volume and intensity, and ultimately to what it may communicate. For the presence of bodies, in determining social events, is also determined by the specific sociality of such events. Whether a concert hall or a classroom, the crowd is positioned by such context, either as a kind of sub-architecture in which one takes one's place, or as a kind of built-in respect for a given situation: the body occupies the correct location, either in the foreground or background, onstage or off, in front of or behind. Because of this, the crowd adds character to sound materially, as well as socially, according to the context of the event and its inherent positioning. Therefore, my clapping would be heard differently at a concert than in a classroom.

Third, sound is never a private affair, for if we listen to something like "my speaking voice" we tend to look toward the speaker as the source of sound, as an

index of personality: all eyes watch my mouth, as if this sound remains bound to my person. Yet we can see, or hear, how my voice is also immediately beyond myself, around the room, and, importantly, inside the heads of others. In this way, sound is always already a public event, in that it moves from a single source and immediately arrives at multiple destinations. It emanates and in doing so fills space and other ears. To speak then is to live in more than one head, beyond an individual mind. Listening is thus a form of participation in the sharing of a sound event, however banal. Such occurrence implies a psychological dimension to considering sound and modes of spatiality. Whereas the acoustical brings to the fore material presence, adding and subtracting space by carrying sound beyond itself, to multiple points, involved in the social organization of people and their situational dramas, it further carries with it a psychological dynamic in which sound converses with the spatial confines of mental reverberation, as a kind of "radiophonic" broadcast arriving at unseen, unknowable locations in the head.

With this in mind, we can understand how sound as relational phenomena immediately operates through modes of spatiality, from the immediate present to the distant transmission, from inside one's thoughts and toward others, from immaterial wave to material mass, from the here and now to the there and then. For the presence of architecture, found sounds, environmental noise, and the details of given locations loom as continual input into forms of listening. That is to say, the sonorous world always presses in, adding extra intensities by which we locate ourselves.

Sound thus *performs* with and through space: it navigates geographically, reverberates acoustically, and structures socially, for sound amplifies and silences, contorts, distorts, and pushes against architecture; it escapes rooms, vibrates walls, disrupts conversation; it expands and contracts space by accumulating reverberation, relocating place beyond itself, carrying it in its wave, and inhabiting always more than one place; it misplaces and displaces; like a car speaker blasting too much music, sound overflows borders. It is boundless on the one hand, and site-specific on the other.

Site Specificity

The understanding that art brings with it the possibility to address the world, beyond an abstract or elusive category, can be seen to gain significance throughout the latter part of the twentieth century in the form of "site-specific practice" of the late 1960s and 1970s and subsequent forms of contextual practice. Such methodologies produce artwork that, rather than separate itself from the space of its presentation, aims to incorporate it into the work, from material, such as architectural features, to informational, as in the governing curatorial premise behind an exhibition or larger social and cultural conventions. From here, art self-consciously becomes critical of its own structure, offering critique to its institutions, from the

museum to the language of art history, and relying more on a move away from the fabrication of objects to the dematerialized potential of events, actions, ideas, ephemera, and the politics inherent to space.

The developments of sound art, which took its defining steps from the mid to late 1960s, coincides generally with the developments of such methods, along with Performance and Installation art. It is my view that such correspondence is not by chance, for the very move away from objects toward environments, from a single object of attention and toward a multiplicity of viewpoints, from the body toward others, describes the very relational, spatial, and temporal nature of sound itself. Sound provides a means to activate perception, spatial boundaries, bodies and voices, and the energy waves of forms of broadcast, transmission, and other modes of radiating out. Yet, paradoxically, the historicization of sound art and the historicization of site-specific and contextual practice remain separate. While sound art is finding a current footing within cultural and academic arenas, as witnessed in the plethora of exhibitions and conferences over the last five years, its history remains separate and fixed within a specialized domain that neglects the historical context of not so much experimental music but of the visual arts and its related forms of practice of the postwar and contemporary period, particularly those actively engaged in spatial questions. It is my intent to bring these two together, inserting the history and context of sound art alongside and within the history and content of site-specificity, so as to recognize how sound art is built around the very notion of context and location.

To follow the course of such a project, I have been concerned to not so much articulate a survey of works but to pick up specific projects and artists that set in motion a critical dynamic of self and the world, through the particular use of sound, beginning in the early 1950s. From this historical point, I follow the developments of sound as an artistic medium through the 1960s and 1970s, tracing such chronology by implementing thematic threads related to architecture, place, and location, asking: how does sound embed us within local environments while connecting us to a broader horizon? What consequence do forms of sound practice have on notions of spatiality and issues surrounding public space? Can we identify questions of identity and experience in relation to listening and the resonance of space?

Since the early 1950s, sound as an aesthetic category has continually gained prominence. Initially through the experimental music of John Cage and musique concrète, divisions between music and sound stimulated adventures in electronics, field recording, the spatialization of sonic presentation, and the introduction of alternative procedures. Musical composition was to take on a broader set of terms that often left behind traditional instrumentation and the control of the composer's hand. Part 1 of this book addresses the work of Cage as progenitor of experimental music and its emphasis on "sound" as a specific category. Oscillating between sound as worldly phenomena to music as cultural work, Cage sets the stage for a heightened consideration of listening and the "place" of sound by

developing a form of critical practice. Specific works, such as *4′33″* and his Black Mountain performance, are investigated as a means to uncover the principles by which sound art developed—for Cage's work positions music in relation to a broader set of questions to do with social experience and everyday life. Musique concrète and Group Ongaku are placed alongside Cage as a way to extend the North American emphasis to that of Europe and Japan, as well as to elaborate on the general thrust of the postwar period as experimental music engaged questions of found sound and environmental material. By pushing the envelope of musicality to an extreme, found objects, audience, and social space coalesce in an unstable amalgam of input and output, technologies and their inherent ability to arrest and accentuate sonic detail, and the performing body as situated within found environments come to initiate a vocabulary by which experimental music slips into sound art.

Part 2 sets out historically to follow Cage's influence in the work of Happenings, Environments, and Fluxus, as well as Minimalist sculpture and music and Conceptual art. The artistic developments of the 1960s introduce questions of phenomenology and presence alongside social and political concerns, demanding that art become indistinguishable from life and that objects take on relational dialogue with people. Beginning with Happenings and Environments, initiated by Allan Kaprow, Claes Oldenburg, and various students of Cage, the performativity of the body and the larger contextual frame of audience and space are made the focus of art. Such shifts are furthered in the work of Fluxus, whose perceptual games define the art object as inextricably linked to an immediacy of the real. Event scores and performances are organized around "post-cognitive" understanding, creating work to be completed in the mind of the viewer/listener. The immediate and proximate can be said to govern throughout the 1960s, and find elaboration in the works of La Monte Young in music, Robert Morris in sculpture, and Michael Asher in spatial installation. Part 2 follows, in more detail, their respective works with a view toward elaborating questions of presence, as manifest in sound, space, and bodily perception. Each artist uses sound in diverse ways, pointing toward the potential of the medium to perform phenomenally (Young), discursively (Morris), and conceptually (Asher). The concern of presence is ultimately problematized in the work of Conceptual art in the late 1960s and early 1970s through semiotic games, dematerial strategies, and performative tensions that deconstruct, politicize, and spatialize perception inside the cultural structures of language. It is my argument that Conceptual art, while causing a break with earlier work, finds its inception in the work of John Cage and can be said to problematize his project.

Part 3 moves into Performance art of the early 1970s, addressing the works of Vito Acconci and, in turn, Alvin Lucier, along with the contemporary work of Christof Migone, with the intention of hearing how the voice is put to use so as to unsettle social conventions of subjectivity. Lucier's *I am sitting in a room* and Acconci's *Seedbed* and *Claim* performance installations use speech to reveal an

alternative view of presence by staging the self at its most volatile. Sexualized, disembodied, excessive, and self-obsessed, speech travels through technologies of reproduction and architectural containers to inaugurate spatiality as integral to subjectivity. Their work questions the phenomenology of Minimalism by subtracting from the plenitude of presence, inserting instead a "radiophonic" body, further exemplified in Christof Migone's work. How does the voice, as a sonorous expenditure of the body, locate the self against the greater social environment? What are its limitations and how does it position the self within a contextualized and situational geography? These are some of the questions pursued in the artists' works, marking them as integral to an expanded investigation of sound's spatial and relational operations.

The spatiality of sound is furthered in Part 4 by addressing the development of sound installation in the works of Max Neuhaus, Bernhard Leitner, Maryanne Amacher, and Michael Brewster. Sound installation, spatialized musicality, and acoustic design all situate sound in relation to architecture. Architecture is taken on, dissected, and redrawn by positioning sound work in relation to its given acoustics. Amplifying existing sounds, fostering auditory dialogues across inside and outside, tapping into structural vibrations to expand the sonic palette of tonality, and designing listening experiences by harnessing the environmental mix of found auditory events: each of these procedures come to the fore in sound installation, blossoming more fully into the beginnings of sound art as a distinct discipline. With sound installation, and the works of Neuhaus and others, sound art finds definition, demarcating itself from the legacy of experimental music and entering into a more thorough conversation with the visual arts. Shifting back, I look at Iannis Xenakis with the intention of using his work as a further example of sound's architectural potential. For Xenakis's example is indispensable to any formulation of a history of sound art by forging a dynamic mix of musical and spatial elements. To appropriate and create architecture for a renewed sense of listening, sound installation moves increasingly toward public space, situating the listener within a larger framework of sonic experience that is necessarily social, thereby leaving behind the singular object or space for an enlarged environmental potential.

Extending such concerns, Part 5 looks toward more overt environmental investigations as found in acoustic ecology and other "soundscape" work. Acoustic ecology parallels the developments of Land art throughout the 1970s, both of which look toward the remote, distant, and "natural" landscape as source for an enlarged artistic experience. As progenitor of greater awareness of the sonic environment, acoustic ecology brings to the fore sound as a physical presence whose understanding can lead to more sensitive built environments that reduce noise levels and infuse sociality with deep listening. In addition, acoustic ecology opens up a greater field of sound to artistic and musical practice, exemplified in the works of Hildegard Westerkamp, Annea Lockwood, and Steve Peters, all of whom work with environmental sound to map its local presence. Through their

respective works, I chart the ways in which sound and modes of site-specificity overlap and form an extended dialogue. Acoustic ecology articulates an elaborated sociology of sound in which music, ecology, and "sound studies" coalesce to form a hybrid research and musical practice. Yet acoustic ecology runs the risk of shutting down auditory possibilities by registering sound within an overarching framework of value: what sound is harmful and what sound isn't? Which sounds contribute to noise pollution and which sounds don't? To stage a critical perspective against acoustic ecology, I address the practice of Yasunao Tone and Bill Fontana, along with the artist group WrK, whose works draw in questions of noise, systems of information, and their environmental organization. Tone and Fontana problematize in a productive way the often naïve procedures of environmental sound practice by agitating its seeming purity.

Moving increasingly from the location of sound to its propagation, from the concert hall, as in Cage, and to the environment, in Westerkamp, Part 6 follows sound's expansion into global and interpersonal network space. By looking at digital networks and interactive technologies in the works of Achim Wollscheid, Atau Tanaka, and the art collective Apo33, I arrive at present forms of sound art. Contemporary sound art fulfills Marshall McLuhan's theory of the "imploded society," for sound's current location is multiple, diverse, and expansive, streamed across the globe in networked performances, seeking the potential of interpersonal spaces, which, in turn, brings sound into every space, in every time. Such current methods operate by leaving behind the phenomenology of acoustic experience in favor of the behaviors of people. It thus seems to partially return us to John Cage by once again removing the referent in favor of materiality and the experiential prompted by sound's own affective thrust. Interactive and participatory, streamed live and web-cast, sound has gained an intensified and dynamic place within contemporary culture. It is my argument, that its relational, spatial, and temporal nature parallels theories of electronic media, for both operate on the level of mobility, connectivity, and the immaterial.

That sound has gained momentum as a field within postmodern studies is not without its philosophical, cultural, and social backing, for the auditory provides an escape route to the representational metaphysics of modernity by offering a slippery surface upon which representation blurs and the intractable forms of codified order gain elasticity. For the acoustical could be said to function "weakly" in its elusive yet ever-present signifying chains, its vibrations between, through, and against bodies by slipping through the symbolic net of the alphabetical house and delivering up the immediate presence of the real, in all its concrete materiality. It registers in the vibratory waves of tactile experience, which, rather than being debunked by technology, is brought forth, through a McLuhanesque implosion in which the body is externalized and thus implicated in the network of electric circuitry and

global nerves. In short, the acoustical may function as an appropriate model for confronting such a jumble of nerves and extensions and their subsequent ethical and social implications, as transformed through the globalizing networks of signals and intensities.

With such an enlarged acoustic mirror, sound may figure as an increasingly relevant and important category to offer the self a new set of codes by which to operate, as a medium intrinsically communicational and heterogeneous, and by which to negotiate and utilize the increasingly animate and telepresent world, for sound embeds itself in the creation of meanings, while remaining elusive to their significations.

I have been interested to listen to sound as it congeals into forms of creative assertion, identifying specific artists, composers, and works that seek architecture's echo, the city's crowd, and the audience as interlocutor, as a means to uncover facets to the development of sound art. By doing so, this book contends and converses with existing literatures across disciplines, from musicology and cinema studies to art history and architectural theory, ultimately with the intention of contributing to the emerging arena of sound studies. It puts forth sound art as a field of practices that may engage levels of sociality through understanding not only the harmonies but also the dissonances between place and self, and their interaction.

Note

1. Barry Truax, *Acoustic Communication* (Norwood, NJ: Ablex Publishing Corporation, 1994), p. 15.

Fade In

South London, 2001: I remember seeing Gillian Wearing's video work *Dancing in Peckham* for the first time and not being able to get it out of my head: the image of a body dancing, inside a public shopping mall, engrossed in a private ritual, oblivious (or reaching for oblivion) to the surroundings—and yet, all too conscious of them. The surroundings in fact come crashing in, as a looming backdrop that activates the work and the dancing body.

In reading about the work, I became increasingly moved—the relation between the dancing body and music (imagined or real?) housed within public space, as a triangular conversation, seemed to hover along a fragile yet forceful thread. This can be glimpsed in the work—something delicately pronounced, almost futile, but also persistent and hopeful. What Wearing embarks on through this dance is a conflation of the private imaginary with the larger looming public world—the imaginary here being an act of listening, where the body dances to a silent music heard only in the head and the public world that must contend with the moving body. Public space cannot look away or ignore the presence of the body gesticulating in rhythmic fashion, for "whoever dances does not attract people's glances … they summon."[1]

What *Dancing in Peckham* captures is the oscillation between self and world. It figures the body caught between the flows of surroundings and its own inner drives, as a membrane whose fluctuations of movement and anxiety register in forms of creative negotiation: how the self gives articulation to what it receives and to what it imagines. Art could be said to function in this way, as a body or skin caught between a self and an audience, making apparent the negotiations of inner and outer, as intensities of dialogue, or abrasions and marks left to be read through fantasies of possibility. That is to say, art registers on its surfaces the forces from without against the forces from within, whether a performing body masturbating in the gallery or an installation that uncovers the hidden infrastructure of a museum. Art places its finger on the pulse of a body that is the conflation of the artist's with society's. As Adorno elucidates: "The basic levels of experience that motivate art are related to those of the objective world from which they recoil. The unsolved antagonisms of reality return in artworks as immanent problems of form. This, not the insertion of objective elements, defines the relation of art to society."[2]

Such a viewpoint forms the basis of this book, for it aims to take the pulse of such a negotiation as found in art and music, yet one marked or produced by a sounding body, as it recoils and then uncoils, emanates, and then fades. The title, "Background Noise," then should be understood as designating not so much what goes unnoticed, but what in a sense cannot be ignored. And how the background often contains the very substance by which the foreground gains significance—"any scenography, any profile, and any appearance are forms sprung from this background, signals come from this noise, perceived things born of these apperceptions."[3] Yet, the background embodies the weight and potential of surroundings, registering spatially the movements between signal and sign, ambiguity and clarity, shadow and its ultimate appearance. In following works like Wearing's such dichotomies seem to come forward only to be complicated and unsettled, resulting in what I perceive as the ultimate contribution of sound art: to make audible the very promise of noise to deliver the unknowable.

Notes

1. Michel Serres, *Genesis*, trans. Geneviéve James and James Nielson (Ann Harbor, MI: University of Michigan Press, 1999), p. 45.
2. Theodor Adorno, *Aesthetic Theory*, trans. Robert Hublot-Kentor. (Minneapolis, MN: University of Minnesota Press, 1999), p. 6.
3. Michel Serres, *Genesis*, p. 25.

4'33": Sound and Points of Origin

Cage was concerned to organize the temporal unfolding of the work in a context where chance already rules, for reasons that are more social than musical . . .[1]

—Jean-Jacques Nattiez

All I am doing is directing attention to the sounds of the environment.[2]

—John Cage

Introduction to Part 1

4'33": Sound and Points of Origin

Given the extraordinary breadth of materials written on and about John Cage, not to mention his own writings and extensive creative projects spanning his long life, to begin my own undertaking with him is to confront a mass of material, opinions, bibliographies, references, and anecdotes. Yet it is with Cage that I begin, not so much with a desire to analyze the plethora of material or to rewrite all that surrounds him (if that is possible …), but to initiate a specific project in which Cage must figure. For Cage stages a consideration of sound *through* musical practice. In this way, music not only functions as a form of cultural output, but a platform for critical reflection. Cage's beginning is thus a reinvention of musical practice through an investment in sound's potential to invigorate music's reach.

To refer to sound *and* music in the same breath is to confront, right from the start, a semantic impasse or jag in the cognitive map. For how can I begin with "sound," which presupposes a relation to found phenomena, and "music," which operates in the domain of cultural production? In short, with musical aesthetics and thinking and the sonority of environments not as two sides of the same coin, but as faces that overlap, superimposed to form a singular? For Cage sought the found environment, as space for altered and renewed listening within a musical framework. In doing so, he articulates what would become a driving force for the aesthetic project of the neo-avant-garde throughout the sixties, which would increasingly aim for immediacy, beyond the artistic object and musical messages, seeking instead the heart of the real. Through such moves, Cage bursts the seams of the musical framework so as to open onto the outside, reminding music what it is made of: sound. For Cage, such advances came by emphasizing the "here and now" of sound: that sound was found in the immediate and the proximate, whether that be a concert hall or a shopping center, inside objects or even inside his own throat. For "it behooves us to see each thing directly as it is, be it the sound of a tin whistle or the elegant *Lepiota procera* [mushroom]."[3] To "see each thing directly as it is" finds its maximized realization in the very move toward sound: against prevailing

musical languages of the classical tradition, sound is cast as the essence to musical experience, to musical objects, and to the auditory situation of music in general.[4] To make music was thus to harness the essential ingredient of sound, mobilizing it for direct sensory experience. The immediacy of sound thus lends to its own force and value. For Cage, it opens the way to leaving behind the discursive narrative of musical messages in favor of a social inertia.

Expanded View

To follow Cage's example, his lessons and his vocabulary, is to begin with an expanded view in which something like music takes on cultural weight. Such a view necessarily leads one's listening to new sounds and new ways of perceiving such sounds. Yet Cage is not alone in creating such an expansive field. Contemporaneously, musique concrète equally uncovers an entirely new set of musical possibilities, yet through very different means: whereas Cage aims for the here and now of sound beyond the mechanics of representation, musique concrète appropriates technologies of sound recording and reproduction in the constructing of musical work. Phonographs, tape machines, editing techniques, found recordings, speaker systems, mixing consoles all feature in the machinery employed to piece together musique concrète's elaborate mosaics of sound. While occupying an extreme end of experimental music's auditory discoveries in the late 1940s and early 1950s, musique concrète contributes greatly to the expansion of musical vocabulary, lending weight to electronic, extra-timbral technological potential, while detailing the rhetoric around sound.

It is my intent to pursue Cage and musique concrète as forerunners to experimental music, with a particular view toward recognizing how sound is defined according to spatial and locational coordinates. That is, their work defines sonic culture by continually positioning music, either in relation to social space, as in Cage's project, or through methods of appropriation, electronic manipulation, and diffusion, in musique concrète. To add to this, the work of Group Ongaku, a Japanese collective from the early 1960s whose performative improvisational work could be said to utilize the technology of the body by appropriating found objects. Ongaku aims for an anthropological aesthetics, where site, sound, and action coalesce in performances that leave behind any semblance of tonality.

Conceptualism

By seeking to reflect upon the conventions of musical practice through the very process of producing music and establishing compositional methods as a way to articulate such reflection, Cage defines what can be called a "conceptual" approach, in that music is both the thing *and* a reflection on the thing. Such conceptual moves can be understood through following his incorporation and cultivation of silence, sound, chance operations, and indeterminacy. Each of these interests

can be seen as prescient of Conceptual art in the latter part of the 1960s: silence within musical composition can be heard in terms of a "dematerialization" of the musical object, revealing a suspicion toward representational structures; sound, as distinguished from harmony and pitch, short-circuits the traditions of musical understanding, and in doing so provokes an implicit critique of such traditions; the development of chance operations and indeterminacy as methods of composition and performance sets the stage for a self-referentiality in which the very means of composing and processes of performing become part of the content of the work itself—what one partially hears in chance operations is chance itself as reflected through sonic events. Cage's work, his procedures and ideas, underscores sound not only as a musical medium but as a trigger for directing attention not so much beyond interpretation but toward the context in which interpretation must always take place.

By marking Cage in relation to Conceptual art, I want to underscore his work as initiating a mode of critical practice that would influence the developments of contemporary art throughout the 1960s and 1970s that spatialized, contextualized, and politicized itself. Further, in Cage's practice we can identify the developments of auditory thinking whereby sound is brought to the fore as cultural media as well as philosophical arena. The approach to such auditory thinking is thus wed to a conceptual, critical practice based on self-reflection, contextual awareness, the appropriation of found materials, and an overarching interest in social reality.

As Ursula Meyer proposes in her *Conceptual Art* anthology from 1972, "Art is not in the objects, but in the artist's conception of art to which the objects are subordinated."[5] Even while Cage strove to remove his own authoring hand through techniques based on chance and indeterminacy, with a view toward liberating sound from its referent, to deliver up experience rather than object, he did so by continually framing his projects through a self-styled language that philosophically made explicit his conceptualizations. That is to say, he was very much in control of the process by which liberation could be discovered and made concrete. Sound thus gains credibility through its potential as an addition to the musical palette, and more by its ability to activate perception, social space, and temporal immediacy—its potential to foster subjective intensities, from listening to living.

Context is thus prominent within Cage's philosophical project, referring audition intensely toward its very location. The here and now takes a twist in the "acousmatic" methods of musique concrète: working directly with sound recording techniques and technologies, musique concrète renders the here and now through intensely constructed sound objects that enliven the ear. The theatrics of sonic diffusion creates its own unique presence, turning a given time and place into an active musical experience. The importance of the experiential, the here and now of sound, the elaboration of a rhetoric of audition, these are the ingredients of a prominent thread of experimental music, one that leads to the developments of sound art and forms of audio art throughout the latter part of the twentieth century.

Notes

1. Jean-Jacques Nattiez, "Cage and Boulez: A Chapter of Music History," in *The Boulez-Cage Correspondence* (Cambridge, UK: University of Cambridge Press, 1993), p. 15.

2. John Cage, *For the Birds* (London and Boston, MA: Marion Boyars, 1995), p. 98.

3. John Cage, "Music Lovers Field Companion," in *Silence* (Middletown, CT: Wesleyan University Press, 1961), p. 276.

4. The classical tradition as exemplified in the Romantic legacy of Wagner, and the German tradition, in turn finds its Modernist undoing in the works of Schoenberg, whose own "emancipation of dissonance," and subsequent twelve-tone compositional method, already announces a move toward sound as a category, though under the guise of atonality and the overtone spectrum. Cage, in this regard, makes a final sweep against the lingering threads of the classical tradition by progressively interfering with the musical vocabulary of atonality through the use of percussion, the introduction of silence as governing terminology, and, eventually, with the lessening of compositional control with chance operations and indeterminacy.

5. Ursula Meyer, *Conceptual Art* (New York: Dutton, 1972), p. XI. It is curious to note that Meyer, in her introduction, quotes Cage on the first page, after Wittegenstein, Merleau-Ponty, and Roland Barthes.

Chapter 1

Sociality of Sound: John Cage and Musical Concepts

The experimental ethos as exemplified by Cage refutes the classical tradition, for "traditional dialectical music is representational: the musical form relates to an expressive content and is a means of creating a growing tension; this is what is usually called the musical argument."[1] In contrast, the new experimentalism develops "multiple permutations" consisting of "independent structural units … making uncertainty a positive feature."[2] While "musical arguments" characterize and overdetermine the inherent richness of sound through representational "signs" in need of interpretation, the experimental "open work" calls "for a new form of mental collaboration with the music" in which "the singularity of the moment" comes into being "in the listener's ear."[3]

In the experimental "open work," musical arguments are replaced by *processes* that result in "music," and the writing of music is supplanted by the creation of situations. Michael Nyman's differentiation of Cage from a contemporary, Stockhausen, may highlight the distinctions further: "The classical system, and its contemporary continuation [Stockhausen] is essentially a system of *priorities* which sets up ordered relationships between its components, and where one thing is defined in terms of its opposite."[4] In contrast, for Cage, such prioritizing is overturned by indeterminate and chance-oriented events in which sounds and nonsounds, control and chaos, are placed on equal footing. Thus, any remnant of musical argument is negated by a prevailing extravagance of nonintentionality, multiplicity, silence, and noise.

The musicological argument over the referentiality and meaning of music must be seen to shift radically under the momentum of Cage's work. Yet Cage does not so much escape representation as resituate it onto the field of sound through which "its ephemereality … its interpenetration and unimpededness, becomes meaningful."[5] The very condition of sound thus features as means for composition *as well as* interpretation. By overturning the musical object so as to insert the presence of

the listener, Cage resituates the terms by which the referent of music takes on social weight, beyond symbolic systems and toward immediacy and the profound presence of being there. In doing so, he relies upon sound as an ontological crutch by casting it as always *other* to music's traditional construction, as ephemeral and transcendent, as nonreferential and nonintended, as anarchic and free. Sound is the boundless, undefined materiality of musical events, as well as a vocabulary for a new philosophy of musical ethics. According to Cage, music is accountable not only for its aesthetic or formalistic properties, but as a social and political object with real influence.

Increasingly through the 1940s both fronts intertwined in a dual consideration that ultimately leaves them indistinguishable: progressively, music is never without the social. This process is not without its problems or tension, for Cage's project ultimately aims to transcend the material conditions of the musical object by insisting, on some level, upon the very material conditions of such an object. In other words, as listeners, we are asked to witness a musical event that, by insisting on its material conditions (this sound is only this sound), may lead us *beyond* music. For instance, his prepared piano of the 1940s[6] turns the classical instrument into a drum orchestra, removing tonality for the percussive surprises of screws, bolts, and spoons, echoing his earlier *Living Room Music* (1940), whose first and last movements ask for household items, such as magazines, books, tabletops, and window frames, to function as sound sources, or *The Wonderful Widow of Eighteen Springs* (1942), which calls for playing the piano solely through tapping, banging, and knocking it; and his Imaginary Landscape series introduces electronic tone tests (No. 1, [1939]), radio uncertainties from twelve receivers and twenty-four players (No. 4, [1951]), and randomly mixed recordings structured with the *I-Ching* (No. 5, [1952]), progressively interfering with the musical message with unimpeded airwaves, chance-operated jazz music,[7] and random juxtapositions. Such lineage is marked by a steady introduction of objects and strategies that add percussive presence, electronic flows, and chance-operated and indeterminate procedures, bringing the certainty of physicality—the percussive thwack, omnipresent radio wave, household items—alongside a giving up of presence—the compartmentalized charts of musical decision to be filled in by the *I-Ching*, and the random overlapping of subsequent output, resulting in the indeterminate *Variations II* (1961), based on a series of five transparencies marked by points and lines whose superimposition creates direction for any number of players to play any type of sound-producing object. Thus, physical presence is wed to a flow of organizing principles that seek to infuse such presence with an unimpeded, nonintentional anarchism that for Cage equates with sociality. Sociality accordingly is all the self-determined operations of everyday life bolstered by material certainty and the effects of *being present.*

Experimental Movements

Cage can be situated within an experimental music legacy that progressively moves away from an overtly musical framework and toward an increasingly contextual

and "extra-musical" one. This movement in general can be thought of as a shift away from music and toward sound, and, more important, from the symbolic and representational (music) to the phenomenal and nonrepresentational (noise). Experimental music challenges music both as form and content by exploding its governing structures (harmonic relation, instrumentation), determining terminologies (consonant and dissonant), notational devices (instructions), and codes of conduct (presentation strategies). In this regard, experimental music can be placed alongside the general move of modernism in its argument with representation, for its strategies incorporate an expanded sonic palette, an intensification of listening experience—in volume, in location, and in procedure—and an investigation of alternative methods of writing and composing. As Alice Jardine has proposed, modernity itself appears when a society begins to question the very representations it has made of itself.[8] Such challenge is given force through an alternative paradigm defined by sound, as found not within harmonic structures and melodic lines, nor in the classical instrument and the totalized compositional work, but within the everyday environment of noise, the procedures of a music of the moment. As Nyman describes: "Experimental composers are by and large not concerned with prescribing a defined *time-object* whose materials, structuring and relationships are calculated and arranged in advance, but are more excited by the prospect of outlining a *situation* in which sounds may occur, a *process* of generating action (sounding or otherwise), a *field* delineated by certain compositional rules."[9]

To demarcate "experimental music" as a special category reflects a greater recognition that some kind of separation is, and was, necessary. As Cage articulates in a lecture from 1957:

> Now, on the other hand, times have changed; music has changed; and I no longer object to the word "experimental." I use it in fact to describe all the music that especially interests me and to which I am devoted, whether someone else wrote it or I myself did. What has happened is that I have become a listener and the music has become something to hear.[10]

Cage raises the very issue of listening and hearing as active components, if not the essential concerns, of (experimental) music in general, offering reflection on the intentions behind composing: to make music is not to complete an object of attention, fixed and frozen, but to engage an audience on the level of audition, in the moment of sound's becoming. Thus, music for Cage seems to become unquestionably about form more than content, as witnessed in his progressive move toward methodologies that remain "open" to multiple input, unimpeded and nonintentional activities that may or may not actually produce sound, which Jean-Jacques Nattiez and others equate with the semiologically driven "open work": "The ["open"] work of art is a fundamentally ambiguous message, a plurality of signifieds that coexist within a single signifier. . . . [T]oday, this ambiguity is becoming an explicit goal of the work, a value to be realized in preference to all

others" that finds expression in "contemporary artists … recourse to the informal, to disorder, to chance, to indeterminacy of results."[11] While Umberto Eco's definition, and Nattiez's use of the "open work," articulates Cage's general methodology, it overlooks his ultimate aim—not for an ambiguity of messages but for a specificity of listening. That the "open work" allows for "plurality of signifieds" does not undermine the ultimate goal of making us *relate* to sound.

Cage radically unravels musicological divisions by always adding too much and by demanding a continual alteration of interpretive angles. It is my view that his work functions as both the work *and* self-referentiality onto the work, so as to lead a listener toward a self-reflexive awareness about the procedures in operation. His work, to a degree, mobilizes interpretation for the purpose of making one aware how interpretation is always part of the game. To pursue sound and active listening through music, Cage thus refers to the very mechanics of representation and interpretation so as to raise awareness on an individualized, liberating level: to engage subjective interpretation and the individual ear.

Silent Prayer

> To compose a piece of uninterrupted silence and sell it to Muzak Co. It will be 3 or 4 1/2 minutes long—those being the standard lengths of "canned" music—and its title will be *Silent Prayer*.[12]

Silent Prayer from 1948 exemplifies the mixture of transcendental spiritualism and everyday life indicative of Cage and enacts his ethics of "disinterestedness" through erasure and negation. *Silent Prayer* is a proposed silence for a set duration of time to be broadcast across the Muzak system recently established to provide background music to the United States' growing shopping centers and malls of the postwar period. In its call for momentary absence, it aims to erase the aural canvas of shopping centers—to wipe away Muzak's insidious presence in the spaces of everyday life—for Muzak serves the machinery of the status quo built upon consumer society. Such machinery for Cage (and others) was seen to cast a shadow across real freedom by holding up imaginary scenes of liberation: the shopping center only promises a false articulation of individuality. We can also witness such general disgust with Muzak, as representing a distinct cultural degradation, in Adorno's summation that "the counterpart to the fetishisation of music is a regression of listening."[13] *Silent Prayer* attempts to erase such "fetishisation" and ultimate "regression" by subtracting its soundtrack, introducing self-reflection in its place: the sudden gap as a replenishing negation. To pull the plug on Muzak, for Cage, would be to strip away the sheen of shopping itself—to wipe away the polish of consumerism and to reveal it as shadow play of "real" freedom. Freedom, for Cage, is beyond the mechanics of representation, outside the gears of mediation, which, for instance, Muzak embodies, and cultivated only in the *giving up* of individuality, the disinterestedness of being. Such negative productions lend to marking

experimental music as *locationally* sensitive, self-consciously social, acoustically expansive, and perceptually aimed, "Distinguish[ing] between that 'old' music ... which has to do with conceptions and their communication, and this new music, which has to do with perception and the arousing of it in us."[14]

Shopping Malls and Everyday Life

In contrast to Henri Lefebvre, whose *Critique of Everyday Life* from 1947 (a year prior to *Silent Prayer*) concretizes the terms of alienation in relation to Capitalist society, the rhetoric of Cage finds its revolutionary force in the non-ego of individual presence. Sharing concern for the everyday as life's medium, as space of autonomy, Lefebvre and Cage fall within the prevailing interest at this time in everyday life as sociological subject and artistic arena: where Lefebvre looks toward the early works of Marx to establish a Critical Marxism, Cage embraces Henry David Thoreau and Lao Tze. Quoting Thoreau—"Government is best which governs not at all, and when men are prepared for it, that will be the kind of government which they will have"—Cage furthers: "But we live from day to day: revolution is going on this moment."[15] For Cage, such revolutions articulate themselves not through political program but from an "apolitical" and anarchist form of spirituality—that of *giving up* individuality.

Whereas views of individuality are often based on notions of personal expression, where the individual is conceived as locus of social freedom, for Lefebvre, the individual alone is inadequate, for "up until now everyday life has been 'alienated' in such a way that its own reality has been torn from it, placed outside it and even turned against it."[16] Such viewpoints lead toward a claim for artistic practice as the basis for renewing everyday life, an "art of living" that, for Lefebvre and Cage, implies a critique of bourgeois society. "As with every genuine art, this will not be reducible to a few cheap formulas, a few gadgets to help us organize our time, our comfort, or our pleasure more efficiently. Recipes and techniques for increasing happiness and pleasure are part of the baggage of bourgeois wisdom—a shallow wisdom which will never bring satisfaction. The genuine art of living implies a human reality, both individual and social, incomparably broader than this."[17]

Cheap formulas, gadgets, comfort and pleasure, recipes and techniques ... such is the arsenal of the Capitalist mechanism by which the shopping mall operates as "... a self-adjusting system of merchandising and development that has conquered the world by deploying standardized units in an extensive network."[18] The shopping mall creates a "weightless realm" structured around "numbingly repetitive corridors of shops ... endless aisles ... dramatic atriums [that] create huge floating spaces for contemplation, multiple levels [with] infinite vistas from a variety of vantage points, and reflective surfaces...." In this regard, Muzak, as the shopping mall soundtrack, serves as a "white noise" complementing the visual effects by washing over the consumer a numbingly dull drone.[19]

To shatter the dizzying and dreamy effects of the mall is to replace one notion of freedom with another, to explode the "gadget" for the "art of living," the "dull drone" with epiphanous silence. For agency, as understood as an index of freedom, only forms the basis for ideological struggle: expressing individuality will not so much guarantee freedom; rather it supports the system that determines such agency, as recognizable. In this regard, personal tastes, the likes and dislikes as exemplified in personal choice, cannot be said to highlight the self as "free." On the contrary, they only go so far as the status quo predetermines, as a representation of individuality, for "social relations and processes are appropriated by individuals only through the forms in which they are represented to those individuals."[20]

Cage seeks to short-circuit individuality by redefining it according to a rugged disinterestedness whereby agency is granted only in the movement *away* from itself, outside personal expression, in forms of negation.

> To attack, if not abolish, the principles of competition and authority, not merely in order to free individuals from the coercion of ossified relations and forms of communication dictated by the capitalist ratio, but primarily with the far-reaching aim of making the individual conscious of the fact that he must eliminate his preferences and dislikes, which are a function of ossifications in consciousness and the internalization of capitalist coercion, to make social use of this freedom of communicative reason.[21]

Rather than define the world according to individual will, the world will find definition in that which will occur, outside one's own likes and dislikes, for "new modes of realization are needed … [which] can be indicated only in negative terms because they would amount to the negation of the prevailing modes."[22] Though never realized (at least as Cage originally hoped for), *Silent Prayer* proposes to challenge the status quo *and* individuality at one and the same instant: by silencing Muzak it sabotages the mechanism of consumption. Through the creation of not so much a produced musical object but a silent space, Cage redefines the notion of the composer as a form of agency against delivering up an overt musical message based on saying *something*; he aims for renewed listening, beyond the noise of consumption, as a mode of absolute individualism, and toward the silence of a "quiet mind" that is "free of its likes and dislikes."[23]

Listening

The presence of sound, outside the representational structures of music, and subjectivity, beyond the mediation of consumer culture, occurs against the backdrop of listening, forming for Cage an overall production of integration, echoing Fiumara when she writes:

> It is almost as though a non-listening speech tends to favor "simple" mechanisms that divide and extinguish, whereas listening requires a laborious attitude more

> consistent with problems of integration and living. And the *gathering* that allows these qualities to unfold is not so much concentrated on a single point to the exclusion of others: it is a silent acceptance that tends to unite through the attitude of integrating and letting live.[24]

By embracing sound, and engaging listening, one finds sympathy in Fiumara's call for an "ecological" perspective on *logos*. She identifies an inherent philosophical lack in Western thinking that leaves behind half of the original Greek term of "logos," that of "legein," meaning "to say, speak, enunciate" but also "shelter, gather, keep, receive." For Fiumara, to recover the verb of *logos*, over its noun, is to reinstate "listening" within the tradition of Western thought, which "starts out to say and not to listen," underpinning her call with an ethics, for "we are not sufficiently conversant with the attitude of openness," which listening supports; rather, knowledge makes claims on territories of thought.[25] "A philosophy of listening can be envisaged as an attempt to recover the neglected and perhaps deeper roots of what we call thinking, an activity which in some way gathers and synthesizes human endeavours."[26] In the same way, a philosophy of listening for Cage is an attempt to recover neglected and perhaps deeper roots of what we call "music," for listening may gather in the total situation of not only sound but its context, synthesizing all this into an aesthetic project.

Sound's Critique of Music

Silent Prayer's aesthetic of silence must be heard in relation to the very thing it silences, opening up to what John Dewey calls "the art experience" by creating avenues for overcoming the forces that "operate to create a chasm between ordinary and aesthetic experience … [that] locate [art] in a region inhabited by no other creature, and that emphasize beyond all reason the merely contemplative character of the aesthetic."[27]

Lefebvre's "art of living," Cage's disinterested ego, Dewey's "art experience" signal a drive into the heart of the everyday, the ordinary, as contested site. *Silent Prayer* operates as musical project *and* critical gesture in such a way as to make the two intrinsic to the other, for *Silent Prayer* doesn't escape the shopping mall, but seeks it out.

Cage's silent composition *4'33"*, from 1952, furthers the intensified dialogue between music and life by again mobilizing the negative, nonintentionality of silence, expressing Cage's ultimate concern: "freedom from one's intentions."[28] As with *Silent Prayer*, *4'33"* is scored as a silent work, written in three movements for a random period of time.[29] Premiered on August 29, 1952, at the Maverick Concert Hall in Woodstock, NY, and performed by David Tudor, reactions to the work were, as can be imagined, mixed. Some people were enthusiastic and others befuddled. One person stood up at the end and encouraged the audience to "drive these people [Cage and the other musicians] out of town!"[30] It may be difficult to

conjure the outlandish and provocative nature of the work from contemporary perspective, for in many ways the work operates in a fairly gentle manner—no bombastic, Dadaist zeal or violent Actionism, which would generally warrant outrage. Yet the outrage is there, as the work oscillates to the other extreme.

4'33" is the perfect conflation of musical frameworks with the everyday field of ordinary environments. It underscores sound by not so much introducing noise as a musical factor (as in the case of the Italian Futurists) but by operating within musical contexts necessarily involving audiences. Like *Silent Prayer*, *4'33"* gains its operative force by self-consciously working with its own anticipated context, that of the concert setting. Context and audience function as determining factors to the work, *as* musical material: the incidental noise of the audience, and the random, acoustic occurrences of the given environment, mingle and invade the compositional framework, at the instant of performance. In *4'33"* duration (the time frame of the composition) and sound (in the form of incidental noise) remain as governing compositional devices. Sound here is any and all sounds, or "sounds, pure and simple,"[31] and specific sounds found within the context of performance, from such bodies as those seated or standing inside the moment of performance. Sound is thus heard imbued with the given characteristics of a found architecture, from bodies and their specificity (and the slamming of doors as people walk out). As with *Silent Prayer*, *4'33"* articulates the nonintentional, disinterestedness of the Cagean ethos, for "we are made perfect by what happens to us rather than by what we do."[32]

What *4'33"* captures in the move from composition to audience, from musical instrument to found sound, from composer as writer to composer as listener is a conceptual frame in which music and context set each other into relief, mobilizing silence to incorporate the noise of all that is outside music. "Thanks to silence, noise—not just a selection of certain noises, but the multiplicity of all noises that exist or may occur—makes a definitive entrance into my music."[33] A definitive entrance, and a definitive exit, for silence is implemented so as to withdraw the musical object and allow "all the sounds we don't intend"[34] to flood in. For "silence is always in a state of listening or of waiting for something to happen."[35] This waiting for something to happen is intentionally set to work in *4'33"* so as to tune perception to itself, its waiting, and its place within such waiting. As in *Silent Prayer*, silence combats a deflated listening by intervening within social space— here, the shopping mall is replaced by the concert setting, which could be said to produce a different consumer object.

Conceptual Music

In his book *Noise Water Meat*, Douglas Kahn criticizes Cage for "musically silencing the social" through an arsenal of "silencing techniques," which ultimately refers noise to a lingering framework of musicality: "One of the central effects of Cage's battery of silencing techniques was a silencing of the social."[36] For Kahn, while "letting sounds be themselves" Cage paradoxically relocates them inside a

rubric of preferential silence and subsequently refers back to a musical language governed by taste and aesthetics far from the social, thereby falling short if not contradicting his intended ambition. The compositional tools of duration and sound positions *4'33"* in the domain of musical production, and the silencing the work enacts necessarily contradicts and undermines the inherent noise of social space rather than amplifying it. Thus, for Kahn, Cage's work operates by "eliminating, diminishing, or displacing the source of the noise, transforming the noise into something else, or canceling the noise by playing back its image, so to speak, in the negative."[37]

In contrast to Kahn's criticism, it is my view that such a musical language, while operating as a contradictory gesture, forms an extremely productive lens through which a work like *4'33"* gains momentum. It seems important here to underscore the very contextual situation of *4'33"*, for the work was self-consciously "written" so as to *converse* with music through its performance in a concert setting. That is to say, the work *aims* for music, as cultural practice and as context. It is from this perspective that *4'33"* finds its operative power: by producing a musical situation in which silence and noise, music and the social, may intersect and destabilize each other.

People or Plants?

4'33" demarcates a time and a space in such a way as to underscore the meeting or gathering of occurrences as a locus, as a situational event with real bodies and real effects. Such a move is precursory to what can be called "site-specific practice," developed overtly within the arts of the mid- to late 1960s. Such practice draws upon the given parameters and situation and incorporates them into the making and presentation of the work itself. In this way, it is contextually aware, producing not so much an object of attention but a set of conditions by which context is brought into focus. In relation to Cage and *4'33"*, context is found in the historical legacy of the classical music tradition, and the burgeoning field of experimental music, the spaces and conditions of performance itself (concert hall), the mechanics of instruments and their references, as well as the language of listening and musicality. All these, rather than inform a final musical project, become active ingredients in his work and ultimately feature within the work itself: what we hear in *4'33"* is not so much the "silencing of the social" and a recuperation of musicality but a conceptual framework in which the social and silence are brought into dialogic relation. That is to say, while Cage's operations rely upon notions embedded in Western art music, they do so in a way that conceptually frames and questions them. Such a process sets the stage for the terms of the social and silence to play off each other, potentially undermine their stability, as autonomous and fixed, and lead to renewed perspectives on their inherent tensions, meanings, and potential. For here, "the very existence of silence depends upon noise *and* permits noise to exist."[38] Such operations parallel what Walter Benjamin called the

"dialectical image." While discussing the intensified production and use of images within social space of the 1930s, Benjamin's dialectical approach suggests ways to understand Cage's maneuvering between musical object and silence. As Ben Highmore points out, Benjamin's dialectical image "is a constellation (a montage) of elements that, in combination, produce a 'spark' that allows for recognition, for legibility, for communication and critique."[39] Such a description may be placed alongside *4′33″*, for the constellation of music, silence, space, and audience throws off a spark through which listening and music complicate and renew each other. In this move exists an implicit critique: the terms by which music is understood, as produced object or event, unravel so as to underscore them as determining factors to music in general.

What Kahn does point out is that such "noise of everyday life" finds its alternate development, beyond the strictly musical framework, within a technological legacy of the modern period. From Kahn's perspective, the noise of the social is articulated and made public through technological advances and their subsequent aural by-products—the crackle of phonographs, the static of telephone lines, radiophonic noise, cinematic stereophony—which form the basis for an expanded aurality advanced throughout the twentieth century.[40] Yet while such aurality may infiltrate the social, occur as everyday events, and filter through daily conversation, it may remain *outside* cultural reflection as subject matter. In this way, the silence of *4′33″* is one that allows *and* introduces the social as a functioning term within musical practice, and, inversely, for the social to take on the musical as a paradigm for active listening, as an aural experiment. Here, Cage may fail to stop being a composer, or to advance along the lines of Futurist haranguing, but due to this he seems able to make more explicit music's shortcomings and ultimate potential to address issues traditionally outside its scope. In this regard, *4′33″* is both a silence and an investigation of its effects, explicitly addressing the musical audience in the very act of listening. "An audience can sit quietly or make noises. People can whisper, talk and even shout. An audience can sit still or it can get up and move around. People are people, not plants."[41] Operating through silence, *4′33″* looks toward the audience as sound-source (shuffling feet, coughing, laughing, walking out)—individual bodies, rather than plants—underscoring listening itself *as* an act and audience *as* a musical event.

> Most people think that when they hear a piece of music, they're not doing anything but that something is being done to them. Now this is not true, and we must arrange our music, we must arrange our art, we must arrange everything, I believe, so that people realize that they themselves are doing it, and not that something is being done to them.[42]

As with *Silent Prayer*, and other of Cage's works, such as *4′33″*, music is a form of proposition, an acoustical suppression of the ego (as a "non-listening speech") so as to replace it with an active event: in the gap between sounds, the silent space

within music, listening is forced away from the musical object and toward its own process: what I hear is the noise of my own listening, where responsibility is given to the listener for the music produced. In this regard, once such recognition occurs, the audience may ask itself: what kind of music are we going to make? Such listening is found in musical messages that are not so much predetermined, as written score, but arise through process, event, and conversation between situation and context, audience and musician, where listening may speak, echoing Roland Barthes: a "listening that speaks … compels the subject to renounce his 'inwardness,'" thereby opening listening out onto a dispersed field of meaning.[43] Though discussed in relation to psychoanalysis, and the relation between patient and therapist, as a specialized moment of speech, Barthes's "listening that speaks," in turn, speaks to the broader field of orality and audition, sound and its emanation. He demarcates a space in which the two are resituated, beyond their dichotomous distinctions: the listening that speaks articulates a nuance of relation by making the seeming passivity of listening active, outspoken, and articulate. Coincidentally, Barthes uses Cage as an example of this externalized, speaking-listening, for in Cage's music "each sound one after the next" is heard "not in its syntagmatic extension, but in its raw and as though vertical *signifying*."[44] By seeking to strip away the representational nature of sound—this sound is understood only in relation to its referent—sound is potently dislodged to float along a chain of reference, as a "signifying" agent within a musical event, outside the narratives of musical argument. This signifying of sound over its signification (and ultimate decipherability) makes possible a shift in listening by which individual imagination is mobilized, for listening reaches not for correct meaning but for its potential. In "realizing that they [audience] are in fact doing it [music]" listening searches for its own narrative—it speaks, it musicalizes, it determines composition, however outlandish or uneventful.

Staging Noise

Silent Prayer and *4'33"* operate by relying upon a language of silence: the works are composed silences aimed at commenting upon certain contexts, from the shopping mall, as domain of ordinary experience, to concert halls, as arena of musical aesthetics. They both aim to uncover and initiate new modes of composing and listening. In contrast, Cage's Black Mountain event from 1952 is a composed noise aimed at unsettling audiences and their listening habits.

Organized while working at Black Mountain College during a summer residency, along with Merce Cunningham and David Tudor, the work was structured around fixing durational "compartments" within which performers were allowed to fill their respective slots with whatever materials they chose, from text to sound to movement. In addition, the actions—musical, visual, and performative—were housed within a spatial design that aimed to disrupt the centrality of the stage/audience dichotomy. For the event, seating arrangements were divided into four

sections, each facing each other and fanning out from a central area, thereby creating an X formation with four distinct perspectives. In this way, the performance presented information from all sides, thereby frustrating certain perspectives while activating others, for an audience member could never experience the entire presentation all at once but was given a series of partial views, each adding up to its own unique "version" of the work. For Cage, this was an attempt to "change architecture from the Renaissance notion to something else which relates to our lives."[45] Such an architectural shift, from the proscenium to a theater in the round in which "we ourselves are in the round," in turn, sets the stage for replacing singular with multiple perspectives. Here, the Renaissance development of perspective for rendering three-dimensional space on two-dimensional surfaces gives way to the multiplicity that, for Cage, renders more accurately the experience of daily life.

The Black Mountain event provides no stable perspective, no ideal viewing/hearing position; instead the audience sees itself as part of the event. In this sense, we can follow Cage's increasing interest in the audience as a determining input, not only as sonic occurrence, as in *4′33″*, but as positioned subject whose own experience leads to its creation:

> The structure we should think about is that of each person in the audience. In other words, his consciousness is structuring the experience differently from anybody else's in the audience. So the less we structure the theatrical occasion and the more it is like unstructured daily life the greater will be the stimulus to the structuring faculty of each person in the audience. If we have done nothing, he then will have everything to do.[46]

Such an overtly architectural interest appears in Cage's work intermittently. His writings are sprinkled with various references to architects and buildings, though these feature only occasionally in direct relation to his own work. Branden W. Joseph has explored such architectural interests through Cage's own critical opinion of modern architecture. Focusing on Cage's articles "Rhythm Etc." (1961) and the earlier "Juilliard Lecture" from 1952, Joseph underscores Cage's interest in transparency and the use of glass in the works of Mies van der Rohe as paralleling his own interest in silence.[47] "For Cage, any silence in Miesian architecture would not negate the environment but would open the building up to an interpenetration with its surroundings along the lines of Cage's own definition of silence."[48] Equating transparency and glass with silence and the opening up of the musical envelope to outside noise—in this sense, the environment that lingers behind the musical event—Joseph maps out a compelling constellation in which modern architecture and Cage's work converse. We can extend such conversation in the Black Mountain event, as Cage does, to recognize sensitivity to the structure of presentation and the position of audiences. Intentionally locating the audience in such a way as to confound their aural and visual perspectives, Cage implies in a

move sympathetic to everyday life that things happen that we don't always witness. That is to say, not only does transparency lead out onto an open and full view, it fills such a view with overlapping and often conflicting information, as a multiplicity of those "stochastic and disordered bodies" emblematic of the real.[49] "Twentieth-century art's opened our eyes. Now music's opened our ears. Theatre? Just notice what's around."[50]

As an aside to Joseph's "silent architecture," the Black Mountain event can be seen as a kind of "landscape architecture" in which objects are positioned to build up layers of input, echoing Cage's own admiration for "those Japanese gardens with just a few stones."[51] In contrast to the "open space" of modern architecture, the open space of Japanese Zen gardens are often designed to create layers of possible perspective. Rather than fill space with light, open vistas through transparent material, Japanese gardens situate a viewer by complicating transparency and open space, as in the Ryoan-ji Zen garden in Kyoto (which Cage himself admired and is obviously referring to in the above quote).[52] Built in the Muromachi period (1499), Ryoan-ji consists of fifteen stones positioned in a rectangular pebble garden, surrounded by a cement wall, maple trees, and a temple. What distinguishes the simplicity of the garden is that the stones are placed in such a way that from any one position a viewer can never see all of them. In this way, something is always hidden from view. Such a construct signals a greater metaphoric proposition: that any single line of thinking must always make one blind to other possibilities.[53]

Confounding view, creating curiosity, initiating inquiry, the Black Mountain event builds an architecture of too little and too much: in always missing part of the action, audiences discover through their own initiative possible views.

> I was on a ladder delivering a lecture which included silences and there was another ladder which M.C. [Mary Caroline] Richards and Charles Olson went up at different times.... Robert Rauschenberg was playing an old-fashioned phonograph that had a horn and a dog on the side listening, and David Tudor was playing a piano, and Merce Cunningham and other dancers were moving through the audience and around the audience. Rauschenberg's pictures were suspended above the audience....[54]

Cage's description races along to catalog the multiplicity of action, to trace the simultaneous movement of sound upon sound, image upon image, as festive theatricality. Built into the performance are a number of structural elements that, in keeping with the stage design, aim to allow performers the freedom to interpret the score and introduce their own elements into the work. In this sense, the piece stages an indeterminate spectacle that would, in turn, add to the inherent multiplicity. As Leta E. Miller suggests, for the Black Mountain event Cage, "instead of creating a fixed work, collaborated in a process, governed by rule but free in its realization."[55] Such strategies are a culmination of Cage's ongoing concern to

liberate sound by erasing the ego of the artist. By giving the performers the freedom to interpret the work, and introduce their own material input, and through structuring works so as to amplify multiplicity, Cage could alleviate the work from his own authorial grip—to step aside and allow the work to complete itself. "[Normally] Cage set up the architecture but then allowed the internal décor to be subject to chance operations.... His works were like a field with a fence, in which one could move as one wished."[56]

Whereas *4′33″* silences music, Black Mountain reaches for a silencing of singularity; *4′33″* makes transparent the space of music, as an opening onto sound, Black Mountain fills space with a density of material and input. Yet both operate to frame a listener's relationship to music by being aware of their positioning: *4′33″* by pointing toward their own presence and Black Mountain by complicating perspective. In contrast to *4′33″* as an attempt to make transparent musical practice so as to introduce, as in Mies's Farnsworth House in Illinois, the outside environment, Black Mountain theatrically stages an environment—to position the audience so as to recognize the haphazard, multiplicity of input—sounds, words, images, movements—as possible music, continually remaining open to individual interpretation.[57]

Unnaming

Cage's project to liberate sound operates by redefining musical objects and messages; he mobilizes sound for philosophical thinking based on an ethics of listening; he speaks out and gives up in the same move, working to direct attention to what is already there; he renames musical practice according to an awareness of its place within larger contexts. The name, in effect, is the very thing his work aims to erase or silence, for it concretizes definition according to a prescribed set of terms. As Derrida proclaims: "To give a name is always, like any birth (certificate), to sublimate a singularity and to inform against it, to hand it over to the police."[58] Therefore, the name grants individuality in the naming of such, while handing over the individual to the police of language, for "the name of a man is a numbing blow from which he never recovers."[59] The name is a "performative," following Judith Butler, in that it relies upon a "linguistic authority" as a means to enact its very articulation.[60] To liberate and pin down in one and the same move, the name arrests and grants definition while (over)determining subjectivity. The name then is a form of violence—"we stand before the name as we stand before the law,"[61] and yet such violence is the promise of subjectivity: "Every time there is a name given, there is a promise ..." and this promise is "the promise of Being."[62]

Cage's attempt to rename sound according to itself, to locate "sounds, pure and simple,"[63] reflects a desire to allow the promise of its Being *to be*, that is to say, to distract the police for a moment so as to allow the name to embody itself, to name itself, before being arrested. Engaging questions of representation thus

leads to an unavoidable awareness of context and the external forces that operate to give definition. To erase the name then is an attempt to allow a name to occur, according to its own directives and force. Naming (or unnaming) for Cage is enacted in the erasing of musical representation, in the silencing of personal taste, in the amplifications of noise, in the procedures and situations of music. Preparing pianos, silencing Muzak, causing audiences to stir, the function of musical messages is turned inside out, deflected from the piano to the audience, from the consumer object to interior thought, in a self-conscious shuffling of definition: where is the source of music and where is its space of reception?

Through following Cage's work and its example, it has been my interest to pursue the intentions looming behind the work so as to recognize in what way it produces a sense of musical practice ultimately wed to a sensitivity of context. A constitutive result of such a proposition in Cage leads to a performative play with the individual ear. Aurality is made the governing term in the perception of not only the concert hall as domain of music but of the world in such a way as to mark it as different: listening can create social bonds, function as a central term in the perception of events, and lend itself to a consideration of context and environments, which life continually delivers up. Cage's own move to presenting *4'33"* on the sidewalk in Harvard Square in 1972 may reveal his belief that his work is inherently *about* social space. Whether sounds ever truly become themselves in Cage's work is to miss the point, for "letting sounds be themselves" initiates a conversation in which the musical and found sounds merge, making music a cultural paradigm beholden to sound and its situatedness.

Notes

1. Wim Mertens, *American Minimal Music*, trans. J. Hautekiet (London: Kahn & Averill, 1999), p. 88.

2. Michael Chanan, *Musica Practica* (London: Verso, 1994), pp. 273–274.

3. Ibid., pp. 274–275.

4. Michael Nyman, *Experimental Music: Cage and Beyond* (Cambridge, UK: Cambridge University Press, 1999), p. 27.

5. Frances Dyson, "The Ear That Would Hear Sounds in Themselves: John Cage 1935–1965," in *Wireless Imagination*, eds. Douglas Kahn and Gregory Whitehead (Cambridge, MA: The MIT Press, 1994), p. 383.

6. Including works such as *A Book of Music* (1944), *Three Dances* (1945), and *Sonatas and Interludes* (1948).

7. Cage's original tape version was made to accompany a dance work by Jean Erdman and used jazz records, partly because the dance work had a quality related to "popular" music and partly so Cage could attempt to overcome his dislike of jazz.

8. See Alice A. Jardine, *Gynesis: Configurations of Woman and Modernity* (Cornell, NY: Cornell University Press, 1986).

9. Michael Nyman, *Experimental Music: Cage and Beyond*, p. 4.

10. John Cage, "Experimental Music," in *Silence* (Middletown, CT: Wesleyan University Press, 1961), p. 7.

11. Umberto Eco, quoted in Jean-Jacques Nattiez, *Music and Discourse*, trans. Carolyn Abbate (Princeton, NJ: Princeton University Press, 1990), p. 83.

12. Quoted in Douglas Khan, *Noise Water Meat: A History of Sound in the Arts* (Cambridge, MA: The MIT Press, 2001), p. 179.

13. Theodor Adorno, "On the Fetish Character in Music and the Regression of Listening," in *The Culture Industry*, ed. J. M. Bernstein (London and New York: Routledge, 2001), p. 46.

14. John Cage, quoted in Michael Nyman, *Experimental Music: Cage and Beyond*, p. 23.

15. John Cage, *A Year from Monday* (London and New York: Marion Boyars, 1985), p. 166.

16. Henri Lefebvre, *Critique of Everyday Life*, Vol. 1, trans. John Moore (London and New York: Verso, 1996), pp. 199–200.

17. Ibid., p. 199.

18. Margaret Crawford, "The World in a Shopping Mall," in *Variations on a Theme Park: The New American City and the End of Public Space*, ed. Michael Sorkin (New York: Noonday Press, 1992), p. 6.

19. Ibid., p. 14.

20. Dick Hebdige, *Subculture: The Meaning of Style* (London: Routledge, 1991), p. 13.

21. Hans G. Helms, "John Cage," in *October* #82 (Fall 1997), p. 77.

22. Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (London: Routledge, 1994), p. 4.

23. John Cage, *Conversing with Cage*, ed. Richard Kostelanetz, 2nd edition (London and New York; Routledge, 2002), p. 231.

24. Gemma Corradi Fiumara, *The Other Side of Language: A Philosophy of Listening*, trans. Charles Lambert (London and New York: Routledge, 1990), p. 95.

25. Ibid., p. 12.

26. Ibid., p. 13.

27. John Dewey, *Art as Experience* (New York: Perigee Books, 1980), p.10.

28. John Cage, "Reflections of a Progressive Composer on a Damaged Society," in *October* #82 (Fall 1997), p. 77.

29. The score reads: I. 0:33 Tacet II. 1:20 Tacet III. 2:40 Tacet. "Tacet" is the term used to inform a performer to remain silent during a musical movement.

30. David Revill, *The Roaring Silence: John Cage: A Life* (New York: Arcade Publishing, 1992), p. 166.

31. John Cage, *For the Birds* (London and Boston, MA: Marion Boyars, 1995), p. 74.

32. John Cage, "Forerunners of Modern Music," in *Silence*, p. 64.

33. John Cage, *For the Birds*, p. 117.

34. John Cage, quoted in *John Cage*, ed. Richard Kostelanetz (New York: Praeger, 1970), p. 166.

35. M. F. Sciacca, quote in Gemma Corriadi Fiumara, *The Other Side of Language*, p. 101.

36. Douglas Kahn, *Noise Water Meat: A History of Sound in the Arts*, p. 165.

37. Ibid., p. 183.

38. Allen S. Weiss, *Phantasmic Radio* (Durham, NC: Duke University Press, 1995), p. 54.

39. Ben Highmore, *Everyday Life and Cultural Theory* (London and New York: Routledge, 2002), p. 71.

40. For more on this, see Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffery Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University, 1999).

41. John Cage, "Diary: Audience 1966," in *A Year from Monday*, p. 51.

42. Quoted in Michael Nyman, *Experimental Music: Cage and Beyond*, p. 24.

43. Roland Barthes, "Listening," in *The Responsibility of Forms*, trans. Richard Howard (Berkeley and Los Angeles: University of California Press, 1991), p. 259.

44. Ibid.

45. John Cage, in *Happenings and Other Acts*, ed. Mariellen R. Sanford (London and New York: Routledge, 1995), p. 52.

46. Ibid., p. 55.

47. It is interesting to note that the text Cage reads from in his Black Mountain event is his "Juilliard Lecture."

48. Branden W. Joseph, "John Cage and the Architecture of Silence," in *October* #81 (Summer 1997), p. 89.

49. Friedrich Kittler, *Gramophone*, *Film*, *Typewriter*, p. 14.

50. John Cage, *A Year from Monday*, p. 50.

51. John Cage, in *Happenings and Other Acts*, p. 64.

52. He also composed musical and visual works referencing Ryoan-ji throughout the early 1980s; see Joan Rettalack, *Musicage: John Cage in Conversation with Joan Rettalack* (Hanover, NH: Wesleyan University Press/University Press of New England, 1996), pp. 240–243.

53. Marc Treib and Ron Herman, *A Guide to the Gardens of Kyoto* (Tokyo: Shufunotomo Company, 1993), p. 94.

54. John Cage, in *Happenings and Other Acts*, p. 53.

55. Leta E. Miller, "Cage's Collaborations," in *The Cambridge Companion to John Cage*, ed. David Nicholls (Cambridge, UK: Cambridge University Press, 2002), p. 152.

56. Gordon Mumma, quoted in Leta E. Miller, "Cage's Collaborations," in *The Cambridge Companion to John Cage*, p. 159.

57. In a letter written on the work of Charles Ives, Cage says: "Everybody hears the same thing if [the musical event] emerges. Everybody hears what he alone hears if he enters in." To enter into music, rather than to be confronted with its emergence, leads to individualized interpretation, which is expressive of Cage's aim for liberation. See John Cage, *A Year from Monday*, p. 39.

58. Jacques Derrida, *Glas*, trans. John P. Leavey and Richard Rand (Lincoln, NE: University of Nebraska Press, 1990), p. 7.

59. Marshall McLuhan, *Understanding Media* (London: Routledge, 2002), p. 35.

60. See Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (London and New York: Routledge, 1999).

61. Alexander García Düttmann, *The Gift of Language*, trans. Arline Lyons (London: The Anthlone Press, 2000), p. 95.

62. Ibid., p. 110.

63. John Cage, *For the Birds*, p. 74.

Chapter 2

Exposing the Sound Object: Musique Concrète's Sonic Research

Sound's locational intensity arrives through it always already being there: before this writing starts, a sound is heard, its presence already passing, altered in the flows of molecules, cut up by mouths inhaling and speaking back into the air's modulations, trapping, letting go, and attenuating the plateau of the aural. Sound butts in, and then falls back, pushing forth its source, whether object, body, music, or movement, into the frame of perception. I stand by sound, and sound invades my space—it disrespects borders, thereby making explicit the intensity of territory. To record sound, trap it on media ready for amplification, diffusion, and distribution, through systems of transport and broadcast, is to toy with the present, undo origin, and realign memory. It is also to turn sound into object, giving it weight and mass, added strength and force, a figure haunting through its continual reappearance the bodily real.

As a contemporaneous parallel to the early work of John Cage, musique concrète significantly figures sound as a subject of research as well as musical medium. Though to refer to musique concrète in relation to Cage, and his work from the late 1940s and early 1950s, is to arrive at a philosophical and methodological split, for each occupies extreme positions in relation to questions of sonic representation and musical meaning. It is also to discover a regional shift, for the French school of musique concrète articulates a distinct difference from, if not opposition to, Cage and what can be seen as a North American tradition. This difference articulates itself in relation to the musical object and its context. Such differences between Cage and musique concrète offer the chance to articulate more fully sound as a specific medium, as well as chart how practitioners negotiated the unsettled terrain between sound and music in the early stages of experimental music.

As mentioned, what we hear in the work of Cage, and reflected in works such as *4'33"*, as well as *Cartridge Music* (1960), which calls for the amplification of small objects,[1] is an emphasis on the very source of sound itself, as objects, electronic

circuits, and real bodies: a reference to sound as founded upon the actual object of its source, as in the piano and the sounds of the audience, shopping malls and their soundtracks (and their proposed removal), or the multiplicity of live action and their unimpeded and chance-driven juxtapositions. The work establishes a sensitivity to sound, and listening in general, by showing us the direct place from which it springs, underscoring the ever-present happenings of real sound, as in works like *Living Room Music* (1940), utilizing the found object itself, or the Imaginary Landscape series, exposing and amplifying the circuitry of electronics. Reference to its source underscores sound in such a way as to encourage, or set the stage for, liberated perception, for it insists upon the direct correlation between music as a culture of listening and sound as indicator of everyday life as found in material objects and their ultimate appropriation. Such performativity underscores material presence by establishing reliance on the sound source as a signifier from which sounds arise and, in a sense, return. For as listeners, we are asked to hear sounds as liberated from traditional representational devices of musical composition *through* the very material source. Such insistence performs its own philosophical wrestling match, for it seeks to remove meaning so as to find it again. Thus, we are asked to understand the liberation of sound in relation to material conditions: the material of objects, the material of sounds, the material of our own bodies and the space in which we are positioned. These become conditions that refer to themselves rather than signifiers of some *other* reality; for Cage, liberation only occurs by insisting on sound, and by extension, direct perception, beyond representation or mediation, as found within the location of the real.

Against such thinking, musique concrète locates sound's liberation through ideal configurations, harnessing sound's intrinsic ambiguity or malleability so as to create distinct auditory experiences abstracted from an original source, beyond or in spite of material reference. Musique concrète underscores the technological mechanics, physics, and inherent nuance of sounds as revealed through the properties of phonograph records, magnetic tape, and the recording studio, loudspeaker, and sound diffusion. Thus, to a certain degree, experimental music's initial steps oscillate from concentration on a social architecture in which sound figures to a concern with the body of sound as an object in its own right.

Musical Research

Pierre Schaeffer, along with Pierre Henry, established the Groupe de Recherche de Musique Concrète in 1951 while acting as researcher at Radiodiffusion-Television Francaise (French national radio) where he had been working since 1944. In establishing the Groupe (later renamed Groupe de Recherches Musicales, or GRM, in 1958), Schaeffer created a specialized context for audio research and musical experimentation. Such research had profound influences on music, leading to the establishment of electro-acoustic music, yet it is important to emphasize that any musical outcome was the result of a technological, investigative sonic

process. Musique concrète positions music within a larger sonic syntax based on the manipulation of audio machines and recording media, the cultivation of sound objects and their intrinsic dynamic. GRM should thus be seen both as a school of musical thought and practice *and* a laboratory for the continual development of acoustical research.

Prior to establishing GRM, Schaeffer was educated in radio and broadcast technology and engineering and began working at Radiodiffusion-Television Francaise (RTF) in the 1930s, initiating the study of musical acoustics in 1942 during German occupation. Having access to phonograph turntables, recording devices, and a library of sound effects housed at RTF enabled Schaeffer to explore the possibilities such technology could have on opening up the inner world of sound. While applying technology to making music, Schaeffer, in turn, positioned the process of composition within an overarching arena of study: phonograph turntables, recording machines, and manipulation techniques made available sound as a specimen. A recorded sound could be objectified and scrutinized, magnified, repeated, re-recorded, and played back so as to hear all its hidden and potential details, uncovering the inner dynamic nestled inside every instant or particle of sound. Scientific investigation coupled with musical production, sonic manipulation as compositional aesthetic.

Schaeffer's *Études de Bruits*, from 1948, referred to as the first musique concrète compositions, are clearly marked by the appropriation of existing recordings and their ultimate dissection and transformation. Broadcast as a "Concert of Noises" by RTF, Schaeffer's initial compositions recall Luigi Russolo's noise machines, whose design aimed to belt out a range of pseudoindustrial noise. From the crackler and the roarer to the bubbler and the thunderer, Russolo's "art of noise" obliterates notions of tonality in favor of a radicalized noise palette.[2] Brutal and assaultive, funny and ridiculous, the noise orchestra finds its way into the future of music by insinuating itself onto recorded media through Schaeffer's *Études*. Yet such noise operates not as an end in itself but as an expanded field of aurality.

Études de Bruits is produced from a series of recordings made from various sources: recordings of musical instruments, the railroad, an orchestra captured while tuning, a piano (performed to *exclude* any sense of musicality), and voices found on a recorded disc that had been thrown away. Through the use of phonographs, Schaeffer could alter the speed of playback, thereby pursuing a range of pitches. Such simple means of manipulation, while retrospectively primitive, must be underscored as a radical alteration of musical sensibility—for records contain an endless array of sonic sources, housed inside the multitude of grooves, within the electronic potential of its ultimate manipulation: slowing down, speeding up, repeating, randomly picking up and placing down the stylus, scratching records, accentuating its materiality, the static, the crackle (its surface as another set of potential sounds), all of which feature on every single record and recording.

Appropriating the phonograph record and its machine of playback, Schaeffer developed an array of techniques, at first based not only on altering playback

speed but also through "lock-groove" (*sillon fermé*) and "cut bell" (*cloche coupée*) techniques. The lock groove was established by cutting off the single groove of a phonograph record, which enables the stylus to move from the outer edge (beginning) to the inner edge (end) of a record. The lock groove essentially enabled Schaeffer to create a "loop" of sound. Rather than move from beginning to end along its course, an instant of sound could be endlessly repeated, fixed in an almost static state, enabling a listener to dwell upon its details. In addition, the "cut bell" was developed as "an experiment in interruption," which in "isolating a sound from its context ... and manipulating it ... a new sound phenomenon" could be created.[3] To achieve such potential, Schaeffer made a series of disc recordings of bells in which he eliminated the initial attack by using a volume controller between the microphone and the cutter. Through such a process, the bells sound more like the notes of a flute. By using these recordings, Schaeffer could fix them on record and create a locked groove, thereby developing a whole range of new sound phenomena. As Schaeffer reflects: "Having come to the studio to 'make noises speak,' I stumble onto music...."[4] His *Études*, as technological processes, as sonic investigations, "stumble onto music," yet not through a concerted use of chance or the introduction of audiences as sound-generating sources but through a probing of the mechanical potentials of early electronics and the concrete quality of found sounds. As an aesthetical potential, concrete sounds offered an endless source of "sound bodies" for the making of "sound objects." As Schaeffer discovered, sound's potential existed not in its immediate, real instant but in its separation from such location. As in the locked groove and the cut bell, sound was cut off from its source, as real phenomena, and further, as immutable recording.

Musique concrète spirals into and deviates and detours through an appropriation of sound, its recordings, its archives, and its technologies to arrive at what Schaeffer terms "reduced listening," defined by Michel Chion as "listening for the purpose of focusing on the qualities of the sound itself (e.g., pitch, timbre) independent of its source or meaning."[5] Reduced listening repositions the listener away from an interpretive and culturally situated relation so as to direct attention to the phenomenal, essential features of sound and the musical work. As in Cage's liberation of sound, musique concrète aims to move away from the trappings of language as laid over sound and its meaning. It does so by isolating sound, "targeting the event which the sound object is itself (and not to which it refers) and the values which it carries in itself (and not the ones it suggests)."[6] Reduced listening makes accessible the sound object—the cut-out bell, the locked groove on the steam train, the montage and superimposition of one sound on another, as a sonic discovery of buried worlds. As in later works, such as Bernard Parmegiani's *La Création du Monde* (1984), in musique concrète—in isolating sound and delving deep into its material body—reverie, myth, and fantasies of cosmic journeys abound. For the sound object refers back to itself, not sources outside, emphasizing the instant of its (re)presentation, thereby fostering a poetics spun from

sonic intensities as pure matter broken down into energy by the forces of audio manipulation. *La Création du Monde* is an epic poem starting from "Lumière noire" (black light) to "Métamorphose du vide" (metamorphosis of the void) and finally to "Signes de vie" (signs of life). Each stage conveys a range of sound movements, from "Lumière noire" and its incorporation of "white noises" as all the frequencies bundled together into sheets of grating noise that traverse the stereo field, punctuated and sprinkled with a twisting and torquing of sound; to "Métamorphose du vide," the most active movement, compiled of a slow unfolding of cascades of eerily haunting sounds bringing to mind prehistoric voices, increasingly becoming more pronounced through stereophonic play: bubbling up, abstracted, a rising series of trumpet-like horns lingers in the distance, as if announcing the birth of a new day, which slowly falls into a series of extended plateaus of tense tonality. Finally, "Signes de vie" begins with the skirting and shifting of quick pulses, rising and intensifying into flashes of sound, thudding like a storm of apples hitting wet earth. Such sounds seem to follow the musical narrative, as sounds come to life, to fade slowly into dry and brittle cracking and ticking racing through a range of pitches. Throughout *La Création du Monde*, sound is totally removed from a relation to harmony or melodic line, infused with a "quantumsonics" that pulls the sonorous imagination toward a world of material transmutation and fantasy.

Electronic Frontiers

Working with recording technology, phonograph records, and magnetic tape and its manipulation, Schaeffer and other early musique concrète composers such as Parmegiani, as well as Francoise Bayle (later, the director of GRM from 1966), Pierre Henry, and Luc Ferrari, investigate the intensely detailed palette of sound through the creation of "sound objects," distinguished from other forms of electronic music, for example, as cultivated at the Westdeutscher Rundfunk studios in Cologne. Established in 1951 under the directorship of Herbert Eimert, the Cologne studios developed an electronic music ("Elektronische Musik") by exploring the possibilities opened up by early recording technologies and computers based on synthesized sound. As Stockhausen states: "Composing electronic music means: describing that which sounds in mechanical and electro-acoustical dimensions and thinking only in terms of machines, electrical apparatuses and circuit diagrams; reckoning with one single production and unlimited repeatability of the composition."[7] Stockhausen's general description could certainly apply to musique concrète, yet the debates around the emerging field of electronic music at this time reveal a stark divide. Whereas musique concrète "begins with a prepared sound material, which is molded into its final form by a process of experimentation, trial and error, perhaps following unexpected paths to goals that were never foreseen initially, electronic music [at the Cologne Studios] was composed like traditional music, first being conceived in the mind of the composer, then written

down, and finally realized in sound."[8] From this perspective we can understand more explicitly Schaeffer's "stumbling onto music," for the experimental ethos of musique concrète, in setting out to develop audio research, relies upon intuitive, analytic, and propositional processes onto the world of sound. In contrast to the Cologne studios, Schaeffer and musique concrète aim more pointedly for the mind of the listener, as a process of discovery that occurs just as readily for the composer in the process of composing as for the audience.

Musique concrète sought to move away from the "outside of sound" to the inside by pursuing the mechanics of sound recording and reproduction. Here the composer is more an intuitive engineer in the making of sound objects than a writer of compositions, a figure of sonic production and not an ethical philosopher. The extra-musical dimensions of sound are taken on as an extension of musicality in both Cage and Schaeffer's work, yet for the former it ultimately points to an ethical urgency; whereas, for the latter, it functions in the laboratory of sonic exploration.

The analysis of auditory perception, or psychoacoustics, figures prominently in musique concrète, alongside a critique of the classical notions of timbre, or the "color" of sound, as relegated to the domain of pitch control. As Chion points out in reference to Schaeffer's 1966 written work *Traité des objets musicaux*, such concerns are given a programmatic scrutiny, elaborated through quasi-scientific dissection:

> The distinction of four ways to hear (hear, perceive, listen, understand) and the analysis of this "circuit of musical communication" into four sectors: complementary definitions for "sound object" and "focused listening," two key notions introduced by Schaeffer; a dialectic in perception relating to "sound object" and "musical structure"; critique of classical notions of timbre and parameters that seek to describe in a useful way the phenomena of sound, and a counter-proposal of seven perceptive criteria, perceived in the triple "perceptive field" natural to the ear; and the use of all this to achieve a larger program of musical research. . . .[9]

Such a litany of analytic terminology infuses notions of musical composition with scientific scrutiny. The "four ways to hear," "circuit of musical communication," and "perceptive field natural to the ear," in turn, create a vocabulary relevant to the mechanics of sound reproduction and its inherent elasticity with the ultimate aim of inducing states of auditory experience. This is extended throughout the work as Schaeffer seeks to classify all sound-producing objects according to seven categories: mass, dynamic, harmonic timbre, melodic profile, mass profile, gain, and inflection. To refer back to Parmegiani's *La Création du Monde*, listening enters a fantastic fiction of imagistic sonicity reliant upon spectral analysis and acoustical understanding. Extracting detail upon detail, accumulating movement upon movement, musique concrète dramatically manipulates sound, aligning the scientific with the dramatic potentiality of the aural imagination.

Acousmatics

After 1951, tape recorders replaced phonograph records as the primary vehicle and tool for making work at the RTF, offering further electronic capability through multiple recording and playback channels, as well as multiple playback heads allowing for effects such as tape echo and reverb to be introduced. Through tape looping, reversing tape direction, changing speeds on tape machines, tape cutting and editing, superimposing sounds, multi-track recording, and the emerging use of stereo and subsequent effects of spatiality accentuated through multiple speaker placement, the technological future continually lends to the manipulation and research of sound and its ultimate musical potential. Musique concrète thus offers a parallel yet alternative voice in the move toward everyday life in the postwar period, initiating a liberated listening not as social transformation but as perceptual intensity. For such acoustical investigations and subsequent diffusions altered not only the understanding of what music could be but how the ear might listen to the world. Musique concrète pulls into its sonic net an entire array of sound sources, machines, and archives to condense all such things into a compact musical object. Drawing in and exploding back out, musique concrète is highly attuned to the processes of reproduction and its ultimate "acousmatic" distribution.

As theorized by Schaeffer, and later Francoise Bayle, the acousmatic situation emphasizes reduced listening through the presentation of music in such a way as to lessen the intrusion of outside reference. "In listening to sonorous objects 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."[10] Visual information, the role of the performer, and instrumental objects are all removed from the acousmatic situation, replaced by a darkened room, sets of multiple loudspeakers, and a mixing console. In this sense, what is staged is the sound object without external interference or reference as architecture built only in sound itself—dimensions occur by the discreet placement of sound through a playback system and sonic movement within the composition itself.

The sound object thus garners attention and, in turn, the listening individual is positioned as attuned to the heightened potential of auditory experience through technology and its ability to disassociate sounds from their indexical referent—to break the contextual link. Musique concrète is thus *embedded* in the mechanics of its own productions, as inscription on media whose ultimate presentation requires a "blind listening," for "the sonorous object is never revealed clearly except in the acousmatic experience."[11] The acousmatic thus functions as an arena for the amplification of such secrets and inscriptions—a radiophonic theater breaking open aural perception by mobilizing sonic elasticity.

Contextual Debate

Musique concrète requires, in its move to auditory experience and the electronic potential of found sounds, from the acousmatic to the sound object, a suppression of context. Environmental sounds, and the aural materials found in reality, are manipulated to such degrees as to leave them abstracted and devoid of their original markings. At times such markings surface, yet are mixed in with the larger musical structure so as to leave them unrecognizable. The suppression of reference, to both the origin of sound and the presence of place, whether signaled by architecture, as in the concert hall, or the presence of an audience, contrasts strongly with Cage's (and other North American composers' and artists' of this period) emphasis on sound and its source. Materiality and context form the basis for an exploded musical object, and aurality, in the Cagean example, whereas the ideality of sound and its technological partner form a self-enclosed loop of detailed sonic structurings in musique concrète.

The contextual, compositional, and material divide between musique concrète and Cage can be further glimpsed within the GRM itself. Luc Ferrari's composition *Presque Rien No. 1* from 1970 caused a slight rift in the GRM studios through its reference to the real as autobiographical narrative rather than sonic material, as insistence on the source as opposed to an abstracted imaginary. Ferrari's work consists solely of a recording produced by positioning a microphone out his window while staying in a small fishing village in Yugoslavia near the Black Sea. In short, the work moves outside the confines of both the concert hall and the music studio to confront the random and ambient murmurings of everyday life in such a way as to undermine the Schaefferian sonic investigation, for it positions Ferrari more on the side of a Cagean nonintentionality whereby the composer "becomes a member of the audience," composing as a "contextualized" listener.[12]

> I thought it had to be possible to retain absolutely the structural qualities of the old musique concrète without throwing away the content of reality of the material which it had originally. It had to be possible to make music and to bring into relation together the shreds of reality in order to tell stories.[13]

Ferrari's "anecdotal" work brings to the surface the split between associative or referential material and an ideal sonorous object by veering toward a concern for the sound source and its referent as autobiography and individual psychology: the diaristic acoustical mapping of an individual over the course of a single day and how such sonic snapshots may, in turn, reveal conditions of real life. Such a split finds elaboration in considering Friedrich Kittler's theoretical work, for according to Kittler "the real has the status of phonography [the auditory]." Kittler's proposal is based on applying Lacan's psychoanalytic triad of the symbolic, the imaginary, and the real onto technological history, in which "cinema, phonography, and typewriting separated optical, acoustic, and written data flows."[14] According

to Kittler, the typewriter embodies the symbolic operations of language, as stable referent, fixed to paper in block letters, as a "finite set" of letters and the "spaces between," for scopic interpretation, impelling Lacan to designate "the world of the symbolic [as] the world of the machine."[15] In contrast, the domain of cinema features the phantasmic blurring of the imaginary *par excellence* and its compulsion to dream, hallucinate, and drift in flights of fantasy. Thus, film expresses the optical excess of imaging. Finally, the gramophone (or phonography) for Kittler delivers up the immediate *bodily real*, for "the phonograph can record all the noise produced by the larynx prior to any semiotic order and linguistic meaning...." Phonography is neither "the mirror of the imaginary nor the grid of the symbolic ..." but rather "the physiological accidents and stochastic disorder of bodies."[16] Following Kittler, sound is accorded access to the real, if not its embodiment, by its ability to be always already there, as physical presence, as in the voice and other bodily noises, the prenatal vibratory motions from the mother's heartbeat to the encompassing "sonorous envelope" of voices heard as a child, to which it might be said we spend our life attempting to retain.

Ferrari's work "tells stories" by harnessing the "bodily real," the quotidian environment in all its seemingly banal details, thereby invading the cinematic intensities of acousmatic dreaming with the hard edge of actual environments. Such focus recalls Georges Perec's obsessive concern for locating daily life: "The daily papers talk of everything except the daily.... What's really going on, what we're experiencing, the rest, all the rest.... How should we take account of, question, describe what happens every day and recurs every day: the banal, the quotidian, the obvious, the common, the ordinary, the infra-ordinary, the background noise, the habitual?"[17] Ferrari's anecdotal work seems to answer Perec by way of microphones and tape machines, in turn suggesting that such machines may (and should) find their way into the hands of daily routine well outside the elite haven of specialized studios.

Differences

Musique concrète's cinema of the ear appropriates the mediatized flow of data and its storage medium for acoustical renderings. While Cage's work pulls aside the curtain to reveal the material presence of the musical moment, to make apparent the processes at work in such a way as to democratize sound, musique concrète pulls the curtain back in place, operating in darkness so as to bring the ear to the fore of perception—as pure ear devoid of body, for the body is always marked by a sociality full of coded reference.

The difference between Cage's material object and Schaeffer's sound object is a difference in context and procedure: for Cage, the world itself hovers behind and within musical work, as a material presence and site of individual freedom, where ordinary life takes form; in contrast, for Schaeffer the sound object in itself offers the potential for the realization of an altered and enlightened musical experience, one determined by an expanded palette of sonic details exposed through electronic

manipulation. Cage, in seeking the immediacy of sonority approaches technology as a device for breaking open sound, in a flow of nonintentionality, so as to arrive at the nonrepresentational. In contrast, Schaeffer indulges in mediation, in the reproducibility of recorded sound, and its devices and machinery as a means to cinematically treat the ear. Yet excessive technological manipulations for Schaeffer were seen skeptically in later years. "I had learned to distrust facile manipulations. I was now wary of those manipulations that I had played a part in promoting, and, in the course of seminars that I was organizing, I never stopped warning others. The less the original sound is changed, the better it is."[18]

The continual pronouncement of the shared mutuality of art and life by Cage contrasts with Schaeffer's analytical probing of the potentiality of sonorous production and its ultimate listening. "Activity involving in a single process the many, turning them, even though some seem to be opposites, toward oneness, contributes to a good way of life."[19] Here we find not only Cage's general philosophy but the core of his compositional method: to bring into a single experience the multiplicity of elements, disparate, noisy—composition that not only leads to a good piece of music but a good way of life. In a sense, what Cage moves to and from is music and the very context in which music is experienced, whether that be the concert hall in Woodstock on August 29, 1952, or Black Mountain College, to the very contexts themselves, from the architectural structure of the concert hall, the noise of disgruntlement in Woodstock, or the environmental soundscape in North Carolina. Context insists because Cage's musical object relies upon it, addressing the very space and time of its experience in all its actuality; further, listening is predicated on the formation of and belief in democratic organization, for each sound is perceived equal to another, as opposed to Schaeffer who proposes that "sound phenomena are instinctively perceived by the ear with greater or lesser importance as in an aristocratic hierarchy, and not with the equalities of a democracy."[20] To summarize, the divide can be recognized in methodologies and, to a greater degree, in philosophical terms. For Cage "music means nothing as a thing."[21] In contrast, for Schaeffer, and musique concrète in general, context must disappear in order to arrive at the musical experience, for here music, and by extension sound, is everything as a thing. For both, though, what is discovered and cultivated is sound's ability to build presence through processes of material crafting (even while infused with nonintentionality), as well as through a locational sensitivity: in seeking to liberate sound, Cage emphasizes real life, social space, and found environments as sites for dislocating the self and its habitualized modalities of perceiving life. Schaeffer, in turn, engages sound and its materiality through its presentation within spatial terms: sound here creates its own drama as objects diffused within a dimensional architecture determined and sculpted by sonorous events and their ultimate composition and placement. Thus, the beginning of experimental music is marked not only by developing sound as a category, aesthetic and other, but by locating it in a relationship to space and the conditions through which listening literally *takes place.*

Notes

1. The work uses a phonograph cartridge to amplify small objects, such as feathers, pipe cleaners, wires, in conjunction with furniture amplified through the use of contact microphones.

2. See Luigi Russolo, *The Art of Noises*, trans. Barclay Brown (New York: Pendragon Press, Monographs in Musicology, no. 6, 1986).

3. Michel Chion, *Guide to Sound Objects*, from an unpublished translation by John Dack and Christine North, provided by the translators, 2002.

4. Pierre Schaeffer, from the liner notes to *Pierre Schaeffer: L'Oeuvre Musicale* (Paris: INAGRM & New York: Electronic Music Foundation, 1998).

5. Michel Chion, *Audio-Vision: Sound on Screen*, trans. Claudia Gorbman (New York: Columbia University Press, 1994), p. 223.

6. Michel Chion, *Guide to Sound Objects*, from an unpublished translation by John Dack and Christine North, provided by the translators, 2002.

7. Karlheinz Stockhausen, "Electronic and Instrumental Music," in *Audio Culture: Readings in Modern Music*, eds. Christoph Cox and Daniel Warner (New York: Continuum, 2005), p. 379.

8. Reginald Smith Brindle, *The New Music: The Avant-Garde Since 1945* (second edition) (Oxford and New York: Oxford University Press, 1987), p. 104.

9. Michel Chion, from the liner notes to *Pierre Schaeffer: L'Oeuvre Musicale*, p. 56. See also Pierre Schaeffer, *Traité des Objets Musicaux* (Paris: Éditions du Seuil, 1966).

10. Pierre Schaeffer, "Acousmatics," in *Audio Culture*, p. 78.

11. Ibid., p. 79.

12. John Cage, *For the Birds* (Boston and London: Marion Boyars, 1995), p. 127.

13. Luc Ferrari, quoted in Trevor Wishart, *On Sonic Art* (Amsterdam: Harwood Academic Publishers, 1998), p. 129.

14. Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffery Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University, 1999), p. 14.

15. Jacques Lacan, quoted in ibid., p. 15.

16. Friedrich Kittler, ibid., p. 16.

17. Georges Perec, *Species of Spaces and Other Pieces*, ed. and trans. John Sturrock, (London: Penguin, 1997), p. 206.

18. Pierre Schaeffer, from the liner notes to *Pierre Schaeffer: L'Oeuvre Musicale*, p. 72.

19. John Cage, "Forerunners of Modern Music," in *Silence* (Middletown, CT: Wesleyan University Press, 1961), p. 63.

20. Pierre Schaeffer, from the liner notes to *Pierre Schaeffer: L'Oeuvre Musicale.*

21. John Cage, "Forerunners of Modern Music," in *Silence*, p. 64.

Chapter 3

Automatic Music: Group Ongaku's Performative Labors

At the point of origin, sound functions as a new form of musical vocabulary by allowing new methods and perspectives on composing, ultimately enlivening the musical imagination with a whole set of new materials. What marks this development are the instances of sound's locational intensity, whether concert halls, shopping malls, small towns in Yugoslavia, or the phantasmatic spatialities of acousmatics. The potentiality of sound and its use seems to bring with it questions of immediacy and presence, partially casting any such sonic project as a debate on the real. Parallel to Cage's social project and musique concrète's laboratory of sonicity, the Japanese collective Group Ongaku moves into the discovery and utilization of the found to explore an expanded aurality. In this way, Ongaku can be positioned not so much as a medium between the Cage-Schaeffer divide but as a trajectory that cuts through it. While Cage operates on a social level through conceptual techniques, and musique concrète through technological constructions of found sound, Ongaku aims for an appropriation of found objects through an expressivity of bodily action. It embodies the noise promised in *4'33"* and performs the potential buried within the manipulation of the found, as *brut* technology. Introducing its work here also supplements the well-tread ground defined prominently by Cage, and a subsequent New York-centeredness, and musique concrète, and the specifics of French acousmatics. Ongaku's locational particularities are derived from the cultural backdrop of Japan in the late 1950s and early sixties.

Group Ongaku ("Music Group") was a collective exploring musical improvisation from 1958 through 1962. It was originally an improvisational duo between Shukou Mizuno and Takehisa Kosugi, who both were studying music at Tokyo National University of Fine Arts and Music. Later, between 1959 and 1960, the group expanded to include Mieko Shiomi, Yasunao Tone (both participants in

Fluxus, along with Kosugi), Mikio Tojuma, Genichi Tsuge, and Yumiko Tanno. As a group, it would meet at various locations, such as Mizuno's house, and improvise together, using found objects, random instruments, tape machines, and radios. In addition, strategies were employed to expand the musical experience, such as spontaneously responding to nonmusical sounds with musical instruments, or consciously producing sound in relation to another's actions. Through such strategies, a heightened and spontaneous dialogue was created among the group. Such efforts can be understood as an attempt to collapse the point of composition *onto* the moment of performance.

Yasunao Tone, who has produced a compelling body of work since the time of Ongaku, describes such early performances as a process akin to "automatic writing": "We thought then our improvisational performance could be a form of automatic writing … in a sense that the drip paintings of Jackson Pollock were a form of automatic writing. I thought we were doing action painting in music."[1] Having studied Surrealism as a literature student, Tone was familiar with the interweaving of conscious act and unconscious impulse at play in the work of Breton, Aragon, and others. Applying this to the domain of music and performance, Ongaku sought to unhinge the body as a conscious vehicle to uncover a creative potential for making music. Yet this was not to give up notions of rationality or conscious thought, but rather to displace it onto another level of organization, one more corporeal than compositional, more spontaneous than structural, more immediate than mediated.

In addition to the overtly automatic nature of Breton's Surrealism, Ongaku embraced the work of Michel Leiris and Georges Bataille, exemplified in the College de Sociologie of the late 1940s. "Most of our members [Ongaku] were ethnomusicology students and that made me think we were successors of anthropological Surrealists."[2] Like musique concrète, musical work was seen as a form of research, a kind of anthropological "field work" founded on noise and the interpenetration of body and objects, in sites of everyday life—interpenetration to a point of immersion, a Surrealistic "exquisite corpse" in which cause and effect misalign in jarring constructions. Enacting such a crossover of research and noise, music and anthropology, Ongaku activated the musical moment with improvisational discovery. Through such process, relations to the body were implicated and brought into direct contact with sonic production through gestural movements and the physical agitation of objects and materials and the collective surge of disordered sound initiated by the group. Approaching musical production as a space of action or performance, sounds result as by-products, as traces of physical action exerted beyond the body and against the found: random objects function as possible instruments, group dynamic unfolds as a conversation intent on uncovering new terrain, and the musical moment acts as a frame in which the found, the body, and sound intertwine to form composition, as noise. Such reliance and interest in action-based work must be understood as an echo of a larger cultural trend within the Japanese avant-garde following the war. Groups and

movements, such as Gutai and Butoh, exerted significant influence over the growing avant-garde at this time. Whether approaching notions of painting or dance, sculpture or theater, both Gutai and Butoh engage a radically physical relationship to the material world and the production of cultural work.

The word "gutai" literally means "concreteness," and Gutai's works and actions were based on material negotiations and dramas. In its performances, one senses a desperate move toward the world, toward its very fabrication—and further, toward re-establishing an almost tangible tie to the forms of art making. What marks Gutai is a cultivation of physical aggression in which works of art were produced by forcing the body into contact with a material object or set of objects, as in Murakami Saburo's performance *Many Screens of Paper* (1956), performed by the artist running through a series of canvas frames stretched with paper. Bursting through the sheets of paper, thrusting outward against the material, what is left are a series of ruptured surfaces, broken paintings, action-drawings made not of splattered paint but voids left by the body's forceful movements. Another Gutai work produced by Shiraga Kazuo, *Challenging Mud* (1955), was a performance in which the artist struggles in a circle of mud. Lying in the center of this thick pool of earth, the artist wrestles against the material, caught in the viscosity of the mud, moving against its density. What remains are pockets and impressions left in the mud's surface as indexes of struggle or marks of physical expenditure.

The relationship between artist and object is seen as a potential, activated by collapsing their distance: in the space where the hand penetrates an object, pierces paper, or the body collapses in mud, a relation is formed that, through its sudden appearance, seeks to reveal means *through* the material world. "Gutai Art does not alter the material. Gutai Art imparts life to the material. Gutai Art does not distort the material. In Gutai Art, the human spirit and the material shake hands with each other, but keep their distance."[3]

Based in Osaka, Gutai formed around Yoshihara Jiro, an influential oil painter and leader in the Japanese pre-war avant-garde. Its work is indicative of a new beginning embraced by those in opposition to imperialistic values, which were perceived as having led Japan into the war and to their subsequent defeat. The Gutai group sought this new beginning and developed its work against the contemporary art scene based in Tokyo, which viewed Gutai's activities as illegitimate. The artists of Gutai in the mid-1950s were frustrated not only with the intellectualism of the Tokyo art scene and its embrace of tradition, which they felt were bankrupt in light of the atrocities of the war, but more important, Japan's subservience to American occupation. Just prior to the Cold War, the American Occupation sought, above all, to establish democracy within Japan and to install social policies that would benefit democratic growth and undermine the rule of the Emperor. Yet with the sudden emergence of the Soviet occupation of Eastern Europe, which spread throughout Asia, from North Korea and China to Vietnam, and the beginning of the Cold War, the United States shifted its policy by reversing the initial

democratization of Japan and instead supported a return to pre-war politics. Installing leaders of the war into high-ranking positions and casting Japan as a docile ally, the United States helped dissolve the greater social and political move toward democracy. This sudden reversal was cloaked in nostalgia for a past and its traditional practices. This nostalgia, in turn, made its way into the contemporary art scene in Tokyo, influencing the academies and juried exhibitions, a situation that generated such groups as Gutai and forced them into a peripheral position, stigmatizing their work as "irrational" and "Western." Gutai was partially a resistance to this reversal toward an imagined past, embracing instead the democratic spirit so many Japanese were hoping for. Its work bespeaks a desire for a freedom never had before, and its performative tussle with materiality can be viewed as an expression against the very fabric of society, as if by breaking the surface of paper, or challenging mud, some other reality would present itself.

Body Against Space

Ongaku's work of the early 1960s can be understood as stemming from this general cultural backdrop. Gutai's influential flair for radical performance, for cultural antagonism, emblazoned by the growing tensions and fervor surrounding the ratification of United States-Japan policy in 1960, delivers up physical action prominently within the musical framework. For its work insists upon corporeal action, a theater of physical choreography as wed to objects and space. Here, Ongaku's "sound objects" are not found in the inner mechanics of tape machines and scientific auditory research but in the physical relation between subject and object. Freedom from representational devices, from the mechanics of meaning, was found in unconscious pulses taking shape in sonic movement.

Within architectural discourse, the body is cast as both user *and* intruder, fulfilling *and* sabotaging, according to Bernard Tschumi, spatial order:

> First there is the violence that all individuals inflict on spaces by their very presence, by their intrusion into the controlled order of architecture. Entering a building may be a delicate act, but it violates the balance of a precisely ordered geometry.... Bodies carve all sorts of new and unexpected spaces, through fluid or erratic motions. Architecture, then, is only an organism engaged in constant intercourse with users, whose bodies rush against the carefully established rules of architectural thought. No wonder the human body has always been suspect in architecture: it has always set limits to the most extreme architectural ambitions.[4]

Such disruption of the architectural order by the individual body has built within it the power, as Jane Rendell describes, to "(un)do" architecture, for such (un)doing articulates "spatial and temporal rhetorics of use" and ultimately function as "strategies of resistance."[5] Through their persistent nagging of the architectural order, rhetorics of use remind architecture of its own power to shape and

define experience. Architecture, as an external force bound to the Law through a legal framework of urban planning, building codes, and city politics imposes, however gently or dramatically, a force the individual must negotiate. Thus, one never truly escapes architecture, for to move through the built environment is to encounter an endless confrontation—of corporeal drive against spatial form, of impulse against spaces of expression. To design then is literally to create tensions of movement.

To move from use to resistance, as Rendell does, further reveals the everyday as a site of contestation and negotiation, where one is *traumatized* by the spatial. However, such trauma sets in motion a conversation, however unstable or quiet, through which one becomes conscious of both architectural power and the power of one's own body: one recognizes the larger architectural order to which one is both held and made responsible. This intersection could be understood as the formation of the individual in general, for in this recognition one is separated from an exterior body (social) and bound to it as symbolic system (representation). That is, architecture defines one's place within it by promising free movement while keeping one housed within its limits.

Against such trauma, spatiality itself offers potential escape routes, where use becomes resistance, where the order of the individual intersects with the order of Law, revealing fissures, cracks, and openings. Rather than overturn architectural order, such intersections remodel on a micro-level the patterns of its articulation, where one may live according to personalized navigations, modeling forms of freedom along the way. Following Rendell, one resists through an undoing that promises other forms, and thus other experiences.

Such resistance is realized in varying methods, from everyday actions, such as turning the kitchen into a library, to cultural practices, such as musical performance. The performativity of Ongaku can be understood in relation to such spatial resistance, as a kind of anthropological amplification of Cage's *Living Room Music* (scored for found objects) by announcing itself against given forms and their assigned functions: improvisatory action turns chairs into percussion instruments, lamps into amplified hum-machines, pots and other cookery into vessels for the production of collective expression. Such small instances, while innocuous and humorous on one level, form the basis for a potent vocabulary: to move through a house, resituating domestic action onto acts of sonic improvisation frays architecture and forms of design, as well as its inherent power to inform and determine experience.

Resisting locational pressures, and realigning spatial coordinates, Ongaku finds its political backdrop and sounding board in relation to the student movement in Japan in the early 1960s. As Tone reflects:

> When we were about to organize the group, Ongaku, the timing of that coincided with the climax of the anti Japan-US security treaty movement, Zen-Gakuren or All Japan Student League, which mobilized tens of thousands of people to surround

> the Japanese Diet and force prime minister Shinsuke Kishi to resign. Almost every student seemed to want to be a part of it. That was an atmosphere rather than a form of ideology or political consciousness. We breathed this atmosphere like an air. I sensed the same taste of liberation from the participation in demonstrations as when we worked with improvisation.[6]

Ironically, Ongaku's musical improvisation and its subsequent opening up of everyday life and its material reality, while finding cultural direction from the United States and its avant-garde, in turn, discovers its own unique expression in a stance against United States involvement in Japanese politics and lifestyle. As with Gutai, Ongaku and other groups, such as the activitist Hi-Red Center, embrace art and the gestures of musical making as opportunities to fashion new routes for not only making art but for turning it into an active expression of politics.

Contact Music

To press against, locate resonance, situate the body, physical presence confronting physical presence, opens up a vocabulary of sound based on direct contact. Sound spills forth from abrasive encounters, from pressure zones and areas of release, corporeal bodies giving breath, forcing out, through cavities and conduits, touching and scratching to resound. To engage the world as site of buried sound, as in Cage's own lesson brought on by Oskar Fischinger when he sought the acoustical ghosts of objects, making narrative out of association: hearing a certain metallic sound brings to mind the dangling of keys, or a particular scratch conjures the scrawl of a pen in the midst of writing.... Such acoustical moments trigger images completed in the mind, pictures filled in by complementing the sonic signifier with its physical source. They, in turn, raise sound as a kind of "vocal" index of the life of objects, leading us to recognize the animate as not only corporeal display but as sonorous release.

Ongaku's vehicular musical research pulls open the instrumental list by adding the world of objects, making available the entire catalog of existing materiality. The work of many artists using sound over the last forty years finds resonance with Ongaku's strategies. With the utilization of contact microphones from the 1960s to the present, the potential of any object becoming a source of acoustical promise radically increases, for contact microphones amplify the textural surfaces, the vibrational secrets, the hidden audible beauty of things. Attaching a contact mic to a metal bowel turns it into a resonating cavity with a multitude of harmonious resonances, a percussive object full of evocative ringing, or a humming appliance becomes a universe of lulling drones, creating a stream of sonoric lushness. Such contemporary artists as Mnortham and JGrzinich, l. chasse, Small Cruel Party, Steve Roden, Speculum Fight, MSBR, Olivia Block, Richard Lerman, Giuseppe Ielasi, Roel Meelkop, Carl Michael von Hausswolff, Alexandre St-Onge, Toy Bizzare, and GX Jupiter-Larsen have or continually use contact microphones in accentuating their sonic work.

Such microphonic additions harness an already existing process, that of drawing sound out from a given object through physically interacting with it. The work of Jeph Jerman must be highlighted as being at the forefront of such methods. Working simultaneously as Hands To, whose work has been released on an array of cassettes (such as *do not touch them* [1987], *recast* [1989], and *catalogue of abuse* [1989]), CDs, and records, as well under his own name, Jerman has increasingly stripped away mediating electronic devices to get at the rich, natural, existing sounds of various objects through acts of physical contact. Improvisation here results in absolute discovery, not of a single instrument but of a collection of found objects: feathers, bottles, wood, stones, balloons, twigs, all thrown into a bag of sonic potential and caressed, manipulated, and physically handled in shamanistic-like performance.

Released on Anomalous Records in 1997, *egress* was recorded onsite with Jerman fashioning a stringed instrument out of dried cacti found in the Southwestern deserts of the United States. Working solely with dried cacti, the recording is a haunting and magical music that captures the artist nestling among a distant environment, crafting his own instrument from the natural detritus found there and making music there and then. The record is thus a document of the artist's dedication to remain in contact with sound, as a material condition rich in locational specificity. The found cacti, in turn, echoes with the artist Akio Suzuki and his found stone recordings. Picked up on the coast of Japan, near his home in North Kyoto, the stone for Suzuki presents the opportunity to sing through his immediate world: turning stone into flute, his recordings of playing in a cove, with the Sea of Japan splashing, jostling, and tossing other sounds into the event, Suzuki literally concerts with what is nearby. Such works and methodology tease out a relation with sound, echoing Cage's interest in the real and the proximate, in the here and now, and the presence of actual sound. Yet, it seems important to emphasize, as Ongaku and others do, that such immediate appropriation and performance points toward negotiations with the real that often equate with material tensions: dried cacti found in the desert not only leads to unexpected musicality but to narratives about shaping relationships with the world.

Anthropological Music, or Turning Back

What is close and what is found shadows the Cagean insistence on the immediacy of sense-perception, of the bodily real, of the freedom of individual experience, placing sound-making on the list of personal expression. As an explorative relation to materiality, Ongaku can be said to dramatically insert within experimental music the use of bodily action and found object. Its improvisations initiate what we might call "contact music" by opening up the ordinary and the nonmusical as an instrumental category. Musical innovation is led by empirical research into existing conditions, where the body is more a form of technology.

Recorded works such as *Automatism* and *Object* from 1960 explore the sonic properties of found objects while composing music by impelling the body against its environment. What is left is a kind of sonic mark embedded on audio tape whose trace amplifies the point of contact always exceeding both the body and the object. In this sense, it is not a question of hearing the object revealed through its sonic equivalent, as pure index, but rather to fuzz out their respective limits, where sound and source describe a single event.

Parallel to Surrealism's concern for quotidian life, Ongaku's actions form a practice of everyday life, echoing the avant-garde and its drifts through urban space. From the Surrealists and the Situationists to Michel de Certeau and Henri Lefebvre, everyday life features as a philosophical, political, and aesthetical imperative throughout the modern period (and which continues to this day). For it comes to stand as a site of enclosure and of liberation—it is the very material locus by which individuals enact agency and through which they are held in, made susceptible to hegemonic forces. In this sense, it is the site of both assimilation and difference, where individuality negotiates the tensions of possible freedom. Such tensions manifest discursively in varying accounts of alienation, subjectivity, experience, and society, which, in turn, feed the avant-garde, as seen in Surrealism. Surrealism initiates a concern for everyday life, not solely as a field of study but as a terrain of practice.[7] Louis Aragon's *Paris Peasant* and André Breton's *Nadja* both chart the individual trajectories of desire across the urban landscape and form accounts of individuality found within modernity's complex and vertiginous mechanics. The city becomes the penultimate backdrop or embodiment of the tensions of individuality negotiating the borders of alienation and consciousness, for the city can be seen as battleground for poetic drifts of subjectivity and the political implications of such drifts. Lefebvre's influential work from the 1940s and 1950s is of note here, for Lefebvre sets out a comprehensive analysis of the "production of space" that retrospectively furnishes Surrealist activities with insight and sets the stage for a countercultural critique of the urban condition, in the form of Situationist strategies.[8]

Situationist tactics, such as the dérive, wed the poetic with the political in such a way as to forge their own brand of revolutionary subjectivity, beyond the aesthetical category of art. For to believe in the possibility of social transformation beyond the growing consumerism of postwar Europe, the production of art objects had to be given up, for they would only feed the very mechanism of Capitalism one was trying to escape and alter. Here we can witness the overarching suspicion of forms of representation itself to deliver up such transformation, to challenge the codes of modern life and define an alternative paradigm. Representation is deemed complicit with a system that keeps the individual deferred, held in, locked within a spectacular language in which experience is only ever a sign. Under the everyday life ethos, symbolic systems only push the individual away from the experience of life itself—it over-determines individuality by dictating what it can imagine for itself. For the imagination relies upon the very forms offered to it. To set such

imagination free is to break the very symbolic systems by which it thinks itself into being, akin to the automatic writing of Surrealism.

For the Situationists, something had to step in and pull back the symbolic curtain, usurping the commanding dynamics of representation and the spectacle – to strip bare such sign systems and push forth individual experience. What this something had to be was daily life, yet daily life as dictated and determined by a radically altered set of rules, infused with criticality and a willingness to channel the immediacy of physical presence and sensuous living into a revised set of social and personal categories. For daily life can slip undercover of the larger social system, in micro-fluctuations of desire and its articulation, in personalized connections and relations, as in the doing and undoing of architecture. Daily life thus became a political terrain, not so much for an official rewriting but rather for an unofficial subversion that threatened to spill over into a larger, collective inertia. Such inertia finds its force in Situationist tactics, in countercultural revolutions across Europe and the States, from music to art to civil rights in the 1960s, as a way to challenge the status quo and its institutions and through such challenge reconfigure the positioning in which the individual is housed, affected by, and has recourse to institutions. This is not to overemphasize the material basis of such inertia, for certainly what such revolutionary desire craves is as much an internal reconfiguration as an external one: a psychological shift in perceiving such desires. The practice of daily life may play out in the streets and in the shops, in how one rides the subway and watches films, but it starts first and foremost as an attitudinal shift that gives way to even recognizing daily life as a platform *for* practice.

The thrust of daily life, the spontaneous drifts through city streets, the reliance upon corporeal experience as integral to creative expression can be heard throughout the work of Group Ongaku—as a continuation of anthropological Surrealism, which sought to tap into the heart of everyday life by unleashing libidinal force, and as a part of avant-garde art, which seeks the unconscious as source of unexplored action. Such action finds its form in Ongaku's project of improvisational noise. Listening to its few recordings, what immediately comes forth is the presence of the body, the juxtapositions of guttural noise with domestic agitation: the body reaches out, in a dynamic that is both musical and physical, aesthetical and anthropological, and in doing so negotiates the place of the self. That Ongaku did not result in lengthy literary manifestoes is not to undervalue the research involved. As Tone explains: "Most musicians didn't see the outside, but we were always looking outside music…"[9]

Intersections

I would like to place Group Ongaku in relation to Cage and musique concrète, not so much to resolve the gap but to stage a meeting point that draws such a tension out. Group Ongaku focused on the performative body as a means through which to activate sound and in doing so point to another form of listening, for to hear

Ongaku is to hear both the body of sound and the individual body, the sound object *and* its contextual origin, as an intersection, as a contact and its subsequent noise. The performing body forces itself outward, exerting against the borders of physicality and against the concrete world, and by extension the cultural space of music. This exertion stimulates the found object into sound: agitating the materiality of objects, pressing in against architectural space, through forms of misuse, the built and the found collapse in a performative sonics.

The musical and material concerns that run through Cage, musique concrète, and Group Ongaku bring into question musical parameters, for each brush against, either by claiming, escaping, or articulating, context and the presence of bodies, whether audiences, artists, or passersby. Their works encapsulate a trajectory of postwar cultural practice that sought to explore and collapse the distance between subject and object, art and life, by questioning the function of representation and instigating a performativity of sonic material. Such work straddles the line between a lingering modernism and a foreshadowed postmodernism by wedding critical practice with a new identification of the effects of such practice. What marks their work is the initiation of new strands of sonic practice, from Cage's methodologies, musique concrète's electronic research, and Group Ongaku's improvisatory performances, that probed sound as a specific medium, expanding the musical and aural categories. Such work moves well beyond its respective beginnings and gets woven into the legacy of experimental music and the visual arts of the last fifty years, in which sound is elaborated and exploited as media and philosophical paradigm. By bringing into focus a concentrated listening, introducing alternative instrumentation and electronic possibility, and inserting the found environment and the body more dramatically into the folds of musical production, their works draw into question the very context in which music is produced and received. For the project of experimentation has buried within it a heightened conceptualization of the practice of music as wedded to its own questioning. As Cage proposes: "Our concerts celebrate the fact concerts're no longer necessary."[10]

To bring music into a process of questioning is to also bring its very context into consideration: how is music situated within the spaces of its production and reception? And, in turn, how do these spaces influence, affect, and determine the musical experience? This can be understood as a subsequent outcome of the move toward sound as a category. The advent of experimental music brings with it a more pronounced concern for how sound may live in the world and how it may serve musical and cultural strategies. Each, in forming its own sonic vocabulary, reached for the proximate, the immediate, and the experiential, from the concert hall and the fishing village to the phonograph record and the found object. While Cage, musique concrète, and Ongaku push against the traditional framework of classical tonality and the structures of musicality, to "start from scratch: sound, silence, time, activity,"[11] their acoustical experiments return to the fold of music to engage its promise. Their work suggests an experimental "rhetorics of use" within

the architecture of music, building sound *and* spaces for its activation at one and the same time. In this regard, music becomes a highly flexible practice that promises not only timbral possibility, or sonic euphoria, but also a continual realignment of their relational positioning. In the move toward redefining the internal properties of music, their works, in turn, redefine its external position.

Notes

1. Yasunao Tone, from an unpublished interview with Hans-Ulrich Obrist, 2001, provided by the artist.

2. Ibid.

3. Quoted in Alexandra Munroe, "To Challenge the Mid-Summer Sun: The Gutai Group," in *Scream Against the Sky: Japanese Art after 1945*, ed. Alexandra Munroe (New York: Henry N. Abrams, 1994), p. 84.

4. Bernard Tschumi, *Architecture and Disjunction* (London and Cambridge, MA: The MIT Press, 1996), p. 123.

5. Jane Rendell, "doing it, (un)doing it, (over)doing it: rhetorics of architectural abuse," in *Occupying Architecture: Between the Architect and the User*, ed. Jonathan Hill (London: Routledge, 1998), p. 234.

6. Yasunao Tone, from an unpublished interview with Hans-Ulrich Obrist, 2001, provided by the artist.

7. See Ben Highmore, *Everyday Life and Cultural Theory* (London and New York: Routledge, 2002).

8. See Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford and Cambridge, MA: Blackwell Publishers, 1991). The Situationists developed an array of approaches toward navigating the city to unleash intuitive, unconscious, and libidinal pulses as a means of liberating the self. The dérive was based on drifting through the city following intuitive and impulsive routes. It was believed that such a process would undermine the structure of the city, as a kind of bureaucratic plan imposed from above.

9. Yasunao Tone, from an unpublished interview with Hans-Ulrich Obrist, 2001, provided by the artist.

10. John Cage, *A Year from Monday*, (London and New York: Marion Boyars, 1985), p. 154.

11. Ibid., p. 157.

Box with the Sound of Its Own Making: From Gags to Sculptural Form

A certain strain of modern art has been involved in uncovering a more direct experience of these basic perceptual meanings, and it has not achieved this through static images, but through the experience of an interaction between the perceiving body and the world that fully admits that the terms of this interaction are temporal as well as spatial, that existence is process, that the art itself is a form of behavior that can imply a lot about what was possible and what was necessary in engaging with the world while still playing that insular game of art.[1]

—Robert Morris

It may be proposed that the social context and surroundings of art are more potent, more meaningful, more demanding of an artist's attention than the art itself! Put differently, it's not what artists touch that counts most. It's what they don't touch.[2]

—Allan Kaprow

Introduction to Part 2

Box with the Sound of Its Own Making: From Gags to Sculptural Form

Progressively, questions of context within artistic practice are brought to the fore in the late 1950s and throughout the 1960s. With the advance of chance as an operational method, the continual outreach to the audience as a contributing element to art, and the increasing relevance of everyday life as a field in which art should operate, spatial and contextual practice takes precedent. Happenings and Environments of the late 1950s extend John Cage's ideas around music directly into a visual art context, activating such context through performative and theatrical presentation: makeshift installations, alternative spaces, intermedia crossover, and collaborative projects. Such work sets the stage for a rethinking of the object of art by exploding its borders to encompass space, junk, bodies, and noise. Fluxus, in turn, follows from Cage's example, incorporating his expanded musicality in performative works that dilute the theatricality of Happenings toward a refined vaudeville whereby sound, text, object, and action coalesce in literal and perceptual games.

With the establishment of "alternative" spaces and artists' coalitions, such as the Art Workers Coalition, formed in 1969, a critical awareness of the art world and its respective institutions features through the latter part of the 1960s, maneuvering the rhetoric of contextual and spatial practice toward an ever more politicized pitch. With the development of Installation art, spatial and contextual concerns can be seen to find institutional footing within the art world: the Museum of Modern Art's "Spaces," the Whitney Museum's "Anti-Illusion," and "Using Walls" at the Jewish Museum, all presented in 1969/1970, aim to extend the institutional arena toward supporting installation practice.[3] From this vantage, we can appreciate Cage's work as setting the terms for addressing such a larger arena of concern, philosophically in agendas of social change, and aesthetically in conceptualizing a practice that engages contextual conditions.

It seems important to situate such development in relation to "musical" practice, for music composition, performance, and method, and by extension the acoustical, function as prime media in such lineage. In this way, it is my interest to remind art history, as it evaluates and writes the developments of contextual and spatial practice from this period, of sound's early figuring. Not so much to assert a privileged place for it but to recognize its position as a feature within such legacy. This, in turn, has another, more theoretical assertion and proposal: to figure sound practice as a distinct field that may lend itself to the modalities of thinking about space and the function of art in general.

Concept: Art as Idea

When Tom Marioni opened his Museum of Conceptual Art in San Francisco in 1970, the notion of "art as idea" had culminated into Conceptual art in general, framing the artist as progenitor of a neo-avant-garde program based on the production not so much of objects but of a new language, contingent, performative, and political. For Marioni, Conceptual art was an overarching attitude that sought to affirm art practice as social and performative, self-organized and liberating. To move from an actual art object, such as Pollock's paintings, to Marioni's drum-brush drawings or his Fluxus performances, such as *The Act of Drinking Beer with Friends Is the Highest Form of Art*, is to summarize a larger historical move from Cage to Fluxus, Minimalism to Conceptual art, and to site-specificity and Installation art. What this larger trajectory has in common with its smaller counterpart, that is, Marioni's MOCA, is its increasing engagement, on multiple levels, with language, space, and the place of bodies. Language can be seen to take a front seat in the progress of 1960s art, founded on the production of discourse, the dematerialized object, and the appearance of the document; the interrogation of institutional frameworks as a discursive event, as opposed to the production of objects, culminating in Conceptual art in the late 1960s and early 1970s as exemplified in Hans Haacke's *MoMA-Poll* (1970) in which the artist mounted a text at the information center of the Museum of Modern Art, posing the question, "Would the fact that Governor Rockefeller has not denounced President Nixon's Indochina Policy be a reason for you not voting for him in November?" Answers were subsequently written on pieces of paper and deposited into one of two transparent vessels, so the overall count could be registered in the accumulation of papers (visitors chose "yes" twice as often as "no"). What Haacke surreptitiously exposed was the Rockefeller family's involvement in the Museum's history and administration.

Increasingly, such textual acts articulate themselves in and against the domain of everyday life and the field of the social. Thus, the very space in which artists function and art operates are brought into both the production and discourse surrounding Conceptual art. As a culmination of "art as idea," Conceptual art is itself a performance of language, for it not only uses language, as in Haacke's

piece, Joseph Kosuth's philosophical art, or Lawrence Weiner's *Public Freehold*, projects that essentially give language away as public property, but beyond this as an attitudinal imperative to demarcate a space in which the artist speaks for him or herself.

Conceptual art shifts not only the materiality of the art object to an ever more disintegrated form but the very function of art to take on social, political, and cultural forces at work. This necessitates a critical relationship to both language and space, for we can identify language as the machinery of these forces, the gears through which such forces operate and perpetuate themselves, and space itself as the site of actualized consequence and transformation.

Cage

To return to John Cage, we can recognize his work as setting the stage for Conceptual art by its ambition to *reflect* on the function and materials of music *through* music itself. This reflexive operation becomes the backbone of Conceptual art, for to both reflect and create at the very same instant is to announce an increasingly self-conscious practice that speaks beyond the traditional aesthetic categories of beauty and the sublime, of self-expression as a kind of pure formalism or drama of feeling. Found in this announcement is a challenge to such conventions that for Cage necessitates a continual reflection upon the very medium (sound) and situation (music) of production.

Cage's initiation of a critical practice should be underscored as prefiguring the development of Conceptual art, not solely through expanding the very terms by which art can occur but, in turn, by falling short. That is to say, Conceptualism is both an outcome *and* response to Cage, for as Yvonne Rainer has pointed out, in looking toward everyday life as material for active listening, Cage didn't always recognize the political dimension of his own work. In disavowing "interest" and individual "ego," Cage can be seen to couch such things as everyday life in universal and essentialist terms, and thus miss the surface tensions of reality as doggedly marked by everyday struggle. The liberation of all sounds from the representational grip of musicality by insisting upon the materiality and specificity of sound often missed the intensities of social and cultural structures that *precede* and lend to the moment of listening. That is to say, we may leave behind the referentiality of musical argument for the sound world, yet sounds are in some ways always *marked*. The developments that were to follow Cage, and the establishment of Conceptual art, would come to probe, analyze, and rewrite such markings, and it would come to question whether everyday life was as "excellent" as Cage knew it. In this way, Cage sets the terms by which Conceptual art develops and at the same time can be criticized by those very terms.

> What is John Cage's gift to some of us who make art? This: the relaying of conceptual precedents for methods of nonhierarchical, indeterminate organization which

> can be used with a critical intelligence, that is, selectively and productively, not, however so we may awaken to this excellent life; on the contrary, so we may the more readily awaken to the ways in which we have been led to believe that this life is so excellent, just, and right.[4]

What Rainer points out is the legacy of Cage in relation to shifts in the cultural and social climate throughout the 1960s and 1970s, as exemplified in the full-blown project of contextual practice. As Rosalyn Deutsche states, contextual practice aimed to "demonstrate that aesthetic perception is not *disinterested* but contingent on the conditions in which art is viewed …"[5] (my emphasis). Disinterestedness, which Cage professed, is made suspect in the move toward an overtly site-based, contextual mode of production. The 1960s made it imperative that, as an artist, one become intensely *interested* in what is usually unseen, unheard, or unknown so as to investigate and uncover through an explicitly interested scrutiny, the very structural, institutional, and aesthetic presence of that which is given. Here, the materiality of sound as musical object, as amplified magnetic tape, as phenomenal presence is always coded by the language of listening. The "open work," while engaging a listener in his or her own interpretation and experience, through a "plurality of signifieds" and a mobilized active listening, is thus "filled in" by contextual practice with specified meanings. Cage's musical philosophy of all sounds overlooks, and potentially undermines, the positionality of sound—that is to say, sound's liberated referentiality may not always lead us to experiences of freedom.

Such problematizing of Cage's work weaves its way through the early 1960's visual and performing arts milieu of New York. The increasing move from objects to events, as reflected in Happenings, Environments, and Fluxus, can be understood as the beginnings, as well as culmination, of a form of artistic practice that sought out the ever complex terrain of everyday life, the presence of bodies (artists and audiences alike), and the pressing urgencies of political and social agency that would stalk culture at this time.

In moving from Cage and more fully into Conceptual art, it is also my interest to underscore sound's expansion beyond the proximate and immediate and toward broader materials, relations, and social interactions. To do so, I'll look at the work of La Monte Young, Robert Morris, and Michael Asher, for each artist develops a practice that results in the idea of space itself functioning as a medium: Young with music, Morris on the terrain of sculpture, and Asher within installation art practice. Each while using sound through overt and covert techniques subjects it to various interrogations, from its corporeal and physical potential in Young, the intellectual and discursive in Morris, and the conceptual in Asher.

Notes

1. Robert Morris, "Some Notes on the Phenomenology of Making," in *Continuous Project Altered Daily* (London and Cambridge, MA: The MIT Press, 1993), p. 90.

2. Allan Kaprow, "The Shape of the Art Environment," in *Essays on the Blurring of Art and Life*, ed. Jeff Kelley (Berkeley, CA: University of California Press, 1996), p. 94.

3. For an insightful and informative book on the subject, see Julie H. Reiss, *From Margin to Center: The Spaces of Installation Art* (London and Cambridge, MA: The MIT Press, 1999).

4. Yvonne Rainer, *A Woman Who…: Essays, Interviews, Scripts* (Baltimore, MD: John Hopkins University Press, 1999), p. 88.

5. Rosalyn Deutsche, *Evictions: Art and Spatial Politics* (London and Cambridge, MA: The MIT Press, 1996), p. 237.

Chapter 4

Rhythms of Chaos: Happenings, Environments, and Fluxus

Working in New York in the late 1950s, artists such as Allan Kaprow, Jim Dine, Claes Oldenburg, Red Grooms, Al Hansen, and Robert Whitman initially staged what would come to be called "Happenings" and "Environments." Happenings grew out of a distinct moment of art-making that followed on the heels of John Cage and Jackson Pollock, and the overall shift from an art object to a greater situational event based on chance, found objects, and theatrical performance. Kaprow actually staged his first Happening in Cage's Composition as Experimental Music class at the New School for Social Research in 1957.[1] What Cage's class introduced was the possibility of previously unrelated materials and strategies to function in approaching creative work. Chance, strategies for creating spontaneity, inventiveness with found objects, mixed-media aesthetics, and everyday life as stage all figure in the expanded scope of artistic action in which Cage figures and that was to take a deeper hold in the art scene in New York at this time. Since Cage was essentially teaching a course on "composition," music was used openly as a matrix through which to explore methods of production and presentation. Essentially, Cage addressed the very act of making decisions, the artist being understood as not so much the maker of objects but as an individual in the act of making decisions as to what, how, and where art takes place and the systems by which to initiate its production. The produced object then is not so much a final work as a by-product of a larger decision—that of how to live life. In this sense, what follows from a Cagean outlook is an emphasis on process. Coupled with the dynamic use of paint, in the works of Pollock and other abstract expressionists, which revealed spontaneity, improvisation, and bodily action as productive ingredients in an art that sought to immerse a viewer, the move toward Happenings and Environments sets the scene for an absolute blurring of art and life.

Distinguishing Happenings and Environments is found in their respective move toward everyday life, as an attempt to strip bare the artistic arena of representational order exemplified in Hansen's proclamation that "chaos seems to be everyone's threat; I find it my rhythm."[2] Happenings stage actions (often scripted, often not) that collapse the art object as a refined aesthetic product onto the spaces of everyday life. As Kaprow observed in 1961: "I think that today this organic connection between art and its environment is so meaningful and necessary that removing one from the other results in abortion."[3]

Parallel with Happenings, Environments construct an artistic environment more than an object in which junk, random materials, and loose fabrications form an assemblage or scenography in such a way as to *become* art. Presented as participatory spaces or as backdrops to Happenings, Environments soften the line separating art from life to a point where it is difficult to distinguish the two— where actions teeter on the edge of banality or danger, objects are rendered disposable, devalued, and sounds and image mix in a flow of makeshift theatricality. Here, there is no art object *per se*; it cannot be pointed to, apprehended as fixed or stable. Rather it appears in the instant of enactment or participation, in the form of bodies and actions, speech and sound, as processional event. In this respect, the art object is literally enlivened and animated to a point where it loses its objectness, as an ordered form, collapsing from its own inertia onto the field of the everyday—aesthetics not of refined formalism but of cultural energy.

Bodies

In the erasure of the separation of art from life, as well as life from art, Happenings and Environments rely or bring to the fore the presence of the body—of artists and performers, of audiences and participants, and of passersby and their ultimate mixing. While notions of the body are easily thrown around in contemporary discourse, it is important to recognize that what we call the body in terms of art production has real significance at this time (and will gain further currency in the realm of Performance art). The body literally comes to replace the art object, for it pushes up into the realm of form to such a degree as to explode definition and the literal lines of material presence. Following Hansen, chaos functions as directive in determining practice, as a rhythmic pulse, a self-generating beat around which culture, as a life force, gravitates, for "like life, the happening is an art form of probability and chance. The action, material, products, items, sounds I integrate within a happening are results of life as I live it."[4] As the body gains presence as an artistic medium, it brings with it questions of agency, location, and representation in such a way as to alter the aesthetic category as one separate or divorced from the real. The live body, the junk environment, the chaos and the total theater reveals the urgency and desire to make art jump off the page, from its base and into the immediate.

Hansen's description of the fusion of art and life indicates the complete dissolution of any line dividing the two. Such a development falls in line with Cage's aesthetic and philosophical project: to move from the cultural sphere of music to the rhythmic and chance-oriented events of daily life. As in Cage's Black Mountain event, Happenings form a "total theater" in which all objects and actions, all items and information, are collaged in a spectacle of anarchic action, where someone like Meredith Monk "... comes very close to putting out eyes, hurting herself badly or destroying expensive machinery," resulting in the nickname "Miss Danger of the happening world."[5] In their makeshift, hands-on, and do-it-yourself productions, Happenings "invite us to cast aside for a moment these proper manners and partake wholly in the real nature of the art and (one hopes) life."[6] The phrase "to partake wholly" articulates the developments of art at this time. For "to partake" situates art in line *with* an audience—and it does so *wholly* in such a way as to suggest "partake" as a form of "participation." To partake is to join in, to move closer, and to add something, of yourself, to the "real nature of art." "To partake wholly"—such is the recipe for an altogether different set of aesthetic ingredients, for notions of audience take on radical implications for art—not so much to be accountable, as an object of cultural attention, offered up for criticism, but more to figure as a situational catalyst in which "to partake" signals that one *be active.* To back up on the original statement, we might also ask: How to be active? In what way does being active figure? As Kaprow suggests in his reference to "proper manners," audience and art partake wholly so as to leave behind the "proper": to exit the stage of "proper manners" and arrive into "real nature." Real nature figures as the essential concern—it is what participation uncovers, makes knowable, outlines as the art experience. Yet hidden inside Kaprow's statement as the deep-seated hope is that real nature is not far from art and the aesthetic concerns of production, and that art may, through acts of participation and through cultivating situations of real nature, become indistinguishable from life and its nagging manners. Works like *Yard*, presented at the Martha Jackson gallery in 1961 (as part of the exhibition "Environments, Situations, Spaces"), function more like playgrounds than art objects: filling the front yard of the gallery with car tires, visitors could climb over the tires, hang out in the yard, sit and chat with the artist "according to our talents for engagement ... for we ourselves are shapes ... we have [different] colored clothing; can move, feel, speak, and observe others variously; and will constantly change the 'meaning' of the work by doing so."[7] As such, Environments were conceived as a "form that is as open and fluid as the shapes of our everyday experience,"[8] inviting the chance interplay of whoever was present to define the work, as an expanded palette.

Others, such as Dine, Oldenburg, and Whitman, also sought to explore the experiential and spatial potential of Environments by creating rooms of junk, ephemera, and assemblages, all of which add up to a cohesive yet unstable whole. Oldenburg's *The Store* exemplifies the inherent confusing of life from art characterizing Environments, as well as drawing upon the Pop art aesthetic of consumer

culture. Located at 107 East 2nd Street, *The Store* opened in December of 1961, selling objects made by the artist and his friends. Functioning as a "proper" store, as well as theater space for the presentation of Happenings during its two-month operation, *The Store* actively repositioned art into an overtly public arena in which "the viewer was synonymous with the customer and could participate, in the fashion of customers everywhere, by browsing and perhaps purchasing."[9]

To partake wholly though must not be seen as perfectly utopian, as sublimely delicate, for real nature, as divorced from proper manners, is occupied, in turn, by the likes of Miss Danger and can and will lead to unexpected results. Recounting a Happening staged at New York University in 1964, Hansen describes how the audience began to heckle the performers until finally he invited them to enter the performance:

> I offered to have them come into the performance area and take part in the happening in a more dynamic way. One of them called, "If we come into the performance you'll be sorry." In a slow Cagean voice I suggested they come up, one at a time and we would fight. They had already become participants in the happening and I thought it would be interesting to work with that. They didn't want to do this, whereupon Freddie Herko walked up the aisle toward … the leader and said, "I used to go to college."[10]

Such descriptions express the confrontational edge of Happenings, for in fusing art and life—*to partake wholly*—the spectacle may collapse (and hopefully it will!) from its own inertia. It may antagonize audiences, "put out eyes," and fall into hysterics, for Happenings are determined by an indeterminate set of occurrences and chance events that find their actualization in the instant of performance, as a meeting point or embodiment of inputs and their eventual outcome, as chaotic rhythm, not as random juxtapositions but as cultivated intensity. "Chance, rather than spontaneity, is a key term for it implies risk and fear…"[11] Such cultivation of chance, and ultimately risk and fear, adds to Cage's liberated aesthetics by inserting corporeality a bit further, supplanting the freedom of silent prayer with the freedom of danger. Such freedoms must be underscored as inherently anarchic, exceeding the limits of cultural practice, for built into them is a desire to put art to use, or *misuse*, so as to make it live.

Splatters That Live

"Extolling the concept of 'total art,' Happenings implicitly challenged the traditional separation between media"[12] by throwing the heroic actionism of Abstract Expressionism off the canvas. Pollock's "action paintings" take on different intensity in Happenings: Hansen's *Hall Street Happening* at 3rd Rail Gallery in Brooklyn, in the backyard, with performers in windows, "a large man constructed of framing wood and corrugated cardboard" with "two girls making love on a bed" raised up on a

platform, with Larry Poons reading Robert Motherwell's Dada book from inside the constructed man's stomach;[13] or Carolee Schneemann's *Meat Joy*, with bodies rolling around in dead animals, chickens, and fish, as a live bodily enactment of Abstract Expressionism's own visceral mark-making. Kaprow's own paintings, after 1952, develop out of an "action-collage technique" embodying all the "levels of meaning" the artist was after through the "acting out of the dramas of tin soldiers, stories, musical structures."[14] The improvised splatters of Pollock's paintings, which form a network of interweaving lines connected in "chance-like" actions whose results drift from the authorial grip of the painter's hand (derived by the artist pouring paint from a can and down the end of a paintbrush handle) find their culmination in the multiplicity, drama, and "everything goes" aesthetic articulated by Kaprow: "The action-collage then became bigger, and I introduced flashing lights and thicker hunks of matter. These parts projected farther and farther from the wall and into the room, and included more and more audible elements: sounds of ringing buzzers, bells, toys, etc., until I had accumulated nearly all the sensory elements…"[15]

Whereas Pollock splattered paint on canvas, in physical and expressive gestures, Kaprow and others sought to extend their reach directly into the room to a point where the bodies of others would *inhabit* art, functioning not only as "action paintings with objects"[16] but as intrusions into space (with buzzers and all). The frame of the painting is thus exploded by the dangers enacted by the likes of Monk—"putting out eyes, hurting herself badly or destroying expensive machinery" comes to replace the pouring of paint, the splattering of drips, and the solitary figure of the artist in his barn in New York. Whether "total spectacle" of performers, or audiences stepping over tires, "all meaning" and "everything"—objects, raw materials, bodies and junk, sounds and musical structures, toys, "tinfoil, straw, canvas, photos, newspaper"[17]—wrap the space of presentation with art's potential, as an invitation to partake wholly, unabashedly so.

Fluxus and the Extremes of Perception

The move toward everyday life and quotidian experience found in Cage's ongoing output of music, echoed in the tumultuous euphoria of Happenings, finds further iteration in Fluxus. Fluxus parallels Kaprow's Environments and the performative nature of Hansen's Happenings, all of which were overlapping in New York at this time. In the late 1950s and throughout the 1960s the New York art scene functioned as an interdisciplinary hive in which artists worked with dancers, dancers worked with musicians, musicians worked with filmmakers, and so on. As Philip Corner recalls:

> … a group of dancers and musicians, and visual artists interested in performance, and writers were already meeting once a week in a loft on the Lower East Side. The rule was … well there just were no rules. Just generosity of spirit and spirits burning with imagination and enthusiasm. Everyone was willing to try whatever any one of

> the group wishes to try out. Neither was there any group, and kind of recognized belongingness; community of interest produced a cooperative unity. There was, as a line of research, that art = everyday life equation. Choreography made of non-dancers.[18]

That the concept of "total art" espoused by Hansen and "intermedia" practice announced by Fluxus arise from this moment is not surprising, for the very terminology suggests a breaking down of disciplinary borders, or rather, simply overlooking them through collaborative spirit.

In bold contrast to Environments and Happenings, Fluxus veers away from spectacular antics. "These works differed from Happenings in their rejection of the physicality and gestural vocabulary of Abstract Expressionism, favoring instead a conceptual rigor and attentiveness to 'insignificant' phenomena."[19] Yet, as Dick Higgins points out, Fluxus is more an "extension" rather than an opposition, embracing Abstract Expressionism's move toward giving life to materials as they exist in reality.[20] The question of representation and interpretation so paramount to Cage finds curious parallel in the arguments regarding Abstract Expressionism, for both radically aim for essentialist aesthetics: Cage for the material purity of sound, as it relates only to itself, and the formalist aesthetics advocated by Clement Greenberg with regard to Pollock and others, which dramatizes the painterly splatters as fulfilling paintings obligation to its unique materiality: painting is *about* paint. Such essentialist and formalist ideas unfold the art object by reducing its meaningful references, and also opening up to new potentials in which representation, interpretation, and materiality are given new life: the art object, like the musical composition, is not so much a series of signs in need of interpretation but an organized event that aims to open out onto the field of meaning by inviting speculation, curiosity of perception, and the simplicity of ordinary materials to carry the imagination, as in Fluxus's minimalist actions (referred to as "events" in distinction to Happenings), which flirt with imperceptibility.

Staging the imperceptible and insignificant aims for a shift in perception, for Fluxus asks us to take another look, and listen, to the small details making up the greater situations of everyday life by "radically isolating them" as singular events.[21] As in Nam June Paik's *One for Violin* (1962) in which the performer raises a violin slowly overhead and then smashes it across a table, or Dick Higgins's *Danger Musics*, which consists of a series of actions, including the shaving of Higgins's head, the single gesture is harnessed and refined so as to uncover its inherent intensity, banality, and minute detail.

As Hannah Higgins summarizes in her thoughtful account *Fluxus Experience*, "Fluxus is better understood on its own terms: as producing diverse primary experiences and interactions with reality, plain and simple."[22] Reality, plain and simple, finds its description by bringing our attention toward its most banal elements. As Higgins further underscores, it makes "the ordinary special" by creating "multiple pathways toward 'ontological knowledge,'"[23] situating "people

radically within their corporeal, sensory worlds."[24] To "situate people radically" resonates with Kaprow's environmental art practice, and his call "to partake wholly" brings to light the incorporation of live performance to engage and activate an audience.

Events, Fluxkits, Fluxfilms, and the multiples produced, while functioning as objects in themselves, override the explicitly aesthetic properties for an "experiential" opportunity. Situational events are staged in established music theaters in front of audiences as well as completely unannounced, performed by a single artist, as in Robert Watts's *Casual Event* (1962), which consists of someone driving to a gas station to inflate the car's tire until it blows out, replacing it, and then driving home. It features in Fluxkits, which consist of an array of found and fabricated objects assembled in briefcase-like boxes and which invite audiences to fondle, caress, and engage with their contents. As a treasure chest of devices and gadgets, gimmicks and tricks, the Fluxkit intends to an enlivening of the senses, particularly that of touch, through a playful misuse of ordinary objects. The stark simplicity of such a gesture echoes the Fluxus ethos that "everything that happens is art," but most directly, the physical and perceptual experience of participants. To articulate such ideas, Fluxus strips away the plethora of junk and theatrical posing found in Happenings, and their often elaborate scripts, creating instead events of small, ordinary, and simple gestures, considered, deadpan, humorous, and often on the verge of imperceptibility. George Brecht's *Drip Music*, in which the artist drips water into a container, is exemplary in that it forces the listener into the delicate silence of near inaudibility: the ear must move closer to the quiet sounds, to follow each drip, as a universe of potentiality, each single drip an event, each resonance a sonic revelation. To stage the near imperceptible was to direct an audience toward the phenomena of perception itself.

Sound as Event

Many Fluxus artists, along with Kaprow, Hansen, and Dine, attended Cage's seminar at the New School in 1957 and 1958, including George Brecht, Jackson Mac Low, Toshi Ichiyanagi, and Dick Higgins, and subsequently developed an interest in Cage's musical strategies. Chance operations, dissolving the lines between art and life, and the introduction of things like silence as useable material all take root in Happenings and Fluxus, though Fluxus ultimately adopts the more "musical" interest. In fact, Fluxus performances can be seen as resolutely musical in so far as they are often staged as musical performance and rely upon a musical language, instruments, and conventions, even if at times no direct musical reference can be found. This though mirrors Cage's own example, in which music grows increasingly open-ended, as a means rather than an end.

George Brecht's early development of the "event score" furthers the Cagean precept that all sounds can function as music and extends it by proposing that everything that happens *is* music. "Standing in the woods of East Brunswick, New

Jersey, where I lived at the time, waiting for my wife to come from the house, standing behind my English Ford station wagon, the motor running and the leftturn signal blinking, it occurred to me that a truly 'event' piece could be drawn from the situation."[25] Brecht's observations of an ordinary moment, and his realization that such occurrences can function as the stuff of art, is not a radical or original moment, for certainly the notion of artists looking toward the world for inspirational source has a long tradition. Yet a markedly different result occurs when art moves to highlight or frame this world *as* art in itself, rather than represent it through abstracted renderings or representational illusion. Such a move must be emphasized as forming a radical shift in the field of aesthetics, for it undoes the ontological status of the object by introducing that which traditionally remains outside the frame: art comes to function by creating nonsymbolic gestures shared through physical knowledge.

Whereas the antics described by Hansen as indicative of Happenings aim to create a total art in which performer and spectator converge to *form* an art event, for Fluxus such antics are replaced by literal actions whose presentation shuffles the perceptual viewpoint of what art and music are.

Incidental Music, 1961
George Brecht

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 wooden 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 suitably arranged, and the performer seats himself.

Incidental Music redirects our understanding of the piano as sound-generating object by highlighting the accidental, the chance event, its status as material object, whose body holds within it a universe of potential sound. The piano as musical object *par excellence* is intentionally analyzed, in mock-scientific examination, so as to outline a lexicon of possible approaches toward unlocking its potential: altering its position, stacking blocks on its surface, taking its picture, fastening peas, and eventually occupying the position of pianist. Such labors form a catalog of

actions through which the piano may be approached. Brecht suggests that the piano, as we think we know it, may require another look, another understanding, another angle. "While Cage invokes the total, unpredictable configuration, permanent flux, and seems (theoretically) not interested in the quality of the individual things, Brecht isolates the single, observed occurrence and projects it into a performance activity, which he called an 'event.'"[26]

That sound figures dominantly within the construction of events underscores the move away from visual objects and their inherent stability and toward the vibratory, the performative, the humorous, the playful, the propositional, for sound undermines form, as stable referent, by always moving away from its source, while slipping past the guide of representational meaning by exceeding the symbolic, either in a drip of water or in a single pea tapping a piano key. The embrace of sound reflects Fluxus's ambition to activate perception through a performative matrix that would bring situations into play, for sound is marked by its immediacy: in moving against the codes of representational meaning, it slips undercover to surprise the listener; it commands attention and disrupts the dividing line between subjects and objects; it happens all the time, from all sides.

> Music starts in the mind. A sense of music is as individual as the individual mind. Music is the name given to a certain kind of perception of events in the world of sound. To be aware of sounds is to be aware of oneself; to be aware of sounds as music is to experience something capable of being shared. An experience shared is one that can be verified. It becomes more real.[27]

Robin Maconie's description uncovers aspects of musical and acoustical experience that Fluxus exploits. For music "starting in the mind" underscores subjective perception as a determining force—for the composer, it may figure as an intellectual activity, a mental process for the listener, music begins at the moment of perceiving it as such, as "perception of events in the world of sound." Further, sound is the *prima materia* from which musical form is sculpted or made explicit, rendered comprehensible as cultural form. Maconie further emphasizes perception by referring to the self—sound and the self are wrapped up together, wedded as if inseparable, a kind of "acoustic mirroring" reminiscent of Guy Rosolato's formulation in which the voice, as sonorous event leaving the body, returns to it, thus produced and received in one and the same instant.[28] The acoustic mirror is both produced and witnessed by the individual, as voice, for one speaks while hearing one's own speaking, wedding the self and sound as a singular event. In speaking, I announce myself as an individual and am first recognized by myself, in the audibility of my own voice. The voice can be extended to include other sound events produced by the individual—as in the child's gurgles, screams, and cries, which have real effect: the mother comes running, strangers turn and watch, siblings run away. In this sense, the self and sound are superimposed to form a heightened drama that extends past the visual, for vision distances the self from that which it sees—the field of vision

isolates objects, so as to apprehend them, whereas sound comes *upon* the individual, so as to apprehend him or her. Lacan's "mirror-stage" functions quite differently from Rosolato's "acoustic mirror." For Lacan, the child confronts itself as a separate object: in the mirror, it sees itself as an outlined body, positioned in the social field (upon the mother's breast), as a distinct subject, with form. To the image the child points and recognizes itself pointing, thereby seeing itself as distanced and embodied. Yet its body is only understood as coming from outside, in the reflected image—the self is thus made a distanced and containable entity in a scopic field.[29] In contrast, the acoustic mirror is a kind of sounding board against which the voice registers the child as a subject *embodied*, emanating sound outward, a producer of voice. Therefore, the self comes from inside, rises up to greet itself, and returns to itself. In this way, the voice restores the subject, rather than fragmenting it.

To follow Maconie, such a heightened coupling of sound and self operates in the social field—for to make sound is to direct it outward, to emanate the body beyond itself, as voice, as command, as being itself, with effect. Music, as the production of special kinds of sounds, conditions experience as a "shared event," for it circulates through the world as a cultural object with an intensity of meanings.[30] As part of the world of sound, music extends past listeners to enfold them in a collective experience, for music too emanates, entering the space of its occurrence and those present. Fluxus, in creating sound events that leave behind any traditional sense of the musical, ultimately asks the listener to consider not only music itself as sound but things incidental and accidental, even visual, as pertaining to the domain of sound, such as photographing a piano, or dripping water. Ultimately, music functions as a cultural arena for Fluxus, whose specific acoustical operations are exploited so as to direct attention to perception itself. In this way, Fluxus is *about* perception. It aims to "emanate" rather than signify; to embody through action rather than point to through representation, and it uses music to address the self in such a way as to aim for shared experience.

"Unlike the visual experience, therefore, which unfolds in front of and under control of the viewer and tends to be articulated from moment to moment, episodically, the listening experience is continuous, ever-present, and unavoidable, and by comparison less susceptible to direct control."[31] The absence of control of sound lends to the events of Fluxus, for it hints at sound's immediacy to impinge upon a listener's perceptual field—to have immediate effect. It acts as an acoustic mirror in so far as Fluxus aims to dissolve the boundaries of subjects and objects: "What Rosolato suggests is that since the voice is capable of being internalized at the same time as it is externalized, it can spill over from subject to object and object to subject, violating the bodily limits upon which classic subjectivity depends. . . ."[32] In this way, we might understand Fluxus performance as a process of using music (whether a sound is heard or not) to set the stage for immediacy in which "bodily limits" are redrawn, where one does not apprehend an artistic object but laughs along with it. That is to say, Fluxus appropriates music as a direct route into the heart of perception.

Language

In contrast to Happenings, and preceding Conceptual art, language functions increasingly as a material for production within Fluxus. The Fluxus event score operates to not only give instruction but to function as text in itself, as in Brecht's *Five Events* from 1961:

eating with
between two breaths
sleep
wet hand
several words

Five Events is exemplary of the Fluxus language game, as it twists language into an event of the mind. It is both poem and instruction, haiku and manifesto, proposing an action of *reading* and *doing* to collapse the two, for reading the event score is to implicitly enact the score itself. Others of Brecht's works, such as *Three Aqueous Events* ("ice/water/steam") or *Piano Piece*, from 1962 ("vase of flowers onto a piano"), extends the appeal to cognitive process, for "Brecht believed that the task of the artist was simply to stimulate the viewer's imagination or perception."[33] In this way, the event score is a form of signification that, preceding Roland Barthes's influential poststructuralist "Death of the Author" (1968) essay, attempts to liberate language from the authorial grip not only of the author *per se*, but of the value system embedded in authoring.[34]

La Monte Young's *Composition 1960 #10 (for Bob Morris)*, "draw a straight line and follow it," is indicative of the event score, for it raises a question: is it truly necessary to draw an actual line, to follow it concretely, in real time and space? Hovering on the edge of possible action, the event score stimulates the imagination, sets it going, for what is implied in *Composition #10* is that the line is physical *and* mental—it's a line of text read and followed to its end, and a line found within everyday life—it is nowhere and everywhere. "Event scores are poetry, through music, getting down to facts."[35] Here, language is an instructional game or musical score that situates the reader in the position of maker. Yet, paradoxically, what is articulated is that language becomes the art work: the event score articulates, implies, and performs the very thing written, yet only in the moment of its being read, as a textual act. This operates on what Dick Higgins calls the "postcognitive."[36] In contrast to the cognitive, the postcognitive is not so much an operation of interpretation that attempts to apprehend language, understand it as a singular meaning, but rather a performance *of* language. Such performance situates meaning in the event itself, not as a singular interpretive moment but as an extended and reverberating multiplicity resulting in laughter, reverie, action, conversation, and performance. It is a kind of secret passed in the operations of artistic practice to extend beyond the object to meet the viewer or participant, in their own head. "One anti-personnel type-CBU bomb will be thrown into the audience" (1969).

Philip Corner's outrageous event in blowing up the audience, in turn, suggests an exploding of the boundaries between subject and object, viewer and artist, by literally collapsing the two, making them grotesquely indistinguishable, for "... these cryptic phrases were equally valid as performance directives, physical entities, or states of mind; although they could be enacted, simply reading and thinking about them was sufficient to constitute realization."[37]

We might, in turn, substitute the event score for music and propose that the sound events of Fluxus are also meant to be completed in the listener's mind, as a process of postcognitive realization—to be completed in the mind, and not before, not against the static object to which the mind may turn but before, or within, the instant of reception. Brecht's *Incidental Music* or Young's *Compositions* each situates music and the auditory event inside a reader's/listener's imagination. Sound is thus heard through its suggestion.

On the Aesthetical Terrain

"Fluxus transforms the avant-garde (as institutional critique, as iconoclasm) to become, in part, its opposite: aesthetic experience."[38] Following Hannah Higgins, the project of Fluxus aims to get inside the mechanics of perception, through postcognitive, imaginary, and poetic events, activating the senses for ultimate "aesthetic experiences." Yet Higgins's reduction of Fluxus to "pure aesthetic experience" overlooks or under-hears that such events often carry cultural and social commentary. Performances, Fluxkits, event scores, Fluxfilms, and other projects, while acting as catalysts for perceptual immediacy in their experiential moment and subsequent "ontological knowledge," nevertheless lead an audience to a series of critical questions. That is to say, can't ontological knowledge contain, if not make possible, something like "institutional critique"? Works such as Yoko Ono's *Cut Piece* (1964), in which the performer seated on a stage invites the audience to cut away her clothes with a pair of scissors, shift the art object to experiential event in a way that *problematizes* such experiential participation as purely aesthetical.[39] Or even Brecht's *Drip Music* can be understood in relation to a legacy of Abstract Expressionism, whose own drips and splatters were thrown from a much more masculine source: Brecht's drip holds within it an implicit criticism of the works of someone like Pollock by intentionally producing much more limp and pathetic drips. Such pathetic drips, while serious, point toward the humorous, for we must not forget that Fluxus was partly motivated by the humorousness of "gags," thereby "introducing a much-needed *spirit of play* into the arts."[40]

The extreme, whether overtly dangerous or resolutely subtle, deeply minute or full of hilarity, seems to unsettle perception not for the sole purpose of reinvigorating its potential to understand reality through aesthetic experience only, but to, in turn, question how reality itself has been constructed. Stripping away the representational glare of signifying codes, predicated on a divide between object and subject, it is my view that Fluxus initiates not only immediate knowing but

activates such knowing in the field of culture by insisting on the difficulties knowing entails. Its interest in music and the dynamics of staging sound underscore a general thrust in the avant-garde to locate new media for generating active relationships between making and receiving. Thus, Happenings, Environments, and Fluxus make us radically aware of sound's potentiality to create work that retains a sense of immediacy, corporeality, and curiosity.

Notes

1. Cage, who had initially attended the New School as a student of Henry Cowell in the 1930s, made it a point in the 1950s to make himself available to younger generations. He taught at the New School from 1957 to 1960.

2. Al Hansen, *A Primer of Happenings & Time/Space Art* (New York: Something Else Press, 1965), p. 21.

3. Allan Kaprow, "Happenings in the New York Scene," in *Essays on the Blurring of Art and Life*, ed. Jeff Kelley (Berkeley, CA: University of California Press, 1996), p. 18.

4. Al Hansen, *A Primer of Happenings & Time/Space Art*, p. 85.

5. Ibid., p. 75.

6. Allan Kaprow, "Happenings in the New York Scene," in *Essays on the Blurring of Art and Life*, p. 18.

7. Allan Kaprow, "Notes on the Creation of a Total Art," in *Essays on the Blurring of Art and Life*, p. 11.

8. Ibid., p. 12.

9. Julie H. Reiss, *From Margin to Center: The Spaces of Installation Art* (London and Cambridge, MA: The MIT Press, 1999), p. 19.

10. Al Hansen, *A Primer of Happenings & Time/Space Art*, pp. 52–53.

11. Allan Kaprow, "Happenings in the New York Scene," in *Essays on the Blurring of Art and Life*, p. 19.

12. Barbara Haskell, *Blam! The Explosion of Pop, Minimalism and Performance, 1958–1964* (New York: Whitney Museum of American Art, 1984), p. 33.

13. Al Hansen, *A Primer of Happenings & Time/Space Art*, pp. 12–14.

14. Allan Kaprow, "A Statement," in *Happenings*, ed. Michael Kirby (London: Sidgwick and Jackson, 1965), pp. 44–45.

15. Ibid.

16. Barbara Haskell, *Blam!*, p. 44.

17. Allan Kaprow, "A Statement," in *Happenings*, p. 45

18. Philip Corner, liner notes from his CD *On Tape from the Judson Years* (Milan: Alga Marghen, 1998). I might also insert, however minimally, the general cultural backdrop of the New York scene exemplified in the atmosphere of Greenwich Village in the early 1960s. We might recall how the Village became a hive of creative energy during the anti-Communist era of the 1950s, operating as a haven for leftist radicals, Beat poets, jazz players, and general anarchist bohemians. Gravitating around numerous coffee shops and bars, such as the legendary Café Wha?, figures such as James Baldwin, Bob Dylan, and Allen Ginsberg, to name just a few out of the many, all hovered in and around this community, participating in nights of poetry reading, music-making, theatrical happening, political meetings,

and conversation through an overarching spirit of sharing and reveling. To recall that such things were always happening on the streets in the Village, we might appreciate Corner's statement and recognize too that art practice was partially inseparable from the more subcultural popularity of such antics as found in the cafes and bars.

19. Barbara Haskell, *Blam!*, p. 49.

20. Dick Higgins, "Something Else About Fluxus," in *Art and Artists* (October 1972), p. 18.

21. Douglas Kahn, *Noise Water Meat* (Cambridge, MA: The MIT Press, 2001), p. 226.

22. Hannah Higgins, *Fluxus Experience* (Berkeley, Los Angeles, and London: University of California Press, 2002), p. 59.

23. Ibid., p. 38.

24. Ibid., p. 67.

25. Michael Nyman, *Experimental Music: Cage and Beyond* (Cambridge, UK: Cambridge University Press, 1999), p. 75.

26. Ibid., p. 74.

27. Robin Maconie, *The Concept of Music* (Oxford: Oxford University Press, 1990), p. 11.

28. For an account of Rosolato's theories, see Kaja Silverman, *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema* (Bloomington, IN, and Indianapolis, IN: Indiana University Press, 1988), pp. 79–80.

29. See Jacques Lacan, "The Mirror-Stage," in *Écrits*, trans. Alan Sheridan (London: Routledge, 2001), pp. 3–29.

30. For more on musical meaning in relation to individual experience, see Tia DeNora, *Music in Everyday Life* (Cambridge, UK: Cambridge University Press, 2000).

31. Robin Maconie, *The Concept of Music*, p. 22.

32. Kaja Silverman, *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema*, pp. 79–80.

33. Barbara Haskell, *Blam!*, p. 53

34. Roland Barthes, "Death of the Author," in *Image Music Text*, trans. Stephen Heath (London: Fontana/Flamingo, 1977), pp. 142–148.

35. George Brecht, quoted in Michael Nyman, *Experimental Music: Cage and Beyond*, p. 79.

36. Craig Saper, "Fluxus as a Laboratory," in *The Fluxus Reader* (Chichester, UK: Academy Editions, 1998), p. 148.

37. Barbara Haskell, *Blam!* p. 53.

38. Hannah Higgins, *Fluxus Experience*, p. 99.

39. Kristine Stiles proposes that *Cut Piece* "… becomes a representation of the translation of mental concepts into corporeal and spiritual deliberations on the problem of ethical human interaction." The aesthetical proposition of concepts being completed in a viewer's or participant's mind then takes on much more social weight from this vantage point. Kristine Stilles, "Being Undyed: The Meeting of Mind and Matter in Yoko Ono's Events," in *Yes: Yoko Ono* (New York: Harry N. Abrams, 2000), p. 148.

40. Dick Higgins, "Fluxus: Theory and Perception," in *The Fluxus Reader*, p. 225.

Chapter 5

Minimalist Treatments: La Monte Young and Robert Morris

The Fluxus project and its eccentric cultivation of singular events tunes the ear toward acute refinement, bringing perception and the field of the everyday up against questions of representation and experience. From butterfly wings and candle flames to imagined bombs, Fluxus totally revamps the aesthetic category. It, in turn, tosses sound into a far broader field of possibility, harnessing its dynamic so as to activate art's social and relational promise: to attract people's attention to attention itself. The work of La Monte Young contributes dynamically to the Fluxus project, while in turn setting the terms for the developments of Minimalism. His work throughout the 1960s, and to the present, extends auditory experience and the potential of experimental music toward an intensified refinement.

In contrast to Conceptual art's overt "idea-based" endeavors of the late 1960s, Henry Flynt's "concept art," coined earlier in 1961, refers more to the perceptual event: "For the first time in 3,000 years of mathematics an image is used as a notation-token, such that the image has to be completed in the reader's mind in the act of perception."[1] Like the "postcognitive" Fluxus event score, concept art is theorized as a perceptual process in which the image (concept) is experienced as an immediate presence—an art that presents to the viewer/listener an experience to be completed through the very act of perception, resonating with Nam June Paik's statement, "In a nomadic, post-industrial time we are more experience-oriented than possession-oriented."[2] Concept art can be found in the event scores of Brecht and others, articulating the Fluxus ambition to renew perception by collapsing the distance between art and life. Such interests also feature in the musical works of La Monte Young. "La Monte Young overthrew Cage's definition of the new as 'extravagant confusion.' His compositions presupposed a quasi-scientific analysis of music as nothing but a collection of sounds defined by frequency, amplitude, duration and overtone

spectrum."[3] Moving away from the overtly social dimension (or "extravagant confusion") of Cage's work, Young probes the perceptual and detailed world of sound to bring to the fore a music as pure concept, as a sonic image to be completed within the listener's ear.

Having learned guitar and saxophone as a kid living in Idaho, Young studied at Los Angeles City College and at UCLA, in the early 1950s, and then studied composition at Berkeley in the late 1950s. Combining a dedication to jazz music, the likes of John Coltrane, Ornette Coleman, and Eric Dolphy, the works of Stockhausen and the European musical avant-garde, with an interest in the natural phenomenon of sound, Young's music moves quickly through the 1950s to arrive at what would come to mark his significant works, that of extended duration, harmonics, or overtone, and psychoacoustics, presented through intensified volume.

His growing interests in just-intonation (or whole number frequency ratios) and extended duration are found in the early *Trio for Strings* (1957), constructed of long tones and silences. As fellow-minimalist Terry Riley recalls: "The *Trio for Strings*, which is a milestone in the history of Western music, is made up entirely of long durations. It is the most strangely unique serial composition that I know. The sound of the piece, which combines the patience of ancient China with the austerity of Zen Japan, is dominated by suspensions of intervals that carry us along static planes where our gravity-bound and worldly ideals of Western culture do not normally allow us to travel."[4] The composition also made quite an impact on his professor at the time, Seymour Schifrin, who went so far as to organize an informal performance of the work at his house in order to point out to Young his erred direction—for certainly the use of extended silences and notes were the result of a miscalculation or passing fancy. To Schifrin's chagrin, Young became increasingly interested and excited in the sonic experience of frequencies and long duration, and he went on to further exploit their potential.[5]

Moving to New York in 1960, after a summer spent at Darmstadt as part of Stockhausen's first workshop, Young was to exert an enormous influence in coalescing the artists working around Cage's New School class and downtown New York into what would become early Fluxus. Organizing a series of events at Yoko Ono's loft at 112 Chambers in 1960 and 1961, Young created a concentrated forum for the multiple strands of art activity happening at this time.[6] In addition, his editorial work for the Fluxus compilation *An Anthology* from this time, along with Jackson Mac Low, reflects his overall involvement and influence upon the early days of Fluxus.

While Young's work can be seen as an extension of the Cagean logic surrounding sound, his work shifts dramatically from the macroview of Cagean sociality to the microscopic palette of sonic frequencies.

> I could see that sounds and all other things in the world were just as important as human beings and that if we could to some degree give ourselves up to them, the

> sounds and other things that is, we enjoyed the possibility of learning something new. By giving ourselves up to them, I mean getting inside of them to some extent so that we can experience another world. This is not so easily explained but more easily experienced. Of course if one is not willing to give a part of himself to the sound, that is to reach out to the sound, but insists on approaching it in human terms, then he will probably experience little new but instead find only what he already knows defined within the terms with which he approached the experience. But if one can give up a part of himself to the sound, then the experience need not stop there but may be continued much further, and the only limits are the limits each individual sets for himself.[7]

The call to "give up" the human terms so as to reach the world of sound resonates with Cage's attempt to strip sound of its representational codes so as to liberate music and the perception of it. Yet Young's solution would not be in the multiplication of input—as in the Black Mountain event and later works, such as *Variations IV*—which operates on the human level, of individual bodies and their implication in a social field. That Young strives for the world of sound, as set not by human limits but by its own internal logic, can be seen to follow Flynt's formulation of concept art and Brecht's analytical intuition of near-imperceptible phenomena.

To explore the world of sound, Young dedicated himself to an increasingly "minimal" musical project—the "extravagant confusion" of Cage is replaced by the "Theatre of the Singular Event," articulated in the series of text-based compositions from 1960 and 1961, such as *Composition 1960 #2*, which reads:

> Build a fire in front of an audience. Preferably, use wood although other combustibles may be used as necessary for starting the fire or controlling the kind of smoke. The fire may be of any size, but it should not be the kind which is associated with another object, such as a candle or a cigarette lighter. The lights may be turned out.
>
> After the fire is burning, the builder(s) may sit by and watch it for the duration of the composition; however, he (they) should not sit between the fire and the audience in order that its members will be able to see and enjoy the fire.
>
> The composition may be of any duration.
>
> In the event that the performance is broadcast, the microphone may be brought up close to the fire. 5.5.60

As Flynt further reflects: "In Cage's compositions from the fifties, the audience perceived an event from which neither the composer's intentional procedures nor the performers' intention process could be inferred. The short text scores of Young went beyond the boundaries of music; and they manifested a sort of fantasy—paradoxical and self-referential—which was philosophically challenging."[8] Concentrating on a single action opens the viewer/listener to the microscopic details of perception: the fire is an elemental event, a performative action, and an acoustical occurrence, however subtle or challenging or paradoxical.

Working alongside Tony Conrad (violin), John Cale (viola), Marian Zazeela (voice drone), and Angus MacLise (hand drums), the "Theatre of Eternal Music" (or "The Dream Syndicate") would enhance the singular event through an intense musical focus. From 1962 to 1965, the ensemble played endlessly, mainly at the loft of Young, as well as various art galleries, such as the 10-4 Group gallery, deriving their music by incorporating elements of Indian music and jazz improvisation, exploiting elements of "Modernism's collapse," exemplified in Cage, into a dedication to singular tones and their harmonics. Though, as Tony Conrad states, such relation to Cage gained much momentum through its critical position: "I heard an abrupt disjunction from the post-Cagean crisis in music composition; here the composer was taking the choice of sounds directly in hand, as a real-time physicalized (and directly specified) process.... As a response to the un-choices of the composer Cage, here were composerly choices that were specified to a completeness that included and concluded the performance itself."[9] Significantly, the Theatre of Eternal Music delved fully into the acoustical universe of single sustained tones, compounding their deeply droning sound with extended duration, bringing each performer into a unified state. "We lived inside the sound, for years. As our precision increased, almost infinitesimal pitch changes would become glaring smears across the surface of the sound.... When John Cale's viola and my violin began to fuse, as though smelted into one soundmass, I felt that the Dream Music had achieved its apogee."[10]

Hearing Subjects and Vibrating Bodies

The physics of sound and acoustics, along with the psychoacoustics of audition, lend significant insight onto Young's work, for questions of listening and cognition (not to mention self-fashioned spirituality) figure prominently in his compositions. To direct attention to the details of sound, Young developed a musical vocabulary of pure frequencies, working with the overtone spectrum or harmonics and nontempered tuning initially produced with saxophone and tambura, and later with tone generators, piano, and voice drone. His music, in a sense, strives for the actualization of the very perceptual moment of hearing as a phenomenon in its own right: sustained tones, loud volumes, extended durations, harmonic frequencies all encompass an overarching sonic commitment that seeks to make sound an experiential event beyond the human limits of time and space, exploiting the ear as a physiological device and the mind in its moment of perception of sound stimuli.

To sculpt such unique music, Young puts to use different tuning systems than traditional Western music. To summarize, tunings are based on mathematical proportion or ratios through which two different pitches are related, and this ratio comes to determine the interval between them, whether as an octave (ratio of 2:1), a fifth (3:2), or a third (5:4). To establish a particular key, instruments are tuned starting from a chosen frequency and following the above intervals. Such an

approach though raises certain problems when moving from one key to another, as in much classical music, which since the Baroque period developed an increasingly "chromatic" character. To overcome such problems, "tempered" tuning was established, which averages out certain frequencies, as vibrations per second, replacing them instead with an approximation. In this regard, a tempered system is never absolutely "in tune," for each octave is subdivided into twelve equal steps, thereby inserting this approximation while keeping the octaves "in tune." In Western classical music, instruments are tuned to this end, for orchestras generally tune to an agreed frequency of 440 cycles per second (which was established as a standard at an international conference in 1939).[11] In order to achieve a more subtle and varied sonic palette, Young works with "just-intonation," a system of tuning in which all the intervals can be represented by ratios of whole numbers, resulting in a virtually infinite variety of scales and chords. Other composers throughout the twentieth century, such as Harry Partch, Lou Harrison, and Edgard Varèse, have also worked with such tunings, retuning instruments, or creating their own, in order to explore a wider range of frequencies and intervals, shifting the entire musical palette away from tempered pitch and toward micro-tonality.

Young's work further exploits the range of frequency and whole number tuning by working with the overtone spectrum, or those frequencies that are produced through the resonance of frequencies against each other. Overtones, or harmonics, lead us into the realm of psychoacoustics, for they heighten individual perception by activating the ear and its intrinsic neurophysiological functions. By playing a note on a particular instrument, we not only hear that note but a note an octave higher, another a fifth higher, then two octaves higher, and so forth. Through such harmonic resonance frequencies influence and "color" one another—what we hear is a kind of acoustical multiplication that occurs through our own experience of frequency, as the perception of the overtone spectrum. Psychoacoustics makes complicit the individual listener within the domain of music, as a physiological conspirator. Young completes the Schoenbergian "emancipation of dissonance" from earlier in the century by following through on Cage's example—to liberate sounds, not as social chaos but as sheer frequency, as overtone, in which the singular sounding of a particular frequency acts to induce "tones which are not physically present in the auditory stimulus, but which are supplied by the human ear, nervous system, and brain."[12] Such liberation must be seen not only on instrumental and musical levels but also on a perceptual one, in which music inaugurates new forms of hearing.

Durational elongation is another characteristic of Young's work, extending the psychoacoustic aspect. Early on, Young became fascinated with the idea of producing a sound for a very long time. His idea was that if you extend a note durationally you're able to better hear all the harmonic nuance within frequency—for it takes the ear time to adjust to the frequencies heard, to in a sense grow sympathetic to them. His *Trio for Strings*, while based on a serial method using the tone row, has built into it extended silences and elongated tones. In this way, the

music aims to resonate the ear canal in such a way as to complete the composition. Duration for Young is not a question of minutes or hours, but days and years. As Philip Glass proposes: "This music is not characterized by argument and development. It has disposed of traditional concepts that were closely linked to real time, to clock-time. Music is not a literal interpretation of life and the experience of time is different. It does not deal with events in a clear directional structure. In fact there is no structure at all!"[13]

An additional aspect must be underscored in relation to Young's work, and that is spatiality. For even though a great deal of his works are staged, in so far as an audience remains in one particular location in relation to the sound source, such as a piano, much of his work also operates as an installation. In contrast to discussions within the musique concrète tradition and the acousmatic construction of the sound object, which focuses much attention on the presentation of sound to a stationary listener, thereby creating a "virtual" auditory space,[14] Young emphasizes the movements of the individual to generate spatiality. In this regard, auditory experience is determined through the bodily flow of an individual whose decisions as to where to be constructs the composition and the subsequent articulation of space.

Young's Dream House is exemplary of such an approach. Dream House was initially conceived of as an environment of light and sound and functioned to house Young's collaborations with Marian Zazeela, whom he had met in 1962, becoming his partner in both life and work. By developing the Dream House, Young essentially constructed a home for his work to be heard and experienced, for the Dream House functions to spatially express the musical works by complementing them with Zazeela's light installations and allowing the necessary conditions for loud volume and extended listening experience beyond the usual concert setting. Beginning in 1964 with *The Tortoise, His Dreams and Journeys*, the Dream House continues to this day, functioning to activate sound through a spatial and perceptual situation. As John Schaefer recalls:

> The Dream House installations usually ran for several days at a time, with live performances of up to eight hours at a time.... Distinguishing characteristics of these sound and light environments included long, sustained instrumental drones playing with or against the electric tones, creating whole fields of audible harmonics, and often Indian-sounding vocals, the latter often done by Marian Zazeela and La Monte Young themselves. High volume was also an attribute ... to the extent the sound took on physical mass—or better, the actual physical movement of sound waves became apparent in a way that was exhilarating for some, painful for others, but in any case inescapable.[15]

In contrast to the acousmatic tradition, the Dream House is formed at the moment an individual enters the sonic field—immersed as in a fluid, sounds oscillate across a range of frequencies through the movements of the body, enfolding the self in a sonic architecture that cannot be said to either exist or

not, for while dimension is articulated, space recedes as predicated by walls. Whereas musique concrète relies upon the loudspeaker in creating a virtual sound space—the loudspeaker positions sound in relation to a positioned subject—Young's Dream House positions the loudspeaker to mobilize the individual through real space.

Such an interest in auditory space is further extended in his use of musical instruments and their particular tunings. In conjunction with the Dream House, Young's *The Well-Tuned Piano* positions the piano to highlight its relation to a given architecture. Begun in 1964, the composition is a work for justly tuned piano in which micro-tonal chords and intervals unfold at an intensely slow pace. Taking its structure from Indian raga music, which is generally structured around a series of melodic lines that the performer can improvise over a period of time, lingering on some lines while building climaxes through repetition, *The Well-Tuned Piano* consists of a similar structure, its skeleton providing a series of chordal opportunities for improvisation. The composition has rarely been performed live, though Young has dedicated years to its development; like all his works, *The Well-Tuned Piano* evolves and gains new material every time it is played, or reconsidered, thereby extending its duration, which is somewhere around five hours.[16] Since its tuning is of such special accuracy, Young often insists on the controlled conditions of a given space so as to maximize the instrument's tonal range. For the given spatial situation can be seen to enhance or interfere with the instruments sound, and the overtone spectrum—that is to say, Young works with the given space as an extended instrument through acoustically conversing with it.

In 1976 the Dia Foundation decided to support Young and Zazeela by purchasing a building for the sole purpose of housing their difficult and austere projects. In 1979, they took occupation of the old Mercantile Exchange Building in lower Manhattan, finally creating the perfect Dream House, a living/working laboratory for the continual exploration of auditory experience. Taking the chordal structure of *The Well-Tuned Piano*, Young installed tone generators in each of the rooms of the building. Each room presented one set of frequencies, or chordal environment, along with Zazeela's light installation *The Magenta Lights*, turning the building into an extended instrument whereby each room added up to form the entire composition. By moving through the different rooms, a visitor would create the composition: spending time in one room, sleeping in another, avoiding others, acted as a form of improvisation, a kind of performance in which sound, space, and the individual unite.

Through the use of multiple frequencies sustained at high volumes, the environment of the building is made a partner in composition, for such frequencies acoustically activate the rooms, tuned to their dimensions and surface reflection or absorption. Listening thus occurs on both acoustic and psychoacoustic levels, for frequencies interweave to create harmonic overtones that shift in relation to one's physical location. By moving around, shifting balance, and relocating one's ears around the room, the tonal dynamic dramatically changes. This functions in

relation to what Maryanne Amacher refers to as "the third ear," for such overtones do not necessarily exist in real space but are created inside the resonating ear canal. This is made intensely active through the creation of "standing waves." As Young explains:

> There are compelling mathematical and physical reasons for employing sine waves [single frequencies] as the foundational units of analysis for sound waveforms.… When a single continuous sine wave of constant frequency is sounded in an enclosed space, such as a room, the air molecules in the room are arranged into complex geometrical patterns of oscillation. Because of the parallel surfaces established by walls, ceiling, and floor[s] of typical enclosed spaces, standing wave patterns are created when a sine wave is reflected from a given plane (without absorption) and then travels back, superposing itself with the original wave. The amplitude of the reflected wave algebraically adds and, at certain points, cancels the amplitude of the original wave. Adding the contributions from the components of the original wave and the reflected wave, we can create standing waves in the space. A standing wave does not propagate but remains anchored at certain locations in the room, called nodes.[17]

Standing waves thus create a field of fixed points, or nodes, which in themselves are highly active zones that in their organization create a field of molecular oscillations and patterns that "allow the listener's position and movements in the space to become an integral part of the sound composition."[18] In this sense, the work exists partially within a listener's experience of it: musical patterns and acoustical events unfold as a listener moves around the room, and the oscillations alter in minute sheets of tone. As Young points out, the room itself functions as an enlarged instrument, fulfilling what Marshall McLuhan and Edmund Carpenter define as "auditory space," for "auditory space has no point of favoured focus. It's a sphere without fixed boundaries, space made by the thing itself, not space containing the thing."[19] Young's work creates the space of its auditory occurrence—that is to say, sound and architecture are no longer separate but interpenetrate to form a single entity, "creating its own dimensions moment by moment."[20]

Discursive Twists: Robert Morris

Young's practice, while performing Concept art, can be understood to engage the viewer/listener with an increased intensity—his musical works, in their extreme duration and rigorous technique, demand much from the receiver. In contrast to Young's work and its physicality, the artist Robert Morris develops a more discursive treatment of relational experience.

One of the more actively versatile and productive artists of the 1960s, Morris moves from the Judson Dance Theater and early Fluxus to Minimalism, site-based sculpture and earthwork. Having been introduced to Young by Cage in San Francisco in 1960, they each subsequently relocated to New York where they

have worked ever since. As a participant in Young's Chamber performance series organized at Yoko Ono's loft, Morris presented his *Passageway* project in 1961. Constructed out of wood, two parallel walls curved throughout the space, tapering into a claustrophobic narrowing. The corridor formed a sculptural environment visitors walked in and out of. In stark contrast to Kaprow, Morris's environment was pointedly hard and antagonistic to participants, where body and environment conflict rather than commingle.[21]

Concerns of physical experience undoubtedly reflect Morris's involvement with the Judson Dance Theater and the new dance performance developed in the works of Ann Halprin, Yvonne Rainer, Simone Forti (at the time, Morris's wife), Steve Paxton, Tricia Brown, and Lucinda Childs, all of whom Morris worked with at the Judson Church. Contemporaneous with Happenings and early Fluxus, the Judson Dance Theater sought to overcome the tradition of modern dance, exemplified in Martha Graham's work, by stripping dance of psychology and spectacle. Much of these new works established a spatial language through the use of props and sculptural structures, as exemplified in Simone Forti's *Slant Board*, also presented at Yoko Ono's loft in 1961. Choreographed for a group of dancers and a wooden ramp fitted with ropes, *Slant Board* forced dancers to negotiate the difficult angle of the ramp, holding themselves up with the ropes. The dance thus unfolds as a spatial conversation in which body and object *produce* gestural movements, as dancers negotiate the ramp through movements noticeably strained and difficult. Such difficulty instigates a positioning of the body, marking the object not so much as a generator of free movement but as an intrusion upon it.[22] Morris's *Passageway* functions in much the same way: the narrowing of the walls confront the visitor with a spatial tension. In turn, the work begs the question: what *is* a viewer's relationship to such a work of art? What are viewers to make of the art object that forcibly positions their sense of viewing in such discordant proximity, in a passageway leading nowhere?

Morris was in fact producing similar props for his dance performances at this time. His *Column* work from 1961 (his first sculptural work after giving up painting) was constructed for a performance at the Living Theater in New York (to benefit the publication of the Fluxus' *An Anthology*). The work consists of a gray, rectangular column eight feet high by two feet square. Positioned in the center of the stage, the column is presented for three and half minutes, and then toppled over by pulling a string, to remain horizontal on the stage for another three and half minutes.[23] That the sculpture relates to literal action beyond dramatic narrative as well as to the scale of the body hints at Morris's involvement with the Judson Dance Theater and its vocabulary of task-oriented actions stripped of expressivity. It also highlights Morris's ongoing questioning of the place of the body in the production *and* reception of art.

Morris's *Passageway* and *Column*, while performative, point to an interest in sculpture, materiality, and perception as object *and* event. As in subsequent works, *Passageway* stands as an object in space, a material articulation, while

housing a participant's body inside a performative situation, where object and viewer become inseparable.

> While the extreme simplicity of *Passageway* demonstrates a substantive departure from the chaos that shaped Happenings … it inevitably recalls their desire to manipulate audiences as well as to draw upon an insistent aggressiveness. Yet Morris had exchanged the loose, episodic, and theatrical form, with its narrative implications, and the expressive texture of the Fluxus event—which may be seen as deliberately continuous with Abstract Expressionism—for a radical contraction of impact.[24]

No more chaos, no more of Hansen's rhythms or Brecht's perceptual textures; performance void of narrative, or aggression, replaced by a subdued and studied literalness. Morris's work is a material investigation, essayistic in tone. His *Column* explores a primary sculptural effect: how does an object change when it is presented vertical and horizontal? Do we understand this as the same object in each given position? Or does the shift in position also redefine the object—in short, is the *column* still the same once it is toppled over?

Questions of perception, as we've seen in Happenings and Fluxus, take on paramount importance in art production at this time and echo the work of phenomenology exemplified in the writings of Maurice Merleau-Ponty, whose work gained a North American audience from 1960 onwards. Published in French in 1945 and translated into English in 1958, Merleau-Ponty's *Phenomenology of Perception* stands as a seminal work on the study of perception predicated on an investigation of corporeal presence. As the study of essences, phenomenology is a transcendental philosophy, yet in contrast to metaphysics, it begins with the implication that the world is always already there, as a material interface or physical presence. In this way, "consciousness is always consciousness of something"[25] and essence is always figured in and through the world. Perception is therefore *situated* in the very space from which it arises. As Merleau-Ponty elucidates: "Phenomenology is the search for a philosophy which shall be a 'rigorous science,' but it also offers an account of space, time and the world as we 'live' them."[26] Merleau-Ponty's work uncovers the body as a determining force, "a system of systems devoted to the inspection of a world and capable of leaping over distances, piercing the perceptual future, and outlining hollows and reliefs, distances and deviations—a meaning—in the inconceivable flatness of being."[27] Thus, "meaning" is found in the body's very movements and digressions, the pulses that trigger movement *toward* the world, and that brings dimension to the "flatness of being." It is only through such movement or motoric engagement that meaning happens:

> All perception, all action which presupposes it, and in short every human use of the body is already *primordial expression.* Not that derivative labor which substitutes for what is expressed signs which are given elsewhere with their meaning and rule of usage, but the primary operation which first constitutes signs as signs, makes that which is expressed dwell in them through the eloquence of their arrangement

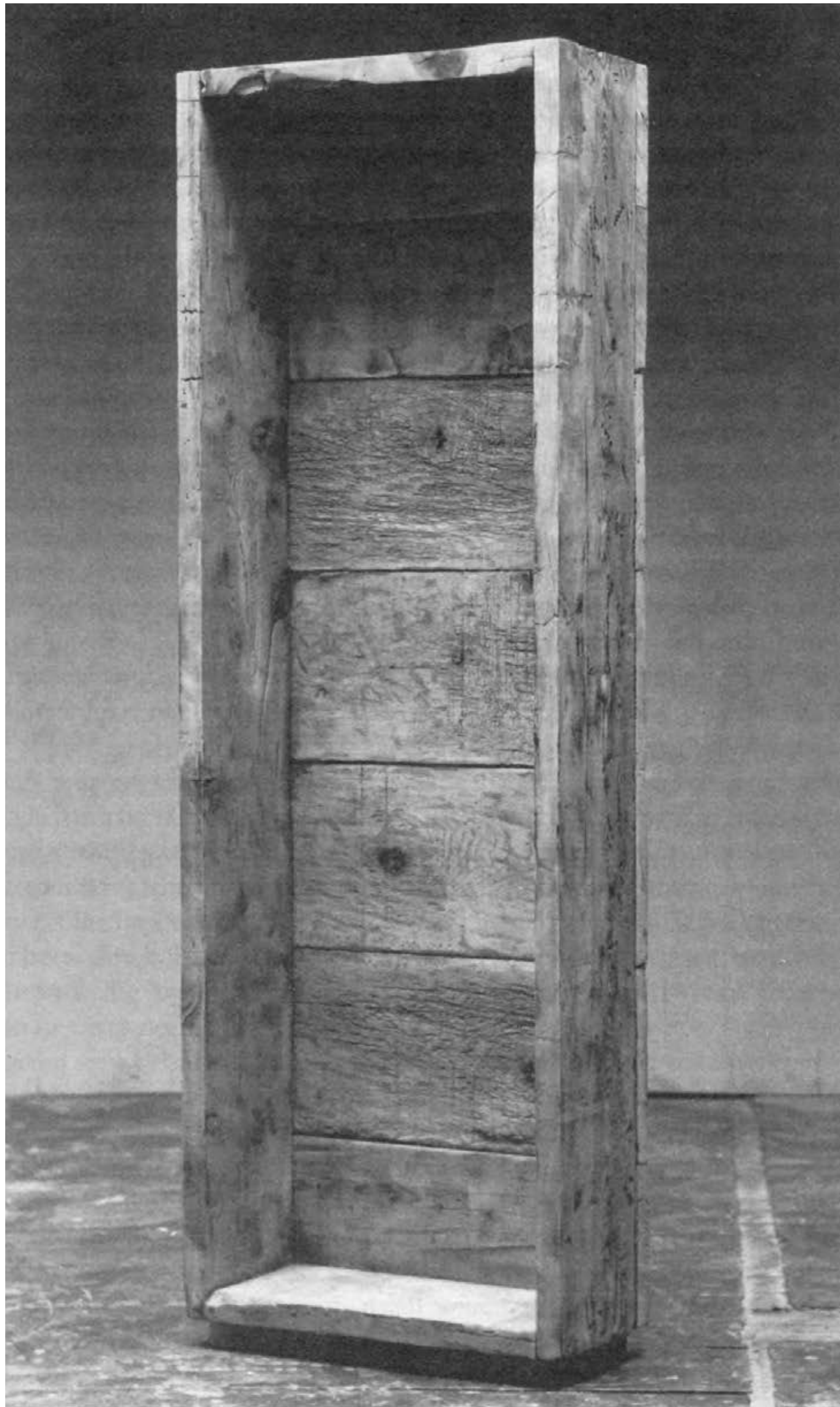
> and configuration alone, implants a meaning in that which did not have one, and thus—far from exhausting itself in the instant at which it occurs— inaugurates an order and founds an institution or a tradition.[28]

Merleau-Ponty inserts into the field of knowledge corporeal presence in a way that challenges or supplements analytic thought, which can be said to "interrupt the perceptual transition from one moment to another, and then seeks in the mind the guarantee of a unity which is already there when we perceive. Analytic thought also interrupts the unity of culture and then tries to reconstitute it from the outside."[29]

Such theories of the body, as not so much antithetical to thinking but as constituting it, can be placed alongside the work of Morris and many others at this time. The artist's *Untitled (Box for Standing)* (1961) performs the body in much the same way *Passageway* did, giving narrative through minimal construction to the play of body and object. Built out of wood according to the dimensions of his own body (essentially his height and width), *Box for Standing* is a wooden frame meant to house the artist. By referring to the dimensionality of the artist's body, the frame *enacts* the very space that surrounds that body. It points to it as performing subject articulating *and* articulated by space. Interwoven into a conversational nexus, the body, art, and space are thus never devoid of the other: the empty frame anticipates Morris's body and, by extension, his body implies the space of the frame—it fulfills the anticipation that the form announces.

Box for Standing seems to propose that the body is always already housed within a given "frame," whether the frame of perception, the frame of the material world, or the frame of art history, and that any subsequent viewing or understanding must, in turn, witness or contend with the frame as a contextual presence. In this case, Morris as the artist figures as the determining materiality and producer of the work itself—not so much as autobiographical narrative but as corporeal presence, as weight and volume. Wedding formalist sculpture with notions of presence encapsulates the language of Minimalism of which Morris is integral, and which these early works begin to outline.

As Jack Burnham proposes: "Morris's sculpture is essentially criticism about sculpture."[30] Such self-reflective concerns of the body in relation to objects, the understanding of forms as sculptural vocabulary, finds articulation in the full developments of Minimalism that Young and Morris initiate, in music and sculpture. As Edward Strickland describes: "Minimalism is used to denote a movement, primarily in postwar America toward art … that makes its statement with limited, if not the fewest possible, resources, an art that eschews abundance of compositional detail, opulence of texture, and complexity of structure. Minimalist art is prone to stasis (as expressed in musical drones and silence …) and resistant to development.… It tends toward non-allusiveness and decontextualization from tradition, impersonality in tone, and flattening of perspective though emphasis on surface.…"[31] Carter Ratcliffe furthers such definitions in his book *Out of the Box* when he states: "The Minimalist object is clear, static, and blank."[32]



Robert Morris, *Untitled (Box for Standing)*, 1961. Photo courtesy of the artist.

Static, blank, only surfaces, eschewing abundance, of drones and silences.... While such descriptions point toward a material presence stripped bare of excess, they in no way register the abundance of perceptual stimuli such stasis and surfaces may deliver, as well as the theoretical register of such formalism. Where Ratcliffe, throughout his book, underscores the "tyranny" of the Minimalist cube as ridding art of any vestige of bodily presence or imaginative zeal as forces of radicality, he seems to do so at the risk of minimalizing Minimalism. For Morris, dealing a death blow to "process" for "idea only" opens sculpture up to that of architectural space and the relational proximity of the viewer. That Morris's work, and early Minimalism in general, *does* silence the "extravagant confusion" of Cage's project as an amplification of noise and sociality, it underscores the increased concern in the early 1960s to look more closely at the details of noise itself—that is to say, Cage's work in letting a lot of stuff in leads future artists to the project of sifting through, in minute extraction, the conditions by which noise itself is heard, understood, coded, and decoded. In this regard, phenomenology can be understood as playing a critical role, for in moving away from the strictures of analytic thought to a concern for concrete and corporeal reality, it raises the question: how does concrete reality present itself to me *as* concrete? What are the conditions by which reality becomes known?

Morris's Minimalist sculptures (prefigured in *Column*), such as *Untitled (Slab)* (1962*), Untitled (Cloud)* (1962), and *Untitled (Corner Piece)* (1964), register the artist's expanded sculptural concerns in which a reduced and geometric vocabulary of rectangles, squares, slabs, and cylinders hover in space and aim for a *gestalt* of form. For example, *Slab* is a rectangular volume raised just off the floor. Constructed out of plywood, measuring twelve by ninety-six by ninety-six inches, and painted what would become known as "Morris gray," it negates sculptural vocabulary as representational or referential to things outside itself. Instead, it directs a viewer's attention strictly to the object as it relates to that which is around it. As Donald Judd observed on first viewing *Slab* at the Green Gallery in New York in 1963: "Morris' pieces are minimal visually, but they're powerful spatially."[33] In this regard, *Slab* proposes the art object as inherently relational: by creating sculptures whose formal properties are brought to a lowest common denominator, the object functions to deflect a viewer's understanding to that of spatial information and perception itself. That is to say, the object no longer contains meaning as a private communication but initiates meaning through activating space and perception parallel to his more overt performative work. Such concerns feature in Minimalist music as well. Young's music, in featuring increased stasis and repetition, comes to "stand" in space as a vibratory form in relation to a listener. And further, the work of Terry Riley, Steve Reich, Tony Conrad, John Cale, and Philip Glass, in cultivating the use of pure frequencies, drones, repetition, and overtones, push music and notions of tonality toward a static field of micro-events, sonic details, and perceptual intensities that take on physical weight and mass, for "unlike traditional dialectical music, [Minimalist] music does not represent a physical event but is the actual *embodiment* of this event"[34] (my emphasis).

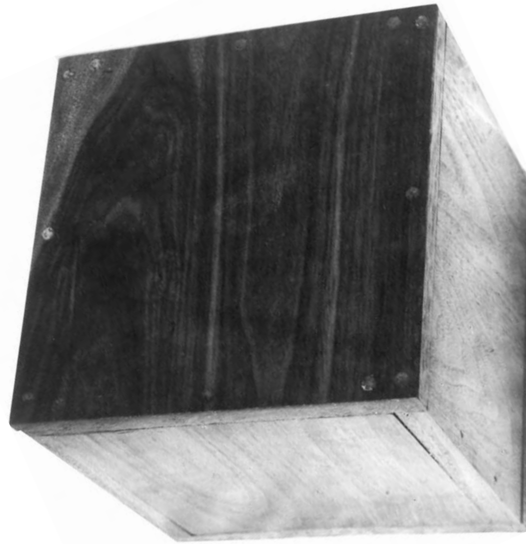
As Morris states: "But what is clear in some recent work is that materials are not so much being brought into alignment with static a priori forms as that the material is being probed for openings that allow the artist a behavioristic access."[35] Such works as *Slab* and *Corner Piece* position not so much the artist's body, as in *Box for Standing*, but the body of the viewer in such a way as to aim for truth, yet truth founded upon individual perspective, in the building of perception. As Merleau-Ponty suggests: "The intrinsic order of meaning is not eternal."[36] Rather, phenomenology, while a philosophy of essences, aims to "put essence back into existence ..." through an emphasis on the "facticity" of being.[37] In this way, questions of presence engage sculpture as choreography for stimulating physical movement. Through the position of the viewer's body in various places within a gallery space, the sculpture takes on dimension: as a material presence with weight, mass, and volume, set against the given space of the gallery that, in turn, informs the perceptual experience. That is to say, the sculpture functions not so much as an object to behold but as a material matrix aimed at conversing with its surroundings—as a "behavioral" unfolding akin to Young's Dream House. Minimalist art and music moves toward relational interests in which the presence of a viewer or listener, an object or sound, and the spatial situation form an extended conversation.

Sound as Text

Concerns for presence and the production of meaning are given a curious iteration in another of Morris's boxes, that of *Box with the sound of its own making*, from 1961.[38] The work consists of a wooden box (measuring a cubic nine and three-quarters inches) containing an audio speaker that amplifies a recording of the very process of building the box. Part-Minimalist sculpture, part-performative action, and part-conceptual game, *Box ...* operates according to what Morris describes as "a death of process ... and a kind of duration of idea *only*."[39] Collapsing process onto idea, *Box ...* resonates as a self-referential object: what is heard is process and yet what is seen is the result of such process.

The perception of sounds, as indexes of real events, shifts dramatically according to their locations in space. The auditory space, theorized by McLuhan and Carpenter and activated in the works of Young, takes on a different character in Morris's *Box ...*, for how can sound "define its own dimensions" in its boundless and unfixed occurrence within the confines of nine and three-quarters cubic inches? How does perception, in the immersive Dream House, operate through Morris's *Box ...*?

Box ... can be said to displace the real with the recorded, and in doing so, stage a conversation between immediacy, as presence, and reproduction, as mediation. In this way, phenomenological presence is teased out as a game of process and perception: as an object *Box ...* is both here and there, present and past, audible and fixed, for its presence is made dependent upon the recording of its past, thereby



Robert Morris, *Box with the sound of its own making*, 1961. Photo courtesy of the artist.

making explicit the presence of the box as material form through the replaying of its very construction. Such play seems to echo Merleau-Ponty's very own description of a cube in the opening pages of *Phenomenology of Perception*, in which he elucidates the inherent tension between the ideal, conceptual form and the actual, experienced variable.

Such concerns find further articulation in *Card File* (1963), consisting of a wall-mounted, vertical flat card file in which each card refers to a stage in the making of the work, however abstract: materials, mistakes, names, numbers make available all the details of the production of the work in alphabetical and circuitous order. Containing forty-four headings, *Card File* consists of hundreds of cross-references. The first entry reads: "Accident 7/12/62, 1:03pm. Three minutes late from lunch due to trip. (see Trip)." Under Trip we find: "7/12/62. 1:30-2:03pm. To Daniels Stationary … to look at file boxes." Another entry, "Dissatisfactions," reads: "The artist expressed his disappointment that everything relevant will not be recorded."[40] This reaches such a degree of self-referentiality that Morris, in a letter from January 1963 asks Cage himself to take detailed notes of his own observations of the work with the intention of including these in the card file.[41]

While implying the presence of the artist at work, *Card File* also reveals art as a series of mundane decisions and actions, acts above all housed within language, as opposed to creative acts infused with inspiration. For the library cards form an archive in which art as process and art object as carrier of meaning turn back on each other—that is to say, the art object consists of language

as a material yet that also performs to refer us to its production process, of meanings and their erasure, decisions and their banal mishaps, of additions and subtractions.

To follow the twists and turns through Morris's *Box* … essentially leads through a semiotic minefield in which one reading is detonated by another, one view blurred against the perspective of another. The reproduction of sound splinters the purely phenomenological while at the same time recuperating it, for "a reproduction authenticated by the object itself is one of physical precision. It refers to the bodily real, which of necessity escapes all symbolic grids."[42] In this regard, Morris's *Box* … is really two boxes: the one presented in front of me as a finished and stable material fabrication, and the other as the continual replaying of its building, as recording buried inside the other. Therefore, perception oscillates between the two, left to wander through the divide created by presence and its reproducibility, between the "bodily real" and "reproduction authenticated by the object." Yet there is a third box that remains out of frame, and out of the remaining documentation, that of the tape machine, which in 1961 was exceptionally too large to fit into the other box, the one enclosed on itself. Using a Wollensack quarter-inch reel-to-reel tape recorder to record the three-and-one-half-hour action and to playback, this tape machine is also in the form of a box, as a compartment of gears, heads, reels, and knobs that spin around to playback in electromagnetic fidelity the "original" moment of construction. That Morris seeks to eliminate this third box seems to add to the dislocation of presence the work enacts. To remove the tape machine from view (as the artist states, the tape player was either presented hidden within a pedestal or behind a wall[43]) is to erase its presence from the work and the all too real hardware of sound reproduction. While Morris relies on this, in the form of sound, he also buries it inside the material box, rendering it absent, as pure information only, as process and idea. For Morris and his *Box* …, sound functions as text rather than object, as purely indexical rather than bulky materiality, an element inside the discursive sleight-of-hand the work seeks to perform.

Listening as Reading

What interests me about Morris's *Box with the sound of its own making* is not only that he positions sound as physical material appealing to the senses, but how it shows that such perception is also potentially "textual," that is, something to be read. Whereas the Fluxus reading of event scores aims to take imaginary flights into suggestive poetics, Morris stages an intellectual riddle. Within the conceptual framework of his work, sound is woven into an object to cause perception to confront the difficulties of finding truth: the Fluxus game, in aiming for the immediate and sensual leaps of imagination rely upon a poetics that situates language as part of the game of art. Morris furthers such work by adding his own brand of intellectualism by which "concept art" becomes "conceptual art."

Box … appeals to an active listening that is analytical: what I hear does not so much complete my experience, as fulfilled perceptual plenitude, as in Young's work, but leaves it hanging by staging a representational question: which is the "real" box? Its physical, wooden dimensions here before me, or its sounds, which emanate from within, as an index of its past? Is the art object, like *Card File*, found in the process behind the object, or in its final form? From here we might ask: how does perception locate itself across the epistemological terrain of representation and experience, as textual *and* sensual? Following Merleau-Ponty, how do the experiential real and the conceptual ideal deal with each other?

It has been my argument that Cage sets the stage for such questioning by developing work based on process, contextual awareness, and conceptual strategy. Though extremely different from Morris and most of the Fluxus generation, it's through their work that Cage's productions can be more thoroughly glimpsed in this way. Thus, the very question of representation expressed by Cage can be identified as the pervasive and overarching philosophical and problematic of neo-avant-garde art.[44]

Young's Dream House as sound/space operates through an insistence on the activation of perception as an event. Such activation is understood as arriving through an intensification of volume, duration, harmonics, and spatiality to deliver sound as a prolonged immersion. The oscillating sonics of the Dream House, as a space of total physical immersion, stand in contrast to Morris's discursive and mediated sound—the box that plays back sound, in the confines of nine and three-quarters inches, does not aim for a plenitude of listening. In contrast, it displaces such presence by introducing a semiotic jag, for the recording comes from another time and place, yet only in so far as it refers to the box itself. In this sense, the sound points to another reality, for we can understand the box was built at another moment, made explicit through the presence of the recording. This other moment of the past is buried within the box itself—literally, the sound plays from inside, suggesting, in turn, that its very presence relies upon that which has already happened, as a kind of internal structure or historical event. Thus, we hear the box's material construction as both an index of labor as well as a phenomenological problematic: the box is *more* than what is apparent to the eye. In this regard, we can further understand the function of the frame in the artist's *Box for Standing* as posing a phenomenological articulation in which presence—here, Morris's body—is underscored as complex. For the frame stands as that which surrounds the body, and which the body is reliant upon to, in a sense, be "seen" as a body. The frame and the recording are not simply material presences but articulations that come from some other side, place, or time that both complete and displace the moment of pure presence.

Such a back-and-forth relay though opens out, or narrows down, onto what Morris describes as "duration of idea *only*." In "idea only" Morris attempts to evacuate an object from the artist's personality, to arrive at "Blank Form," as a way to sidestep expression as originating from the artist's hand. Yet in contrast to Fluxus and its belief in stepping past the object as mediating surface so as to arrive directly

in front of a viewer as an immediate presence of real experience, Morris questions such belief through the making of objects and situations that unravel the conditions of presence. That is to say, the experiential is confounded through a discursive twist, which underscores the "mediation" of perception even in its very immediacy.

Notes

1. Henry Flynt, quoted in Louwrien Wijers, "Fluxus Yesterday and Today," in *Art & Design: Fluxus* (1993), p. 9.

2. Nam June Paik, ibid.

3. Henry Flynt, ibid.

4. Terry Riley, "La Monte and Marian, 1967," in *Sound and Light: La Monte Young and Marian Zazeel*a, eds. William Duckworth and Richard Fleming (Lewisburg, PA: Bucknell University Press, 1996), p. 21.

5. See Edward Strickland, *Minimalism: Origins* (Bloomington, IN, and Indianapolis, IN: Indiana University Press, 1993).

6. Such works as Robert Morris's *Passageway* and Simone Forti's *Slant Board* were presented as part of the series, as well as works by Flynt and Richard Maxfield.

7. La Monte Young, quoted in *Happenings and Other Acts*, ed. Mariellen R. Sanford (London and New York: Routledge, 1995), p. 79.

8. Henry Flynt, "La Monte Young in New York, 1960–1962," in *Sound and Light*, p. 81.

9. Tony Conrad, "LYssophobia: On *Four Violins*," in *Audio Culture: Readings in Modern Music*, eds. Christoph Cox and Daniel Warner (New York: Continuum, 2005), p. 315.

10. Ibid., p. 318.

11. See Michael Chanan, *Musica Practica* (London: Verso, 1994), p. 63.

12. John Molino quoted in Aden Evens, *Sound Ideas: Music, Machines, and Experience* (Minneapolis, MN: University of Minnesota Press, 2005), p. 47.

13. Philip Glass, quoted in Wim Mertens, *American Minimal Music*, trans. J. Hautekiet (London: Kahn & Averill, 1999), p. 88.

14. See Trevor Wishart, *On Sonic Art* (Amsterdam: Harwood Academic Publishers, 1998).

15. John Schaefer, "Who Is La Monte Young?" in *Sound and Light*, p. 32.

16. Ibid., p. 34.

17. La Monte Young, "The Romantic Symmetry," in *Sound and Light*, pp. 214–215.

18. Ibid., p. 215.

19. Edmund Carpenter and Marshall McLuhan, "Acoustic Space," in *Explorations in Communications*, eds. Marshall McLuhan and Edmund Carpenter (Boston, MA: Beacon Press, 1960), p. 67.

20. Ibid.

21. Such conflict did not go without response, as can be witnessed in Yvonne Rainer's graffiti on the walls of Morris's work: "Fuck you Bob Morris." (Though who's to say if this refers to the work itself, or some other conflict....) See Kimberly Paice, *Robert Morris: The Mind/Body Problem* (New York: Guggenheim Museum Publications, 1994), p. 94.

22. These concerns can also be seen in Forti's *See Saw* from the same year. Here, the ramp is replaced with a wooden beam balanced precariously on a central pivot. Choreographed

for two dancers, movements occur as a balancing act, each dancer struggling to remain atop the board while gently edging toward falling.

23. Originally, Morris had planned to be inside the column and to topple it over by his own bodily force, yet replaced this plan with the use of string after suffering a concussion during rehearsal.

24. Kimberly Paice, in *Robert Morris: The Mind/Body Problem*, p. 94.

25. Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London and New York: Routledge, 2002), p. xix.

26. Maurice Merleau-Ponty, *Phenomenology of Perception*, p. vii.

27. Maurice Merleau-Ponty, "Indirect Language and the Voices of Silence," in *Signs*, trans. Richard G. McCleary (Evanston, IL: Northwestern University Press, 1964), p. 67.

28. Ibid., p. 67.

29. Ibid., p. 69.

30. Jack Burnham, "Robert Morris: Retrospective in Detroit," in *Artforum*, (1970), p. 71.

31. Edward Strickland, *Minimalism: Origins*, p. 7.

32. Carter Ratcliffe, *Out of the Box* (New York: Allworth Press, 2000), p. 136.

33. As quoted in *Robert Morris: The Mind/Body Problem*, p. 106.

34. Wim Mertens, *American Minimal Music*, p. 90.

35. Ibid., p. 91.

36. Maurice Merleau-Ponty, "Indirect Language and the Voices of Silence," in *Signs*, p. 69.

37. Maurice Merleau-Ponty, *Phenomenology of Perception*, p. vii.

38. Morris first publicly showed *Box* … at a concert held on March 31, 1961, at the Harvard-Radcliffe Club in Boston. The concert presented the works of La Monte Young and Richard Maxfield. Morris reportedly went along unexpectedly with the intention of performing his *Water Sculpture*, but the organizer refused to allow it. See Henry Flynt, "La Monte Young in New York, 1960–1962," in *Sound and Light*, pp. 60–61.

39. Robert Morris, "Letters to John Cage," in *October* #81 (1997), p. 71.

40. From *Robert Morris: The Mind/Body Problem*, pp. 126–129.

41. For an informative essay on Morris's correspondence with Cage, see Branden W. Joseph's "Robert Morris and John Cage: Reconstructing a Dialogue," in *October* #81 (1997).

42. Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffery Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University Press, 1999), p. 12.

43. In conversation with the author, 2005.

44. This is not to overlook that representation on some level has always been a question within art practice, yet what may distinguish Modernity is that it is marked by a more active and thorough questioning of representation's ability to convey truth.

Chapter 6

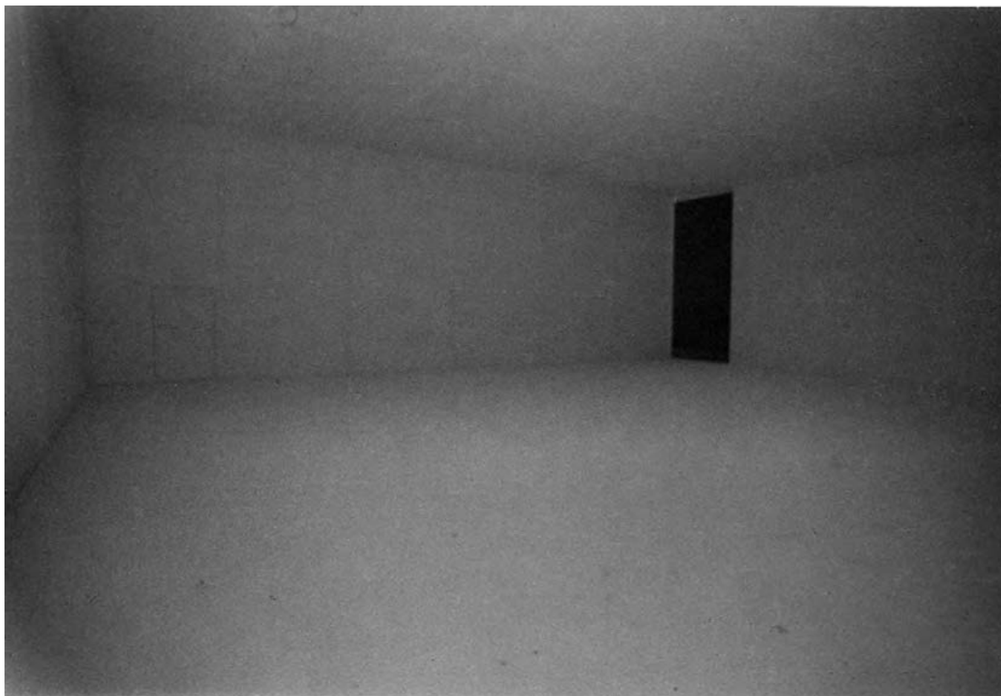
Conceptualizations: Michael Asher and the Subject of Space

The growing concern of bodily and spatial experience instigated through Happenings, Fluxus, and Minimalism gained momentum throughout the decade of the 1960s as artists progressively turned toward ephemeral materials, process-oriented situations, and spatial alterations in the making of work. Morris's considerations of sculptural experience, and his ongoing theoretical writings, formed the basis for a heightened intellectual ambition in probing what art could be and in what way it could address a viewer. That the making of objects expanded beyond the traditional studio practice of an artist can be seen in the development of Installation art in the latter part of the decade. The exhibition "Spaces," which opened at the end of 1969 at the Museum of Modern Art, additionally reflected the growing forms of practice in which the artist's studio collapsed onto the space of exhibition: "In 'Spaces,' the artists treated a space large enough for the viewer to enter as a single work, rather than as a gallery to be filled with discrete objects. Emphasis was placed on the experience the viewer would have. The works included in 'Spaces' were installed directly in the galleries, tailored to the configurations of the spaces they occupied, and were dismantled following the exhibition."[1] Whereas Morris's sculptural works from the early 1960s activated a spatial relation by setting up sculpture as a perceptual object shifting according to a viewer's perspective, "Spaces" proposed that a viewer "now enters the interior space of the work of art—an area formerly experienced only visually from without, approached but not encroached upon … presented with a set of conditions rather than a finite object."[2]

Curated by Jennifer Licht, "Spaces" included works by Michael Asher, Larry Bell, Dan Flavin, Robert Morris, artist/engineer group Pulsa, and Franz Erhard Walther. Each of the artists responded to the exhibition with various approaches, through the use of process, ephemera, or audience participation. Michael Asher's

installation worked through these aspects by incorporating a relation to auditory experience. The installation consisted of an existing space to which the artist added two further walls, leaving two entry and exit points onto the space. In addition, Asher added a series of acoustic modifications to the space, essentially attempting to dampen sound reflection, as well as interference, from outside spaces. Through such modifications, the installation functioned to absorb sound and reduce acoustical reverberation. In short, the room was silenced. Initially Asher had intended to install a tone generator in the space, with the idea of amplifying specific frequencies into the room; yet after consideration, he decided to pursue an alternative direction by accentuating the space's absorbent capabilities. Such silencing, for Asher, was utilized as a means to "control and articulate sensory space,"[3] so as to create "continuity with no single point of perceptual objectification," and in contrast to "phenomenologically determined works that attempted to fabricate a highly controlled area of visual perception."[4] Emptying the room of visual differentiation, from sightlines to acoustic zones, from visual distance to aural contraction, Asher altered a viewer's expectations, turning the experience of art viewing into an acoustical absence.

The work reflected the artist's overall interest at this time to question the given attributes by which art comes to function, which for Asher were based on issues related to visuality and objectness and were further reflected in a number of



Michael Asher, installation for "Spaces," 1969/1970. View of the installation and the northeast entry/exit. Photograph by Claude Picasso. Courtesy of the artist.

works. As with the previous installation, his piece at the La Jolla Museum of Art at the end of 1969 consisted of spatially altering a room so as to heighten or deliver auditory information. To do so, a series of walls were constructed and inserted into the gallery space, creating entry and exit points and allowing sound equipment to be hidden from view. This equipment consisted of an audio oscillator, an amplifier, and a loudspeaker, which amplified a frequency of 85Hz at a level just above audibility. In addition, Asher covered the floor in white carpet to dampen the vertical movement of sound, paralleling the existing acoustic tiling already in place on the ceiling, and he masked the existing lighting through reflective shielding, to diffuse any direct lighting and corresponding shadow. In contrast to the work for "Spaces," here Asher aimed to create a highly reflective acoustic space. As the artist explains: "The vertical surfaces responded to the sound frequency, which caused them to resonate as if they were tuned, while the horizontal surfaces, due to their sound-dampening effect, reduced the frequency. The cancellation of the sound waves occurred when these frequencies coincided … at a point exactly in the center of the gallery. …"[5]

Questioning the operations of art production as predicated on the fabrication and presentation of objects, Asher attempted to navigate between the prevailing aesthetics of Minimalism and the then emerging field of Conceptual art, seeking to both question the former while moving away from some of the philosophical riddles found in the latter. In doing so, Asher continually sought to incorporate the space itself into the making of work, leading a visitor to question the presence of given conditions. That Asher does so through a continual application and incorporation of sound, whether in methods of amplification and reverberation or reduction and absorption, may reveal aspects of the artist's practice and the general artistic atmosphere at this time, as well as articulating a potential of the auditory to figure alternative views on perception and materiality. The ability to fashion concrete presence through audible structures allows Asher to raise questions as to what constitutes an object and, in doing so, to problematize the vocabulary of sculpture and object-making at this time. Thus, sound creates opportunities for rethinking materiality in general by introducing the perceptual question of whether acoustical additions and subtractions may in the end come to constitute, quite literally, an artistic object or not. Sound seems to supply Asher with a critical vantage point in his pursuit to adopt the spatial characteristics of the gallery for art making, to turn them on themselves: the subtle but invasive refashioning of gallery spaces indicative of his installation practice goes hand in hand with the introduction or erasure of acoustical features. Thus, we might consider them as partners in Asher's probing of the conditions of art in general and the very spaces in which objects come to take on power.

His earlier piece for the Whitney Museum exhibition "Anti-Illusion: Procedures/ Materials"[6] six months prior to "Spaces," in the summer of 1969, further reveals the artist's ambitions. In contrast to the other projects, for "Anti-Illusion" Asher presented a "plane of air" positioned between two of the gallery

spaces within the Museum. Produced by blowers forcing air through a plenum chamber, the work was made manifest through activating a molecular condition: "The piece is a cubic volume of space, circumscribed by an activated air mass within the confines of that space. The space is acknowledged by the pressure felt when moving into or out of its confines. The disembodied literalism of the piece neatly alludes to a slab form without carpentry."[7] As in his other projects, Asher's plane of air functioned as a spatial situation defined not by visual reference but by the pressure of air: whether with audible sound or not, both installations create form through a molecular alteration, bypassing visual materiality. Whereas Morris's sculptural works question the perception of forms through a display of their inherent positionality, Asher's plane of air alters the perception of form by changing its inherent materiality—can it be said that form may exist strictly through the molecular characteristic of air? "Asher intervenes in given situations by subtly altering or shifting aspects of their structures. As a result, he draws attention to previously unapparent or unarticulated aspects of them."[8] By shifting perception toward the seeming immaterial and away from visual perspective and the apprehension of imagery, Asher also shifts the understanding of what may constitute an art object or experience—not only is space brought into play as an embodiment of an art object, as material relation, but the question of what constitutes space itself is brought under scrutiny. In this way, we can see (or feel) Asher's work from this time as questioning the new-found realm of Installation art as predicated on the appropriation and use of space: is space as readily available as it may seem? That is to say, is space neutral? And further, what defines space? By stimulating understanding of space from one of graphic dimensions, as governed by the architectural drawing that hovers over and above space, as an abstracted item one can point to, or even with Morris, as an area separating the viewer from the object, Asher's volumetric structures redefine spatiality through the tactility of the aural: felt sound and constructions with air pressure.

Following these installations, Asher presented an installation work in 1970 at Pomona College in Southern California. Installed just months after the "Spaces" exhibition, the work was produced through architecturally transforming the gallery space by inserting a kind of hourglass shape: the front room was sectioned off from the second by a narrowed passageway, funneling visitors from the front and toward the back. In addition, the door of the gallery was completely removed for the duration of the exhibition, thereby allowing outside noise and debris to float freely indoors. As Lucy Lippard recalls:

> One large irregular-shaped area appears to be two adjoining rooms; the rooms, one much larger than the other, are in the form of right triangles; the triangular rooms converge and flow into one another at their narrowest point, beginning a short passageway connecting the two rooms. One wall of each room has a corresponding parallel wall and corresponding angle in the other room, and both rooms are positioned so they are the reverse of each other.... Sound of traffic, of people

walking past the gallery—sounds of vibrations of the day that vary from minute to minute, hour to hour—all enter the project. Being exposed to outdoor conditions, the first small room transmits sounds through the pathway into the back room. They are amplified as they pass into the first room, but are further intensified as they enter the second larger room.[9]

Lippard's impressionistic description highlights Asher's interest and involvement with questions of space as a phenomenological composite beyond strictly visual terms. As Lippard points out, sound figures significantly in the work and, as with his previous works, features as a primary material through which space gets defined. Space and sound interlock in an expanded notion of the object. As in Young's musical work and the use of volume, reverberation, and frequencies to extend musicality into the realm of the overtone spectrum, Asher's early installation works draw upon the aural to reposition space—one might say, to amplify architecture's own perceptual spectrum, beyond its visual presence, as reverberation and molecular movement, as sensory modulation. Whereas previous works used noise generators and oscillators, or acoustical dampening, the Pomona project

Michael Asher, Installation at Pomona College, 1970. Detail of entry/exit and view into constructed triangular area. Photograph by Frank Thomas. Courtesy of the artist.

Michael Asher, Installation at Pomona College, 1970. Viewing out of gallery toward street from small triangular area. Photograph by Frank Thomas. Courtesy of the artist.

harnessed the found environment as sound-producing source. Here, the installation functioned as an expanded amplifier, an acoustical funnel for the modulation and attenuation of found sound, literally channeled through architectural space.

What can be understood in Asher's installations is not so much the sole use of space, as space itself *as* subject matter. This can be further witnessed in later works, such as his installation for Documenta 5 (1972), in which he divided a room in two by painting one half white and the other black, creating a dramatic architectural and perceptual analysis as to the conditions of experiencing space. Such work would progressively aim to take on the given conditions of gallery spaces and museums, as in his 1974 exhibition at Claire Copley Gallery in Los Angeles where the artist removed a partitioning wall between the exhibition space and the office area, thereby exposing or making indistinct the space of display and the space of business.

That space as subject matter gains significance is reflected throughout the 1960s, beginning with Happenings's "total art" and Morris's concern for subject-object relations, "for the space of the room itself is a structuring factor both in its cubic shape and in terms of the kinds of compression different sized and proportioned

rooms can effect upon the object-subject terms."[10] In outlining some of the terms of the "new sculpture" in his article from 1966 *Notes on Sculpture Part 2*, Morris retains notions of the object as separate from space and the viewer: art, while conversing with spatial considerations, is maintained as an object presented to the viewer's gaze. For Asher and other artists, space itself *is* the object. Asher's work suggests that space is never simply a given, already manifest in the thing presented to the perceiving viewer, as something neutral through which phenomenology and the experiential may pass unimpeded. Rather, space is determined by a set of conditions or systems, molecular and other, through which perception is directed and thus affected. Here, Asher expands Morris by following upon the phenomenological relation—that is to say, in beholding a work like *Slab*, perception oscillates from object to space to object again; Asher's installations begin here, underscoring perception as inherently spatial, as already moving within a larger set of material presences often hidden from view. Asher's early work, in turn, can be positioned between Morris and Young on the field of sound, for his works occupy that space between total immersion in a perceptual plenitude, as in Young, and the auditory discursivity of Morris, to introduce the acoustical as a problematic onto the spatial conditions of artistic presentation.

Spatial Twists

The question of space as subject matter ran throughout a number of artists' works at this time, notably Bruce Nauman, whose *Performance Corridor*, also exhibited in the "Anti-Illusion" exhibition at the Whitney, consisted of two parallel walls separated by a twenty-inch gap and running twenty feet long. Reminiscent of Morris's *Passageway*, the corridor made a viewer radically aware of the intrusiveness of space to shape experience. Such work is furthered in Nauman's "video corridors," in which a labyrinthine structure is fitted with live video cameras and monitors and shows a person's movements in one section of the corridor at precisely the moment they enter another, thereby creating a kind of shadow play in which one is always followed by one's own image. Or his corridor, *Acoustic Wall* (1968), defined by an acoustically treated panel cutting diagonally through a gallery space, creating a funnel-shaped space leading, as in Morris's *Passageway*, to a narrowed dead end. Walking deeper in, information is removed further and further, as light and sound are erased, deadened from the perceptual field: one is left only with space itself, as total absence of other information, only the sterile materiality of the acoustical wall mirrored by the white wall of the gallery. Such spatial alterations find harder edge in the work of Barry Le Va, particularly in his *Velocity-Impact Run*, where the artist set himself the task of running as fast as possible directly into a wall, repeatedly for one hour and forty-three minutes. Performed at the Ohio State University art gallery in 1969, the action was recorded onto audiotape and presented by playing back the recording in the gallery space through a sound system. Amplifying the trace of the body within such extreme physical moments,

the recording makes audible the act not solely as physical exhaustion but as a confrontation with space through a double act of absence and presence. Whereas the body is literally exhausted by architecture, as a corporeal negotiation through live action, it systematically unhinges the space through an unsettling sonority. The presence of the body as pure physicality passing into its own audible double seems to map out an inherent tension between the body and the built environment, suggesting that physical presence is always already housed within architecture. Being in architecture is to a degree being itself, as architecture comes to partially determine the possibilities of experience through an intrinsic performative relation. Such concerns seem to resonate to a degree within the general frame of Minimalism, where absence is also partly its presence, an existing frame, or corridor, haunted by the coming or going body. Le Va stages his own disappearing act by leaving behind a sonic trace: the audio recording *recalls* the artist's body in its breaking apart, its exhaustion, its extreme physicality, as a kind of sound object hurtling through acoustic space.

That space is made subject matter at this time within an artistic environment that sought to question perception, the field of objects, and what constitutes experience points toward a larger cultural moment in which things like music and architecture also turn. Self-reflective, political, minimalist, articulate, and self-proclaimed, architectural groups like SUPERSTUDIO and Archigram sought to address the total field of society through the design of universal, transportable, self-empowering objects and spaces. SUPERSTUDIO's *The Continuous Monument* echoes Morris's *Continuous Project Altered Daily*, opening onto processes of rethinking, recirculating, and reappropriating the field of objects. While Morris probed questions of sculpture through phenomenological forms, SUPERSTUDIO aimed for a zero-degree of design, a minimalist object wrapped around the world, so as to eliminate bourgeois ideals of consumable objects, spatial injustices articulated through high and low, center and margin. "This process of repeatedly and critically reexamining the normal drifts and currents moving across the domestic landscapes has led them to design, or perhaps more appropriately to un-design, their surroundings. . . ."[11] Whereas SUPERSTUDIO finds answers in the universal grid, Morris sees "random piling, loose stacking, hanging, giving passing form to the material" as operations of "disengaging" with "preconceived enduring forms and orders."[12] Asher's own conceptual interventions within architecture parallels such spatial concerns by engaging the material circulation of process in the form of sound and molecular movement, and through acts of architectural removal. Such seemingly negative gestures, or what Marshall McLuhan termed "anti-environments,"[13] while removing, erasing, or collapsing form and function seem to do so with the intent of inciting perception to buried structures, apparatuses of influence, and conventions that position knowledge. SUPERSTUDIO's "Endless City," from the late 1960s, in which "possessionless wanderers" were left to "explore a city without spectacle and without

architecture as well"[14] highlighted an architectural move toward not so much creating space as reflecting on the nature of it.

The artistic development of early installation art operates on the level of exploring and exposing the nature of space by appropriating given architectures and inserting a critical appraisal of found conditions. While definitively outside the realm of the architectural profession, such works, as in Asher's micro-alterations, create spaces that incite self-reflection while cultivating perceptual experience. For Le Va, such interventions continued to take form through acts of scattering physical matter throughout the gallery: breaking sheets of glass piled one on top of another in controlled action, or, for his work exhibited in "Anti-Illusion," covering the gallery floor in a fine layer of flour. While visitors did not necessarily step onto the flour, their movements in and around the space did slowly push the flour around the space, disrupting its original pattern through air currents. Thus, the work registers not only the single instant of a given appearance but all the absent physicality that has at some point traveled in and around the work.

Sound's Presence

Cage, Happenings, Fluxus, and Minimalism form a constellation in which artistic practice gains significance as a critical undertaking with a view toward an expanded perceptual terrain. Such a practice increasingly views itself as both formalistic and philosophical—that is, the production of objects features more as an event for *positioning* artist and audience, form and content, in a loop of self-reference so as to short-circuit the stability of meaning and representation and open out onto new forms of experience and information.

As we have seen, the move toward self-reference and language games operates to reflect upon the very conditions at play in the production of a work of art and its ultimate reception—Cage on the terrain of music, Happenings on the terrain of the spectacle, Fluxus on the terrain of language and the postcognitive, and Minimalism in terms of sound, space, and perception. Such a constellation poses art increasingly as a "contextual" practice. In contrast to Abstract Expressionism's obsession with the artist's physical actions that result in painterly marks, this new sense of practice figures such action in relation to audience, space, and experience in such a way as to make them implicit in the actual production of work itself. For whether *4'33"*, *Yard*, *The Well-Tuned Piano*, or *Box for Standing*, the very context (and their intrinsic elements) in which music is heard, spectacles are created, and actions are seen function as contributing factors.

What Conceptual art finalizes, beginning with Cage's philosophical questioning of the musical object and subsequent move toward everyday life, through Fluxus's minute deconstructions wielded in vaudevillian antics, and Minimalism's perceptual and geometric spatialities of sound and space, is the necessity on the part of art to reflect upon its own conventions. Conceptual art in a sense

politicizes Fluxus by shifting from an overtly performative mode to a covertly analytical one, from a desire for immediacy to a distrust of such immediacy. Such a move oscillates around questions of perception—as in Young's Dream House, or even Morris's spatial constructs—and questions of meaning. For if we follow Cage's attempt to outlive representation by freeing sound from its musical harness through to the "total art" of Happenings and Fluxus's further dissolving of the line between art and life—toward a postcognitive immediacy—we witness a general appraisal and suspicion of the function of art to produce "meaning" through representational forms only.

That sound features as a thread throughout the art scene of the 1960s is a testament to not only Cage's example or influence, though this in itself initiates a great deal, but to a pervasive concern for the present. Against this narrative of artistic work, we might recall the political and social reality at this time, so as to recognize the intensity with which focus was placed on what was not only apparent to the eye but also what lurked behind. Presence and the present were brought into question by demanding that it come forward, in all truthfulness, and in all its otherness: representation could thus only be trusted if it demonstrated some element of contingency, and art-making a degree of performative criticality.

Sound is brought into play as media leading straight into perception and heightened immediacy, relocating the art object to that of spatiality and relational engagement: sound comes from a body and reaches another to leave behind static objects, thereby problematizing *and* freeing up representation; it, in turn, lends to the immediacy of perception, as spatial intensity enfolding the body in on itself, as tactile event, while it also displaces perception, causing it to stutter through technological mediation, continually shifting perspective across the here and now, original and copy, bringing the faint ephemera of a past back into the present to question how immediacy itself is constructed or always slightly beyond one's grasp.

What such work adds to the legacy of experimental music and the emerging forms of auditory art is a *performative* potential by which sound is harnessed to engage spatial experience, spatial economy, and spatial politics: Young's Dream House absorbs bodily presence into an architectonics of dynamic frequency by constructing what David Toop refers to as an "aerial architecture";[15] the phenomenological probing of Morris questions the exchanges and negotiations between subjects and objects within an elaborated field of production, while Asher's installation works bring to the fore the very properties and conditions that make space available by inserting acoustical infiltrations. Thus, sound is not only an expanded musical vocabulary or medium for social anarchy, as in the case of Cage and early experimental music, but a radical form of materiality for creating, describing, and questioning the experiential event and its fabrication.

Notes

1. Julie H. Reiss, *From Margin to Center: The Spaces of Installation Art* (London and Cambridge, MA: The MIT Press, 1999), p. 88.

2. Jennifer Licht, introduction to the exhibition catalogue, *Spaces* (New York: Museum of Modern Art, 1969).

3. Ibid.

4. Michael Asher, *Writings 1973–1983 on Works 1969–1979* (Nova Scotia: The Press of the Nova Scotia College of Art and Design, 1983), p. 30.

5. Ibid., p. 18.

6. It is worth noting that besides the participating artists, the exhibition also featured concerts by Philip Glass and Steve Reich.

7. James Monte, from the introduction to the exhibition catalog *Anti-Illusion: Procedures/Materials* (New York: Whitney Museum of American Art, 1969).

8. Ann Goldstein and Anne Rorimer, *Reconsidering the Object of Art: 1965–1975* (Los Angeles: Museum of Contemporary Art, 1995), p. 58.

9. Lucy R. Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (Berkeley, CA: University of California Press, 1997), p. 198.

10. Robert Morris, *Continuous Project Altered Daily* (London and Cambridge, MA: The MIT Press, 1993), p. 16.

11. Peter Lang and William Menking, "Only Architecture Will Be Our Lives," in *SUPERSTUDIO: Life Without Objects* (Milano: Skira, 2003), p. 28.

12. Robert Morris, *Continuous Project Altered Daily*, p. 46.

13. Marshall McLuhan, "The Relation of Environment to Anti-Environment," in *Innovations: Essays on Art and Ideas*, ed. Bernard Bergonzi (London: Macmillan & Co., 1968), pp. 122–123.

14. Simon Sadler, *The Situationist City* (Cambridge, MA: MIT Press, 1998), p. 145.

15. David Toop, *Haunted Weather: Music, Silence and Memory* (London: Serpent's Tail, 2004), p. 256.

I Am Sitting in a Room: Vocal Intensities

It is only in their performance that the dynamic of drive charges bursts, pierces, deforms, reforms, and transforms the boundaries the subject and society set for themselves.[1]

—Julia Kristeva

To apprehend what a person has produced in space—a bit of writing, a picture—is not at all to be sure that he is alive. To hear his voice is to be sure.[2]

—Walter J. Ong

Introduction to Part 3

I Am Sitting in a Room: Vocal Intensities

The developments of Conceptual art throughout the 1960s and 1970s fostered an increasingly social, political, and contextual form of practice. Questions of space, place, information, self-determination, language, and the possibilities of artistic action blend in intensely provocative ways. In turn, such practice can be seen to reflect greater theoretical developments, exemplified in poststructuralism which sought to undo the metaphysical tracings of modernism in philosophical thinking.[3] The fusion of art and life pursued throughout the 1960s opens the terrain of the aesthetic to things beyond the realm of pure form. In such a move, art can be said to confront the tensions implicit in social reality by operating *relationally*. While figuring more poignantly in later artistic and theoretical developments exemplified in identity politics and performance theory, the relational can already be found in early performance work, such as Fluxus, Happenings, and Minimalist art. Identity politics and theory thus could be said to extend the artistic moment of the 1960s and early 1970s and its concern for the relational intensities of subjects, objects, and the social and political spectrum in which they are necessarily positioned and through which they come to perform.

As discussed, Minimalist sculpture and music investigates the spaces *between* objects and their viewers and listeners. The relational concern found in Robert Morris's phenomenology, La Monte Young's immersive Dream House, and Michael Asher's spatial alterations, in underscoring the art object and the art viewer as interwoven into a conversational exchange in which the object produces the looking/listening, and the looking/listening produces the object, comes to suggest the field of attention as a *performative* arena. Thus, art objects do not so much contain or embody meaning but rather are given meaning through a performative exchange. Indebted to the phenomenological theories of Maurice Merleau-Ponty,

whose *Phenomenology of Perception* questions the place of the body within a field of relations, Minimalism escapes the interior psychology of the artist's mind by looking toward the exteriority of presence and multiple bodies.[4] This is precisely what Michael Fried struggled to combat in his arguments on the "theatricality" of Minimalism.[5] Such theatricality signaled to Fried an inherent deficiency in the Minimalist ethos, in so far as art was made dependent upon things outside itself, beyond the frame and sculptural base. The relational makes the aesthetical domain susceptible to a "site-specifics," by which art's meaning is always contingent, temporal, and culturally specific. If the art object is to create meaning only through and in the moment of its viewing, in front of a body and in a space, then the object itself loses value as a stable signified. To follow Jacques Derrida's formulation of *différance*, the signified floats, through a process of deferral, across meaning, remaining unstable or inhabited by multiplicity.[6]

Against this backdrop of Minimalism and its relational pursuits, along with questions of embodiment and situatedness found in phenomenology, we can understand how Performance art surfaces as an increasingly significant mode of practice. Performance art enlivens the operations of representation by fusing art and life, and crisscrossing the lines of meaning through an intensification of the body as object. The live, performing body brings to the fore the specifics of identity by referring to the particulars of its signifying attributes, such as gender, race, and class, and with it pulls into the artistic frame the details of social and cultural contexts. As artistic medium, the body is poised to draw upon its own markings, histories, and biographies, referring to daily existence while speaking the larger domain of social life, for the body is always situated. In turn, it may activate the process of identification with a viewer or visitor—the performing body turns the audience into performers as well, for the live body implicates all bodies into the artistic moment: identity refers to identity, biography to biography. Performance art in general aims for the body as personalized and particular, as well as social and cultural, as both singular and multiple.

Performance art ups the ante on the Minimalist sculpture by adding the agitations of real bodies, the specifics of culture, and the coded trappings of space. Thus, Performance art can be said to "politicize" the early work of Happenings and Fluxus while adopting the relational understanding made intellectually explicit in the works of Morris and others, such as Donald Judd and Dan Flavin. Performance art corporealizes such relations by challenging the innocence of materiality, presence, and bodies Minimalism often assumes. Performance art maximizes the minimalist project.

Such performative dynamic can be heard throughout various artistic works that use the voice, the body, and the tensions of speech to define, map out, and transgress the limitations and the potentialities of individual presence. Examples include Bruce Nauman's *Lip Sync* video, from 1969, which depicts the artist, head upside down, saying the words "lip sync" repeatedly, so as to lose meaning in the flow of repetitive speech; Richard Serra's video project *Boomerang*, from 1974, in

which a woman tries to repeat her own words heard delayed from headphones; Henri Chopin's aphonic sound poetry that transcends the limitations of phonemes, consonants, and textual scripts to arrive at an electromagnetic speech; or in Marina Abramovic's performance *Freeing the Voice*, from 1975. Staged as a three-hour performance at a youth center in Belgrade, *Freeing the Voice* consisted of the artist lying on a platform with her head hanging off the edge, looking directly at the attending audience (and film camera). Over the course of the performance, Abramovic exhaled every breath as an extended vocalization, oscillating between a scream and a moan, a cry and a sigh, each breath forming a long, loud exhalation, underscoring the body as breathing vessel. In effect, expenditure becomes both speech, as signifying screams and cries, and liberation from it in the pure expiration of communication, in the filling up and emptying out of meaning. In this sense, Abramovic enacts the dynamic of speech as being, in one and the same instant, a process of losing and regaining oneself—that is, a form of catharsis. The voice must leave the individual for it to reveal that one is alive, accentuating what Steven Connor identifies as the essential paradox of the voice: "My voice defines me because it draws me into coincidence with myself, accomplishes me in a way which goes beyond mere belonging, association, or instrumental use. And yet my voice is also most essentially itself and my own in the ways in which it parts or passes from me. Nothing about me defines me so intimately as my voice, precisely because there is no other feature of my self whose nature it is thus to move from me to the world, and to move me into the world."[7]

Opening Up—The Cathartic Release as Blind Alley

Abramovic fulfills certain traits indicative of the 1960s' artistic scene by following on the dematerialization of the art object, the fusion of the representational (art) with the real (life), and by performing one's own body as a medium for tracing and erasing the lines of cultural limitations as to how sexuality, relations, and social standing situates the self. The cathartic, as I understand it in Abramovic's work, may be said to fall back upon a belief in the "here and now," creating a zone of escape for the play of different forms of corporeality and psychic relations. Abramovic's performances position the body so as to transgress its own limitations.

Such belief is counter to what I'm interested in following here. It is my intent to address moments of relational intensities, between subjects and objects, objects and spaces, that exert pressure upon the domain of visual representation, the stability of forms, and the Minimalist ethos of pure phenomenology, by falling short. In essence, by using subjective experience and the particulars of identity as situated and culturally specific, so as to point toward the failure of transgression, where artists give voice to psychic intensities that rather than transcend the strictures of identity, perform their inherent tensions; rather than find completion through cathartic release, fall back on the intrinsic difficulties of being. Here, the

voice makes explicit the performing body, as socially situated, based in culture, and teased by the promise of language.

Many performative works adopt sound as a medium because of the intensities and immediacy of auditory experience (as seen in early Fluxus work and Minimalist music), for sound figures as a vital articulation or lens onto the body and the tensions of its social performance, by making corporeality explicit: guttural, abrasive, intimate, explosive, vocal, and assertive, sound may amplify the inherent forces and drives of physical experience and what it means to be a body. As a way to follow the performative use of sound, I will look at specific works by Vito Acconci and Alvin Lucier that use the voice. Their work is of particular interest because of how the voice is placed in relation to the specificity of space: Lucier's *I am sitting in a room* and Acconci's *Seedbed* and *Claim* projects make explicit questions of not only the voice and what it means to speak, but of how speech is entangled in how one is positioned within the world. It is my view that their work shifts the terms by which Minimalism had made its mark (in both sculpture and music) by adding the specifics of spatial intensities, beyond objects and pure phenomenology, as well as overturning the glee of Happenings and the experiential simplicity of Fluxus by developing performance strategies based more on trauma, abjection, and the *problematics* of identity. The voice can be heard in both Acconci and Lucier as an attempt to figure such problematics by raising the volume on the relational, by performing without catharsis the hidden phantasms that come to mark the body: sound and space are wed in Lucier's physical experiments by *coporealizing* architecture; and artist and audience are made complicit in Acconci's productions of unsettled sexualized and traumatized relations. To further tease out their work, and questions of sound and its location, I will extend the historical sweep forward to consider the Canadian artist Christof Migone, whose sound and radio work of the last ten years makes explicit the excesses and limitations of orality. Migone's work will be used to further understanding of the "performing mouth," which utters an entirely different speech, one masked, broken apart, and made alien through radio-electronics.

Voicing Theory or Singing a Different Tune

The developments of Performance art, the burgeoning possibility of sound as an artistic medium, and poststructuralism's theorizing can be traced in the resounding voice and the complexities of what Julia Kristeva terms the "speaking subject."[8] For Kristeva, the voice is a production of the body and a trace of the subject's *processional* construction: in the voice, the subject appears and disappears by speaking through the very structures of language that make its appearance possible *and* difficult. Thus, the intensities of the subject find their ultimate presentation through and by the voice, for the speaking subject brings to the fore the strictures of language and how these push identity into the complexities of being. Speech thus *enacts* the subject as a continual negotiation between the symbolic, as that which

defines cultural meaning, and its usage, as revealed in the heterogeneous force of the voice. Here, we can recognize that what Kristeva furthers, through psychoanalytic-linguistic poststructuralist theorizing—multiplicity and heterogeneity unto itself—is subjectivity *as* a performance.

The voice as used in gallery installation (Acconci), music composition (Lucier), and audio-poetic performance (Migone) cuts across the domains of language, as semiotic and syntactical field, by introducing the excessive and deformed mutations of identity: Lucier's stutters, Acconci's fantasies, and, further, Migone's microphonic vocalizations. It is this voice that I want to follow, and, in doing so, to engage the relation of sound and language where each undoes the other, unraveling the purely "liberated" sound by adding the linguistic voice and undoing the linguistic signified by adding the sonic, corporeal, and vocal signifier. It is my intention to embrace the notion that sound problematizes representation by inserting semiotic excess, radiophonic fantasy, electromagnetic broadcast, as an addition and subtraction, as too much or too little, onto the symbolic; and at the same time, to follow linguistic meaning, where the voice drags into the auditory frame too much of a signifier by remaining bound to referent. I want to continue to follow sound on its course, from the point of its origin, as in Cage's silences/noises and musique concrète's sound objects, to the relational and proximate, as in La Monte Young's Dream House, Morris's phenomenology, and Asher's spatial volumes; and here, to sound's vocalizations that attempt to locate the body in relation to a world always already inside.

From Music to Voice

To move from sound's phenomenal folds to a consideration of the voice is to pose a complex intersection—for the voice is already operating within and through the structures of language, thereby bringing with it the codified markings of the symbolic while relying upon the acoustical dynamic of sound as a force of breath, vibration, and immediacy. Therefore, the voice could be said to perform the intersection of sound and language in the event called *speech.*

To speak is a complicated act: the voice resounds as a sonorous flow, spit out from the oral cavity, rising up from down inside the body, and out into the spaces of other bodies, other voices, and other rooms. The voice sings, it laughs, it screams, sputters, whispers, and whistles; it follows the movements of air that whirl around the speaker, carrying the voice beyond itself, beyond the body and to another. The other is both proximate—the one that stands before the speaker, as interlocutor—and distant—the other that is always out of frame, on the wings, in the crowd, overhearing the speaker, catching wind of the voice that rises from a body over there, from across the room or the street.

The voice is inside and outside in one and the same instant; it is spoken and heard, in the head of the speaker, as vibratory sensation and expelled breath, and as signifying gesture, as communicable message. Thus, we recognize our voice only

as it leaves us, only at the moment of its articulation, as that initial paradox identified by Connor—when it rides on the wind to return to us, as if from another. The voice is in control *and* out of control; it reveals agency in the words spoken, which form commands, pleas, and invitations, and, in turn, it dissolves agency, leaving the speaker depleted, helpless, and unable to conjure words so as to enter conversation and the power plays of voicing, for "language assumes and alters its power to act upon the real through locutionary acts, which, repeated, become entrenched practices and, ultimately, institutions."[9] To act upon the real, language oscillates between personal usage and institutional force, between subjective speech and objective law, between the ordering of personal vocabularies and their location within situational geographies. Here, to speak is not so much to escape such institutions but to perform within their relational structures:

> Indeed, the source of personal and political agency comes not from within the individual, but in and through the complex cultural exchanges among bodies in which identity itself is ever-shifting, indeed, where identity itself is constructed, disintegrated, and recirculated only within the context of a dynamic field of cultural relations.[10]

To speak, then, is to discover both the external forces within which one is always positioned and the peripheries of subjective articulation that skirt across the law of language.

To conflate the complexities of the voice with the aesthetic arena of the arts is to pose a multi-layered consideration, one that must leave the speaking subject behind to hear the sonicity of speech, while returning to the subject, as embodiment of an orality that is always already more than itself. The voice thus completes and complicates the signification of sound by adding and subtracting presence, by overriding the symbolic domain of language with too much signification, too much body, and too much voice, and by relying upon language, by keeping intact, as referent, the means of signification. Thus, to pursue the voice as heard in art is to approach a field of danger, for as sonic media the voice aims for language as its target.

Notes

1. Julia Kristeva, *Revolution in Poetic Language*, trans. Margaret Waller (New York: Columbia University Press, 1984), p. 103.

2. Walter J. Ong, "A Dialectic of Aural and Objective Correlatives," in *The Barbarian Within, and Other Fugitive Essays* (New York: Macmillan, 1962), p. 28.

3. While the early days of poststructuralism developed out of an entirely distinct cultural and academic environment than the New York art scene, I refer to it here to underscore a more general intensification around questions of performativity at this time. As my own genealogy of sound art suggests, the question of performance certainly precedes

the late 1960s and the field known as "performance art," seen in the works of Cage, Group Ongaku, and others, such as the Fluxus group. It must also be underscored that questions of performance were made explicit throughout Modernism, from the Dadaists to the Lettrist group in Paris, and through such figures as Antonin Artaud, Maya Deren, Duchamp, and others. While maintaining my own tracing of performance, with an emphasis on sound, it is important to recognize that intersecting the New York performance scene with post-structuralism runs the risk of suggesting a cultural crossover that in effect did not exist. For poststructuralism at this time is resolutely "literary," concentrating on questions of textuality, the politics of reading and writing, and semiotics. To bring them together, though, does open up the larger cultural questions of performativity arising within Western culture and thought at this time.

4. Merleau-Ponty's work had been translated and read by Minimalist artists, such as Robert Morris and Donald Judd, throughout the early to late 1960s.

5. Fried's argument was against what he perceived to be a shift in aesthetics in which the art object is subject to external references and information. See Michael Fried, "Art and Objecthood," in *Artforum* no. 5 (Summer 1967), pp. 12–23.

6. In Catherine Belsey's *Poststructuralism: A Very Short Introduction*, "differance" is defined as "the deferral of the imagined concept or meaning by the signifier, which takes its place and in the process relegates it beyond access." See Catherine Belsey, *Poststructuralism: A Very Short Introduction* (Oxford: Oxford University Press, 2002), p. 113.

7. Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), p. 7.

8. Kristeva's project is an attack on the tradition of linguistics that, for her, "seem helplessly anachronistic when faced with the contemporary mutations of subject and society." (Julia Kristeva, quoted in Toril Moi, *Sexual/Textual Politics* [London and New York: Routledge, 2002] p. 151.) To better engage the problematics of "subject and society," she develops a more sympathetic theory in relation to "the speaking subject," which "moves linguistics away from its fascination with language as a monolithic, homogeneous structure and toward … language as a heterogeneous process" (Toril Moi, *Sexual/Textual Politics*, p. 151) by incorporating the works of Marx, Freud, and Nietzsche.

9. Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (London and New York: Routledge, 1999), p. 148.

10. Ibid., pp. 161–162.

Chapter 7

Performing Desire/Performing Fear: Vito Acconci and the Power Plays of Voice

Vito Acconci's performance *Claim*, from 1971, is a space of voices: "I'm alone here in the basement ... I want to stay alone here in the basement ... I don't want anybody to come down to the basement with me ... I'm alone here in the basement. . . ."[1] Staging a confrontation that borders on violence, control, self-destruction, and pathos, *Claim* must be heard as well as seen. Sitting at the bottom of a staircase at the offices of *Avalanche* magazine on Grand Street in New York City, Acconci was blindfolded, brandishing a crowbar and two lead-pipes. Visitors arrived from the street and entered the gallery to witness a video monitor showing Acconci downstairs, chanting to himself, punctuating his words with an occasional bashing of the staircase. In this way, one confronted an invitation *and* a threat—visitors were left to decide whether to enter or leave, to test Acconci's commitment or to leave him to his space, a pathetic figure in the dark.

As in his work *Seedbed*, from a year later, Acconci set up a complicated dialogue between himself—as artist, as body—and visitors—as viewers, as listeners, as performative others. In both works, we are left to hear words from below, housed under the gallery—in *Claim*, it is from the basement that Acconci speaks, whereas in *Seedbed* it is from under a wooden ramp built into the space where Acconci lies, masturbating and speaking to visitors through a microphone. What we are given in both instances is a displacement of presence—Acconci is somewhere else—and an amplification of it, for his voice, his body, is all too close. In the performances, we are above and Acconci is below—he is in the depths of desire and fear and we are above, left to behold, overhear, and witness. Yet such passive acts turn into active roles that perform a vital complement to Acconci. His performing comes to emphasize and complicate a visitor's position—is Acconci

playing the part of an art object, or the unconscious of those who witness? Is the work performing the complexity of voice as index of body and desire, and if so, what does overhearing such a voice do? And how do such actions situate themselves within a spatiality that contributes to the work?

Seedbed: Performing Desire

Acconci has stated that *Seedbed* was about reaching out toward the viewer to establish contact, intimacy, and connection by conducting a strange choreography whereby intimacy is made possible only through hiding one body under a ramp and positioning another on top.

> The physical situation of *Seedbed* allowed me to be with an audience, with a potential viewer, more than any situation I had come up with before—first, being constantly physically present, in the sense of being audible.... Second, on a more psychological level, in a way that had to do with intertwining regions. If their presence, their footsteps, had to cause my fantasies, I would have to be drawn to them in order to fantasize.[2]

Presented at Sonnabend Gallery in 1972, *Seedbed* consisted of a wooden ramp, measuring thirty feet long by twenty-two feet wide and raised two feet high and positioned against a far wall of the gallery, thereby creating an unseen space under the ramp. Acconci would hide under the ramp two days every week, for a period of eight hours, masturbating and speaking through a microphone and amplifier to visitors who he could hear walking above him on the ramp. The ramp, thus, functioned as both barrier and conductor for the exchange of a private correspondence. The very mechanism of such exchange depended upon separation—the

Vito Acconci, *Seedbed*, 1972, Sonnabend Gallery, NY. Photos courtesy of the artist.

ramp provided a shield through which to arrive at some other form of intimacy, produced through an altogether different set of behavioral terms—for *Seedbed* positions both artist and viewer in an unstable relation: are we to accept Acconci's masturbatory fantasies as invitations for intimate exchange, or witness them as private eccentricities of an individual? In other words, as recipient, does a visitor cross the threshold into participation? And if so, what kind of participation is this? *Seedbed* oscillates between fulfillment and lack, suggesting that one is integral to the other, for the artist enacts desire by making himself absent, sabotaging the intimacy he seeks to achieve.

Voice and the Intersubjective

Writing about *Seedbed*, it is no wonder that often the presence of the voice is overlooked, or underconsidered, for the voice is no longer here—documentation of *Seedbed* consists solely of photographs and statements by Acconci, and critical articles on the work seem to leave behind his voice.[3] It is this voice that I want to recuperate, to recapture, even if such a proposition occurs partially through fantasizing it back into existence—to hear Acconci again in my own head is to articulate, or enact, my own set of desires.

In *Seedbed*, libidinal force is not to be found solely in the act of masturbation, but in whispers and moans, in the propositional reach the work vocalizes:

> you're pushing your cunt down on my mouth … you're pressing your tits down on my cock … you're ramming your cock down into my ass …[4]

Here, the voice, in all its unabashed lasciviousness, is both an acoustical act animating the performance at work and an indication of a certain agency, or its collapse, inciting sympathy or intrigue or disgust. Fed through an electrical system of microphone and amplifier, the voice, through its disembodied presence, is brought toward the visitors and forced upon them: Acconci's body is *implied* in all its viscous corporeality through the fantasizing vocality. The voice is offstage, or under-stage, housed in a self-fashioned prison or dreamhouse, and yet made explicit through its erotic stirrings, for the transmitted, libidinal voice is *too much* voice; it is voice as amplified body, as live presence, as sticky seed. Technology provides the means to get past the voice by getting inside it, to overrun it, to overwrite it, to reposition it through a radical ventriloquism in which space speaks the body: Acconci makes the room vibrate with his sexualized productions, casting visitors as sympathetic bodies.

Early

Acconci's interest in language extends well before *Seedbed*. Previously known as a poet, Acconci's work throughout the 1960s consisted of experimental texts bordering on concrete poetry:

I have made my point.
I make it again
It
Now you get the point.[5]

As a writing student at the University of Iowa in the early 1960s, Acconci had worked on his poetry alongside discovering new forms of criticism that probed the differences between writing and orality. Acconci cites the work of Walter Ong as having instilled recognition of the voice. Ong's meditations on the voice, and the discrepancies between oral and print cultures, map out an impressive territory in which sound, speech, communication, and metaphysics converse. It, in turn, sets the stage for a thorough consideration of what he calls "the sound world," in which the voice holds a special position:

> To consider the work of literature in its primary oral and aural existence, we must enter more profoundly into this world of sound as such, the I-thou world where, through the mysterious interior resonance which sound best of all provides, persons commune with persons, reaching one another's interiors in a way in which one can never reach the interior of an "object."[6]

As exhalation, the voice carries with it the interior of the one who speaks; the interior is essentially externalized, to enter the interior of the listener, thus "pulling them into his [the speaker's] own interior and forcing them to share the state which exists there."[7] In this regard, Ong privileges orality over print, sound over visuality, by underscoring how the sound world involves us in each other's lives through immediacy and continual presence. Whereas "the development of writing and print creates the isolated thinker, the man with the book," thus "downgrad[ing] the network of personal loyalties which oral cultures favor as matrices for communication and as principles of social unity,"[8] Ong's work highlights the voice as inherently subjective and communal.

Following Ong, Acconci embraces orality as necessarily social: "Orality meant a community of talkers and listeners—orality took the 'thing' out of itself and into the body of the listener."[9] Yet Acconci's orality is not exempt from the problematic of its situatedness. What he insinuates through *Seedbed* is that Ong's "presence of the word" is never as simple as it may seem—that in moving from interior to interior, in the intimate mingling of communication, the presence of the self contaminates and is contaminated by an implicit violation that often delivers libidinal and desiring productions. For Acconci's orality is also a foot fetish, where "seed planted on the floor" is "a joint result of my [Acconci's] performance and theirs [visitors]" initiated by being "underfoot."[10] Here, putting the foot in the mouth literally takes a new twist, whereby a visitor's foot triggers Acconci's orality—his vocalized fantasies use a visitor's presence as their origin, masturbating to their rhythm, their shared choreography.

> Under the ramp, I'm lying down, I'm crawling under the floor over which viewers are walking, I hear their footsteps on top of me.... I'm building up sexual fantasies on their footsteps. I'm masturbating from morning to night....[11]

Acconci's orality seems to suggest that the voice is always housed within a structure that is not universal but architectonic, that one speaks from a situated and social position that is partly uncontrollable, and that the interior state that the voice exposes, amplifies, and presents to another is at times violating, disgusting, and unstable from within its own processional intensities. Such complication of orality, and by extension subjectivity, is staged in *Seedbed*, for Acconci's voice is a one-way release of sexualized excess, amplified and yet contingent on the presence of another, tainting the social coupling of oral-aural sharing with the insertion of masturbation and a foot fetishism in which being trampled underfoot is cause for pleasure. Conversation is thus blocked, housed inside a strange architecture in which the body violates itself in an attempt to reach for another. Acconci is totally private and at the same time totally public, usurping a visitor into participation: sexual fantasy inaugurates the visitor as catalyst, completing, without knowing, Acconci's libidinal project.

Strategic Interactions

Acconci's work as a poet and performance artist indicates a growing tendency in the 1960s and early 1970s to distrust the spoken as inherently truthful: the Civil Rights and Women's movements, the Vietnam War and Watergate, to name a few, all highlight the total rupture of not only institutional structures but the language that supports them. No longer could the word be taken at face value, for it was seen again and again to be full of lies. Such distrust finds its productive articulation in early postmodern thought, in so far as postmodernism seeks to find truth in the split subject and not in the transcendental ego, in the mediatized image and not in the sculptural gestalt, in the deferral of meaning and its play and not in the full presence of the word.

Acconci's voice, and his language of desire, can be positioned alongside such poststructuralist and deconstructive critiques of phenomenology and the trancendental signifier. The theoretical work of Roland Barthes, Jacques Derrida, Michel Foucault, and Julia Kristeva, while operating within a geographic and academic milieu distinctly separate from the work of Acconci and the New York art scene of the late 1960s, nonetheless provides an intriguing and productive intersection. The wave of poststructuralist and deconstructive thought, which infiltrated American Universities throughout the 1970s,[12] lends itself to understanding modes of Conceptual, Installation, and Performance art at this time primarily by articulating a general critique of Western metaphysics, which traditionally holds the individual subject as transcendent to the specifics of language, culture, and social values. That is to say, the individual "I" is positioned so as to remain in possession of truth

distinct from, and overriding, the particulars of experience and social interaction. In short, what poststructuralist and deconstructive thinking aims to do is oppose the tradition of such metaphysics by underscoring an inherent politics to truth, that of its ideological content.[13] On the field of orality, culture creates and perpetuates its own meanings, and by extension systems of value, through an individual's own enactment: speaking reproduces the meanings built into language, which are necessarily partial to certain normalized morals, relationships unfold according to notions of sexual difference, and even something like art repeats historical patterns as to questions of beauty, the sublime, and the inherent values of such traits.[14]

What I want to draw upon here is how poststructuralist and deconstructive thinking examines and makes accountable the individual as the site of social and psychological negotiation. Performance art and related genres undertake to make explicit such negotiations: to underscore, chart out, and potentially find escape routes from the strictures that both bind and make possible subjectivity.[15]

Speaking

For Kristeva, the speaking subject is never over and above the material world. Rather, the subject is only discovered or brought forward through speaking, a subject that is both afforded by enunciation as it is positioned by it. Language offers the possibility of presence by promising agency and the opportunity of fulfillment. Yet such a promise, as Kristeva articulates, places the subject "on trial," for the positing of the "I" is a process infused with its own upheaval:

> We shall see that when the speaking subject is no longer considered a phenomenological transcendental ego nor the Cartesian ego but rather a subject *in process/on trial* ... deep structure or at least transformational rules are disturbed and, with them, the possibility of semantic and/or grammatical categorical interpretation.[16] (my emphasis)

The relational concerns of phenomenology are essentially divested of the transcendental signifier, placed within an increasingly social and psychic field in which subjectivity is enacted and acted upon by forces that are often not on the surface. In this way, the act of writing and reading figure as progressively *performative* in the very making of meaning: here, the stability of meaning is only found in the accumulation of interpretation, which, in turn, is always subject to its own upheaval, its own jouissance, its own self-erasure. The intensification of the relational in art practice of the 1960s, and in the theoretical proposals of poststructuralism and deconstruction, underscores the importance of recognizing the social and ethical other, the audience and the reader, the artist's body and the writer's hand, as inherently generative of meaning and value, conscious or not.

Such social and psychic relations can be witnessed throughout Acconci's work at this time. *Following Piece* (1969), *Proximity Piece* (1970), *Security Zone* (1971),

and *Transference Zone* (1972), all strategically construct a relational intensity between Acconci and another, whether a stranger on the street or in the gallery space. For instance, in *Proximity Piece*, Acconci crowds a visitor at a museum exhibition, moving closer to that person while viewing work, until the person moves away. Or in *Following Piece*, Acconci follows a stranger on the street until that person enters a private space, thereby allowing his own movements to be partly determined by another, the one always a stranger to oneself. Through such acts, Acconci probes the relational degrees of proximity, intimacy, and power by moving in, stepping back, and setting himself in and against others.

Desiring Phenomenology

Acconci probes what Merleau-Ponty identifies as the "field" across which subjects meet:

> One field does not exclude another the way an act of absolute consciousness, a decision, for example, excludes another. Rather, a field tends of itself to multiply, because it is the opening through which, as a body, I am "exposed" to the world.... This means that there would not be others or other minds for me, if I did not have a body and if they had no body through which they slip into my field, multiplying it from within, and seeming to me prey to the same world, oriented to the same world as I.[17]

Whereas phenomenology features in Minimalist sculpture and music, as a pinnacle of relational concern—the looking/listening that produces the object—Acconci's phenomenological field destabilizes the relational by inserting an addition. It is my view that Acconci makes an addition to Minimalism by subtracting gestalt, or completion, with an intensified incompleteness of presence, revealing presence as riddled with absence, and essence as never minimalist. Thus, Ong's presence of the word, whereby the self is revealed as a whole, and Merleau-Ponty's multiplying field, is marked by alienation, where speech fails to find its recipient and the body remains housed within its own self-generating dissatisfaction.

Such dynamic figures in the conceptual strategies Acconci engages. As Robert Pincus-Witten suggests from a review in *Artforum* a month after Acconci's *Seedbed* exhibition: "... the ramp floor of the Acconci speaks for a source in Minimalist sculpture, Robert Morris's several untitled wedge like works from 1965-68 particularly."[18] Adopting such sculptural vocabulary, Acconci makes use of the relational aesthetic of Minimalism, which by 1972 was well established. Yet he adds, or surreptitiously inserts, an extra element into the context of object and viewer relations, that of the sexualized, unsettled, and at times mischievous body. One could say that Acconci supplements Morris's work, overwriting Minimalism with uncanny murmurs, literally filling sculpture with a libidinal rush of blood. Whereas Morris's sculptures took on the presence of physical form in relation to

a viewer, within a phenomenological *gestalt*, Acconci situates such phenomenology within an increasingly unstable and libidinous field. Such work thus heightens and problematizes the "theatricality" identified by Michael Fried as operative in Minimalism, captured in his concluding statement to "Art and Objecthood": "Presentness is grace."[19] As Christine Poggi suggests, such "presentness" exemplifies modernist art championed by Fried and Clement Greenberg, where in "the moment of viewing, desire and temporality, contingency and lack, would be forestalled."[20] In direct contrast, Acconci, under the ramp, is a subject *in process* through which libidinal presence unravels the strictly visual and phenomenological aesthetic by introducing an I *on trial*: masturbatory fantasy, sculptural relief, the flow of the voice, reveal Acconci's desiring self, alone and in need of another, where presentness is certainly not graceful:

> My voice comes up from under the floor: "you're pushing your cunt down on my mouth … you're pressing your tits down on my cock … you're ramming your cock down into my ass…."
>
> (now and then you hear me come: I've done this for you, I've done this with you, I've done this to you …)[21]

Speech here gets caught in the rhythms of the unconscious, the interior flows, through imaginary utterances that move through and against language, moving the self (and the artwork) far from grace. The voice, rather than articulate notions of self-fulfillment register instead a subject's alienation, for Acconci's speech is a production that turns back on itself. This voice of the artwork literally inserts temporality and contingency identified by Poggi through speaking from within the object—Acconci's artwork is literally a piece of live voice: it is too much presence. Such voice adds a twist to Ong's further proposal that "all works of art are in some measure utterances, expressions emanating from the human psyche … partaking of interiority."[22]

Whereas Ong's orality in filling speech with the material presence of the interior, presupposing the interior as an abstract given—in other words, the interior is already there, as a presence—for Kristeva (and poststructuralist thinking), the interior is an operation of psychic formation that speech and language act upon. In this regard, the interior is never already there, to which the voice serves, but consistently negotiates symbolic and semiotic forces. The voice registers the becoming of signification, as a process that often negates the very possibility of communication, overshadowed by anxiety, haunted by desire, subverted by lack and contingency: by having too much interior. Thus, the voice may inadvertently convey its own *lack* of presence. What we hear in Acconci's voice is such a drive, as semiotic force, as pure rhythm and beat, as pulse and fever, as fantasy that reaches for integration and connection, without ever arriving there (for how could he?)—with the body of the imagined visitor, where "I've done this for you, I've done this with you, I've done this to you" contaminates the voice's "invitation to another

person, another interior, to share the speaker's interior…"[23] For invitation may, in turn, threaten.

Architectures

In following Acconci's orality, we must hear the architectural presence of the ramp, for Acconci's libidinal flow, in voice and body, is only recognizable as such through the ramp's operation. As a form, it hides Acconci and the display of masturbatory fantasy, while at the same time amplifying it, bringing it too close, for Acconci speaks *through* the ramp. As a kind of megaphone, the ramp throws Acconci's voice toward the visitor, making it provocatively available. In addition, visitors are asked to sit, walk, or stand on and across the ramp, to position themselves above Acconci, to listen and to make themselves known, as bodies present in the gallery. In this way, visitors are cast as subjects the moment they occupy the ramp, from the other side, as unsettled participants. In this sense, the ramp is a kind of spatial prop or prosthetic in so far as it serves as an addition to the body of the performer, remaining partially out of view yet gaining prominence through its insinuation into the artist's actions and the exchange it surreptitiously inaugurates. Like the microphone and loudspeaker Acconci speaks through, the ramp serves as a technology for the generation of fantasy.

This technology in *Seedbed* is an architectural anomaly, defining space by cutting through it, dividing it in half, enclosing a hidden below and disclosing an apparent above. It functions by *preceding* Acconci—signaling the body we cannot see—and making available his voice, as an amplified orality that extends unquestionably toward another. The ramp encloses *and* discloses in the same move by pressing in, acting as a center to *Seedbed*, not so much by its insistent presence but by what it conducts and makes available. In this sense, the ramp performs its own disappearing act while remaining a radical form. Acconci, in this way, is not the only one performing. Rather, the ramp itself *performs* the work; it speaks Acconci by hiding the artist within its secret interior. It performs by positioning the body of the artist and the body of the visitor into a dynamic of charged separation. The ramp makes Acconci's speech possible. In this way, the ramp seems to accentuate two parallel assertions: that reality is marked by charged separation in which relations are generated partially through alienation, or what is always beyond reach, and what it potentially makes possible—that of desired intimacy—and that architecture, in turn, conducts behavior, situating the body through spatial intrusion and modulation, by remaining behind the scenes so to speak, invisible to the performances of daily life, yet all too present. Acconci thus uses the ramp to accentuate the markings, divides, performances, and inherent tensions of relating.

Such spatial performances can be seen to feature throughout Acconci's career, which has increasingly taken on the architectural as medium. His work over the last fifteen years, as Acconci Studios, consists almost entirely of architectural

projects, whether overtly built environments or spatial installations within museum and gallery settings. These projects are marked by the very performativity announced in works like *Seedbed*, for they aim to redistribute architectural logic, across thresholds of physical, social, and psychic orders. For example, his works *House Up a Building* and *Park Up a Building* (both 1996) consist of splaying open the formal structures of the home and the park across the façades of other buildings. With *House Up a Building*, bathroom, kitchen, dining room, and all other rooms are dispersed across a scaffolding-like structure attached to the building, into which sinks, chairs, and cupboards are inserted like modular units. A series of stairs leads visitors into this "house," offering access to the various "rooms" that progressively climb and span the appropriated building. Originally presented at the Centro Gallego de Arte Contemporáneo, a museum designed by the architect Alvaro Siza, both works "flout their host structure with unapologetic parasitism and in-your-face trespass while thumbing their noses at the repressed programmatic interiority of the museum."[24]

Exposing the spatial coordinates and conditions of a house, *House Up a Building* operates, as Vidler points out, "on the poetic edge of architectural belief."[25] In turn, as with much of Acconci's work, concerns for the underdog, the misfit, the loner, or the criminal float in and out, and *House Up a Building* seems to secretly attach the figure of the homeless onto the site of high culture by staging a potential space for making home. In aligning this back to works like *Seedbed*, and following the ramp *as* performer, we can witness the ramp as taking on much more power within the overall act of the work. Through such operations *Seedbed* underscores, however metaphorically, the determining force of architectural form to allow new experience while dictating the parameters of such experience—to give way to the articulation of desires and to affect such articulations by contaminating the relational field with at times undesirable matter. The dynamics of spaces comes to equate with the dynamics of bodies. While *Seedbed*, in 1972, functioned for Acconci as a home— "... with *Seedbed*, I was part of the floor; a viewer who entered that room stepped into my power field—they came into my house"[26]—with *House Up a Building*, the properties of the home itself, as a power field, are layed open and over an existing space, exposing the often hidden performances taking place between the public and private.

Claim: Performing Fear

The power of architecture to determine and maintain conventional relations and social behaviors is further made present in *Claim*:

> I'm alone here in the basement ... I want to stay alone here in the basement ... I don't want anybody to come down to the basement with me ... I'm alone here in the basement....[27]

Vito Acconci, *Claim*, 1971. Photos courtesy of the artist.

That space functions as a crucial force in *Claim* should again, like the ramp in *Seedbed*, be highlighted, while at the same time remaining out of view—for space, here, becomes a determining force while giving access to physical and psychological exchange. In this sense, space is both that which Acconci defends as a private fantasy and that which allows such fantasy to articulate itself publicly. Like *Seedbed*, *Claim* is about shifting the art object, the function of the viewer, and the exchange between artist and public in order to arrive at a renewed sense of intimacy or agency—between oneself and another, across a threshold necessarily violent. Violence finds its articulation in two ways—it is both Acconci pounding on the staircase in *Claim* and the intrusion of viewers, for viewers, in turn, stage the violence, either by their implied presence in Acconci's speech, or by their own attempts to cross the threshold and enter the basement. These intrusions are both metaphoric and literal, for it is possible to see the presence of the visitor as an ethical other which calls the artist into response—Acconci must defend the space of himself because such space is inextricably linked to the very public of others—as well as the literal intrusiveness of an art-viewing public bent on catching a glimpse of the artist's latest work.

As in *Seedbed*, we can understand Acconci's work as an implicit critique of Minimalist sculpture, for the very spatial relations so nurtured in the works of Morris take on much more sinister tone with Acconci: rather than offer up "space" as a free-floating, innocent field of relations through which subject and object meet, Acconci charges it with violent uncertainty. We can understand Acconci's staging of the body, space, and art as a weaving of the individual subject within

a set of social and psychic forces. What occurs in *Claim* is a turning of a psychic mechanism to stage its very enactment and ultimate unfurling. That the work unfolds these operations inside a performative arena lends to recognize the degree to which desire and context interpenetrate. The ramp and the staircase, as architectural forms, functioning as props in Acconci's drama, operate as strange megaphones for a manic and imaginary speech: the voice rises above its own constraints only by *using* architecture, as resonant chamber, as amplifier, as social scenography. Acconci bashing the staircase in *Claim* could be heard not only as a threat to the visitor but as an unconscious revolt against having to remain at the bottom of the stairs.

In contrast to Ong, and the abstracted notion of self-presence, Acconci's orality as amplified in the operations of an artwork is ultimately about audience—that "community of talkers and listeners." It is not about a pure jouissance of speech but a libidinal sociality that aims to blare out, like music from a car stereo, echoing Acconci's own statement that "the new model for public art is pop music."[28] Pop music is private and public all in one—it is the pleasures of listening that an individual experiences, and the publicness that pop music achieves through its radiophonic dissemination and cultural excess—its *always overheard* presence. As Acconci makes clear, "Music has no place, so it doesn't have to keep its place."[29] Such presence circulates through the very conduits of culture *and* through idiosyncratic usage: pop music is found in cars, at home, on TV, in bars, on computers, and sometimes at museums. Here, pop music can be aligned with Acconci's own version of self-presence, harking back to his notion that "public space is occupied by private bodies."[30] Self-presence thus is always implicated and performed within a public at large, inside and against the turning of multiple psychic centers and peripheries, across desire and fear and all the in-between. Like models for public art, orality for Acconci is "popular" because on some level language, and its semiotic otherness, is always shared. Here, we are always strangers to ourselves.

Acoustic Mirrors

Speaking from under the ramp, or from down the stairs, Acconci voices from an abject and dark place, an architecture haunted by psychological intensities. Here, the unconscious is given its architectural prop in the form of a ramp and basement, each connected to that which is above, in the light of consciousness. In this sense, Acconci occupies hidden and dark space, forcing himself down and under. From such spaces the voice speaks, claiming its right and inviting conversation, registering anxiety and hope. "Through the activity of his body in space, Acconci proves his selfhood, making his environment mean in relation to himself."[31] As Amelia Jones makes explicit, Acconci's work from the early 1970s gauges the (male) body as force acting upon its environment, conditioning space and place to its own image, and for Acconci, performing the body's failure to fully articulate

self-presence. That this, for Jones, signals Acconci as a male body performing his continual claim toward the rights of his own body, as transcendent subject in control of his own environment, leads to recognition that such rights demand their continual reconstruction. Acconci's work labors against itself and others in such a way as to present the self as "in process/on trial," highlighting the male condition as contingent rather than transcendent and in need of continual renewal. "Not only does this subject-in-action show its ability to transform its environment, it also exposes its own contingency."[32] Such contingency is found not only in the physical act Acconci exerts as a corporeal body, by masturbating, biting, or claiming, but in the temporality of the spoken voice. For the voice reveals its own speaking as a call to another, which for Acconci is always absent—conversation is never completed, speech never returns to Acconci from the body of another, desire is never fulfilled. Rather, it is his voice that returns, reflecting back, as a monologue eternally returning to haunt itself, to both support and unravel its own presence. Thus, in *Seedbed*, Acconci can be heard to masturbate, not in relation to a fantasized visitor but to the amplification of his own resounding voice through the floorboards, as a vibratory sensation, an echo returning from the unseen gallery space: Acconci is enclosed within a double-interior, the interior of his own psychic fantasies rebounding within the enclosure of the ramp, as second skin. And in *Claim*, Acconci speaks himself into a frenzy, propelled by complete darkness and a fear of intrusion. Bashing the staircase, rocking back and forth, sputtering to himself, Acconci asks the viewer to never speak back, to never enter in conversation, to literally get out. *Claim* blocks conversation, amplifies the body as manic vocalization and aggressive gesture—"I hear him … someone's coming down the stairs … I swing the weapon in front of me … I'll do anything to stop you … I'll kill you. …"[33] Here, voice and body coalesce in a drive *against* the other. Such drive, though, as Acconci reveals, is totally dependent upon the other, for to defend his space the artist requires and makes complicit the visitor: it is both what Acconci requires and despises, it is what he desires and fears at one and the same instant. Rather than transcend, in acts of male release, his body and situation, in acts that reveal the certainty of self-presence, Acconci performs and reveals his inability by speaking to himself: semiotic, poetic revolution not as heroic catharsis but as theater of the pathetic, in which presence fails itself and the revolution is but a voice in the dark. Acconci's speech then is produced by a number of forces: the production of seed is also a production of speech, for both acts stimulate the other; the footsteps of visitors heard across the wooden ramp, as auditory indexes of the presence of others, drives the artist's own auditory flow, the sonorous gyrations of a speech obsessed with feet, and finally, the ramp itself as spatial intruder pressing upon Acconci, making possible his monologue of desiring. Each aspect functions to impel Acconci into a form of speech that itself must return to an analysis of these works, for it both drives and is driven by their productions, marking speech itself as a sonority riddled with conflict.

Notes

1. From materials provided by the artist, 2004.

2. Vito Acconci, *Vito Acconci*, eds. Franz Ward, Mark C. Taylor, and Jennifer Bloomer (London: Phaidon Press, 2002), p. 98.

3. Robert Pincus-Witten's review of *Seedbed* in *Artforum* of April 1972 makes reference to Acconci's "mumbled fantasies" by concentrating almost exclusively on "sexualized" and "erotic" tendencies in the work, leaving behind the voice in favor of the masturbatory act; and Christine Poggi's essay "Following Acconci/Targeting Vision" refers to his *Claim* performance as "the marking of limits, control over access to a given space, and the power associated with the *gaze*" (my emphasis) (in *Performing the Body/Performing the Text*, eds. Amelia Jones and Andrew Stephenson [London: Routledge, 1999], p. 270).

4. From materials provided by the artist, 2004.

5. Vito Acconci, *Vito Acconci*, p. 9.

6. Walter J. Ong, "A Dialectic of Aural and Objective Correlatives," in *The Barbarian Within, and Other Fugitive Essays* (New York: Macmillan, 1962), pp. 27–28.

7. Ibid., p. 28.

8. Walter J. Ong, *Presence of the Word* (New York: Simon and Schuster, 1970), p. 54.

9. Vito Acconci, *Vito Acconci*, p. 11.

10. Vito Acconci, quoted in Robert Pincus-Witten, "Vito Acconci and the Conceptual Performance," in *Artforum*, (April 1972), p. 48.

11. Vito Acconci, *Vito Acconci*, p. 96.

12. It is worth noting that in 1966 Derrida and Jacques Lacan participated in an International colloquium organized by René Girard at the Johns Hopkins University. It is this initial colloquium that was to set the tone by which poststructuralism and deconstruction were to be embraced by the American academic community. See Michael Payne, *Reading Theory: An Introduction to Lacan, Derrida and Kristeva* (Oxford and Cambridge, MA: Blackwell Publishers, 1993).

13. Roland Barthes's *Mythologies* is exemplary in this regard. It sets out to interrogate cultural objects and activities, such as wrestling, advertisements, and striptease, to reveal their inherent yet submerged meaning. Culture, following Barthes, was thus riddled with ideological content, as a subtext that carried in it an entire set of cultural values that "normalize" certain viewpoints. See Roland Barthes, *Mythologies*, trans. Annette Lavers (London: Vintage, 1993).

14. We can also suggest that the very avant-garde arguments against social "mythologies" fulfill their inherent ideological content by perpetuating their own system of values while trying to outlive or subvert others.

15. I want to also suggest that the very developments of "site-specific" art practice entails a questioning of Metaphysical truth; for certainly, to be site-specific is to recognize the contingency of truth and an inherent politics of any form of meaning.

16. Julia Kristeva, *Revolution in Poetic Language*, trans. Margaret Waller (New York: Columbia University Press, 1984), p. 37.

17. Maurice Merleau-Ponty, "The Child's Relations with Others," in *Primacy of Perception*, trans. William Cobb (Evanston, Il: Northwestern University, 1964), pp. 137–138.

18. Robert Pincus-Witten, "Vito Acconci and the Conceptual Performance," in *Artforum*, p. 49.

19. Michael Fried, "Art and Objecthood," in *Artforum* no. 5 (Summer 1967), pp. 12–23.

20. Christine Poggi, "Following Acconci/Targeting Vision," in *Performing the Body/Performing the Text*, pp. 255–272.

21. Vito Acconci, *Vito Acconci—Writings.Works.Projects*, ed. Gloria Moure (Barcelona: Ediciones Polígrafa, 2001), p. 154.

22. Walter J. Ong, "A Dialectic of Aural and Objective Correlatives," in *The Barbarian Within, and Other Fugitive Essays*, p. 32.

23. Ibid.

24. Sanford Kwinter, "Saint Architect of Sodom," in *Vito Acconci/Acconci Studio: Acts of Architecture* (Milwaukee, WI: Milwaukee Art Museum, 2001), p. 51.

25. Anthony Vidler, "Home Alone: Vito Acconci's Public Realm," in *Warped Space* (London and Cambridge, MA: The MIT Press, 2003), p. 137.

26. Vito Acconci, *Vito Acconci*, p. 13.

27. Ibid., p. 20.

28. Ibid., p. 131.

29. From the DVD accompanying Vito Acconci, *Vito Hannibal Acconci Studios* (Barcelona: Actar, 2005).

30. Vito Acconci, *Vito Acconci: Courtyard in the Wind* (Ostfildern-Ruit, Germany: Hatje Cantz Verlag, 2003), p. 97.

31. Amelia Jones, "The Body in Action: Vito Acconci and the 'Coherent' Male Artistic Subject," in *Body Art/Performing the Subject* (London and Minneapolis, MN: University of Minnesota Press, 1998), p. 123.

32. Ibid.

33. Vito Acconci, quoted in Christine Poggi, "Following Acconci/Targeting Vision," in *Performing the Body/Performing the Text*, p. 269.

Chapter 8

Finding Oneself: Alvin Lucier and the Phenomenal Voice

Sound and space are inextricably connected, interlocked in a dynamic through which each performs the other, bringing aurality into spatiality and space into aural definition. This plays out in acoustical occurrence whereby sound sets into relief the properties of a given space, its materiality and characteristics, through reverberation and reflection, and, in turn, these characteristics affect the given sound and how it is heard. There is a complexity to this that overrides simple acoustics and filters into a psychology of the imagination. For example, if we think of the voice as a sound source, we usually imagine it coming from a single individual that the voice then refers back to, as an index of the one who speaks. The subject then becomes the object to which the sound belongs. Yet to shift this perspective slightly is to propose that what we hear is less the voice itself and more the body from which the voice resonates, and that audition responds additionally to the conditions from which sounds emerge, such as the chest and the resonance of the oral cavity. And further, the sound source makes apparent the surrounding location against which emergence occurs, from outside the body and to the very room in which the body is located. This slight shift overturns the sound source as a single object of attention, as body of sound, and brings aurality into a broader field of consideration by introducing the *contextual.* Sound not as object, but as space.

In conjunction with my explanation here, which emphasizes acoustic experience outside the domain of musical composition or design, much attention has been paid to "sound architecture" within the domain of the acousmatic tradition (discussed in Chapter 2). In working with electronics and sound reproduction technology, and supplanting the conventions of concert presentation with that of surround-sound "cinema for the ears," the acousmatic tradition has sought to define sound in relation to a notion of architecture (whether a concert setting or

sound studio) as a means for controlling, manipulating, and ultimately presenting "sound objects." This notion though, while offering a helpful vocabulary in describing sound material, the building of sound objects, and their "morphology" and "dynamic" in actual space, leaves behind some of the more overt social and relational concerns I am seeking, and that the voice necessarily delivers.[1]

It would seem that the sound space interplay demands a shift in definition or attention when heard in relation to speech, for what we hear in the voice that speaks within a given space is not so much an acoustical body but an individual as he or she is pressed upon, responds to, and affected by situations, and inside of which speaking takes shape. The term "context" is thus useful to outline or open up the purely acoustical to forms of "social architecture," derived from the relational dynamics at play within any given space or environment. Context presses in, as social pressure, as architectural presence, and as psychic intensity, modulating and partially sculpting, through its contours of interaction, the movements of the voice.

Vito Acconci's work intersects voice and architecture by performing social confrontations indicative of the visual arts milieu of the late 1960s and early 1970s. In conjunction, we can witness parallel developments in the domain of experimental music following on the heels of John Cage and Fluxus, as in the groups MEV, Scratch Orchestra, AMM, and The Sonic Arts Union, whose work could be said to engage more overt and explorative forms of performance. The Sonic Arts Union is one of the more adventurous indications of experimental music's ambition to further the scope of sonic and acoustic experience and musical strategy at this time. Bringing together Robert Ashley, David Behrman, Alvin Lucier, and Gordan Mumma, the Union was developed through shared interests leading to works that "partly had to do with homemade electronics, partly with exploration of the nature of acoustics, partly with crossing the lines between theatre, visual arts, poetry and music."[2] Such interests predisposed it to live performance, and in 1966 the quartet toured the United States and Europe, each artist performing the others' works.

Having studied at Yale University and Brandeis University throughout the 1950s, Alvin Lucier's work and career has been characterized by a continual fascination and explorative pursuit of how sound works as physical phenomena. As James Tenney observes, "Lucier has always taken great care to design his pieces so that their physical character was not obscured."[3] This is unquestionably a significant element, for the physical character is, to a great degree, the entire point of his work. Tenney's use of the word "design," rather than "compose" or "write," also seems to signal an understanding of Lucier's work, in so far as "designing music" highlights a concern for physical phenomena and the possibility of music playing a role in revealing such phenomena. Through such perspective, the processional features that Lucier's works often embody can be understood. Forms of composition operate more as structures through which experiments can be conducted, ultimately bringing forward existing phenomena through what might be called "poetic science."

Lucier's long list of compositions of the last thirty-five years extends the scope of experimental music to engage sound as a physical medium, the contexts of its experience, and how hearing and location activate one another. Through very simple means and approach, the works activate complex and compelling situations in which sound gains in material presence. "His pieces deal with virtually the whole range of natural acoustical phenomena, including sound transmission and radiation … reflection … diffraction … resonance … standing waves … feedback … beats … and speech."[4] The categories of physical phenomena and their relation to auditory events function as subject matter in Lucier's work, and yet Tenney's list of categories seems to strangely end with "speech." For speech, while physical phenomena, is also dramatically unlike feedback, beats, or reflection. Speech brings with it a whole set of extra ingredients; that is, it drags into the realm of pure physical phenomena the presence of language and the inherent complexities of what it means to speak. Tenney's introduction of "speech" unquestionably refers to the composer's seminal *I am sitting in a room* (1969), which continues today to be discussed, performed, and revered as exemplary of an experimental form of musical practice. Working with voice and sound reproduction, the composition stages a number of complex actions, in which the voice as audible media may be engaged. The score reads as follows:

> "I am sitting in a room" (for voice and electromagnetic tape, 1969)
>
> Necessary Equipment:
>
> One microphone, two tape recorders, amplifier, and one loudspeaker.
>
> Choose a room the musical qualities of which you would like to evoke. Attach the microphone to the input of tape recorder #1. To the output of tape recorder #2 attach the amplifier and loudspeaker. Use the following text or any other text of any length:
>
> "I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but more as a way to smooth out any irregularities my speech might have."
>
> Record your voice on tape through the microphone attached to tape recording #1. Rewind the tape to its beginning, transfer it to tape recorder #2, play it back into the room through the loudspeaker and record a second generation of the original recorded statement through the microphone attached to tape recorder #1. Rewind the second generation to its beginning and splice it onto the end of the original recorded statement on tape recorder #2. Play the second generation only back into the room through the loudspeaker and record a third generation of the original recorded statement through the microphone attached to the tape recorder #1. Continue this process through many generations.
>
> All the generations spliced together in chronological order make a tape composition the length of which is determined by the length of the original

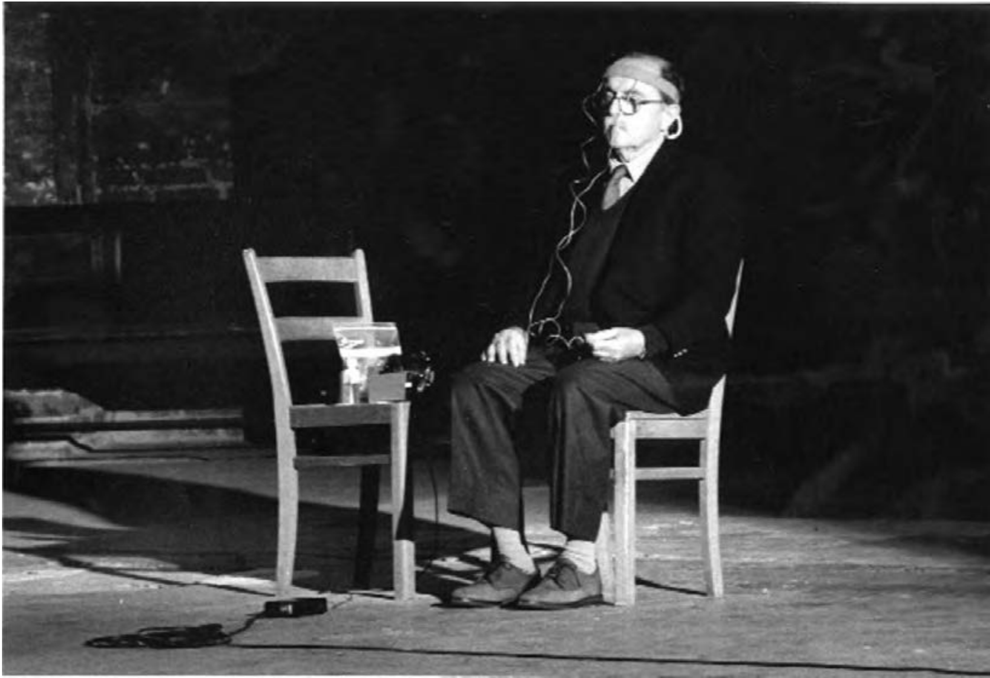
> statement and the number of generations recorded. Make versions in which one recorded statement is recycled through many rooms. Make versions using one or more speakers of different languages in different rooms. Make versions in which, for each generation, the microphone is moved to different parts of the room or rooms. Make versions that can be performed in real time.[5]

By replaying the recording of his voice back into a room, rerecording and playing back, repeating the process, the work develops into an accentuation of acoustic space whereby the sound source (voice) loses its original shape through the resonance of the spatial situation. Here, sound and its source diffuse into a larger conversational interaction in which the voice makes apparent the surrounding architecture through its disembodied reproduction. Over the course of the work's process, the original recording dissolves into a long, moving tone, punctuated, as Lucier points out, by rhythm alone—for we can still make out the general impression of the original spoken text: its inflected edges, the moments of pause, and Lucier's stutter. What we hear, then, is phenomenal in so far as space is articulated by sound, yet imbued with an uncertain psychological imperative, for as Lucier's voice states, the work is a process through which any speech impediment (in this case, his stuttering) may smooth out. The stutter though inexplicably stands out. As the syncopation of body and space, as a jag in the surface of the speaking subject, the stutter hovers throughout the forty-five minutes of recording. In essence, the stutter *drives* the work, as original motivation, as lingering sonic, as auditory figure haunting the work—over the course of listening, we inadvertently listen for the work's fulfillment to eliminate its own stutter, anticipating its appearance and disappearance, its erasure, thereby always somehow finding it. In this way, how could the stutter ever truly disappear? It pulls us in, as a personal effect whispered to us, confessed in the desire or possibility of being eliminated. The stutter is the very heart of the work.

While Trevor Wishart's analysis of Lucier's work in his book *On Sonic Art*, though brief, describes it completely in terms of a "sound object" defining an abstracted relation to acoustic space, casting Lucier's approach as "literal and objective,"[6] it is my interest to unsettle such analysis by inserting the "psychological and subjective"—for speech challenges the pure phenomenology of acoustical physics by always supplying or introducing the social and cultural tracings individuality intrinsically enacts, tracings that by nature are always partly ambiguous and forceful. Moving into a space of relations as inaugurated by acoustics, through following or enacting speech, opens out onto an existential uncertainty, for speech is not purely physical phenomena but a sticky medium for negotiating such phenomena. Thus, what must be recognized in Lucier's *I am sitting in a room* is a complicating of the physical phenomenon of acoustics as enacted by a voice staging its own existential release: not only do we hear a "sound object" but we hear an identity speaking his stutter into a form of acoustic space.

What appears in *I am sitting in a room* is forty-five minutes and thirty-two cycles of modulating repetition that ultimately turns orality into a spatial question.[7] Like Acconci, personal desire leads the artist to formulate for himself a different form of speech. Such speech is impelled by a certain relation to lack and haunted by the possibility of its erasure through self-fashioned performative exchanges. Lucier looks for the other and yet like Acconci this other is only himself divested of speech impediment, made complete through a sonic process that is more cosmetic than composition. Amelia Jones's observation that Acconci's work "proves his selfhood" by "making his environment mean in relation to himself" could, in turn, be applied to Lucier's *I am sitting in a room*. That the voice becomes the main acoustical driving force in this suggests, like Acconci, that architecture is intensely bound up with how and in what ways the individual may grapple with the difficulties of being in the world.

While Lucier unquestionably pursues physical and sonic phenomena, he does so in such a way as to *implicate* subjectivity. That is to say, Lucier's work, in its obsession with physical phenomena, winds its way inevitably toward a heightened consideration of individual presence. Such presence is not solely physical or phenomenal—for Lucier's work probes not only the conditions or characteristics of physical phenomena and their wonder, but also the conditions of subjectivity in the midst of grasping such wonder. In other works, such as *Music for a Solo Performer* (1965), *Vespers* (1968), *(Hartford) Memory Space* (1970), *Gentle Fired* (1971), and *Bird and Person Dyning* (1975), not to mention *I am sitting in a room*, physical phenomena are made explicit only through the participation of people and the activation of perception. For instance, *(Hartford) Memory Space* asks participants to go outside and record sounds heard through audio recording, writing, or through memory alone, then to return inside to a given performance space and attempt to re-create the recorded sounds using voice and acoustic instruments only. Or *Vespers*, which asks that a group of any number of people equip themselves with hand-held echolocation devices and to explore a dimly lit space or environment and its inherent acoustics: reflection patterns, distances, spatial relations. And more, in *Music for a Solo Performer*, brainwaves are used to generate sonic results: attaching electrodes to his head (or other people's heads), a series of sounds is generated through alpha waves that activate acoustic instruments and other sounds. What these works, and many others, offer is the opportunity for anyone to experience, through a process that could be referred to as "musical," auditory events as immediate and ever-present. And further, to explore one's own presence as situated within various spaces or environments and their conditions: in this regard, the aural is used to investigate and discover how one occupies space and, in turn, how one is implicated within auditory space and events. While a work like *Music for a Solo Performer* results in what Lucier refers to as "music without compositional manipulation or purposeful performance,"[8] it does so by revealing the individual interior as full of unspoken intensities.



Alvin Lucier, *Music for a Solo Performer*. Photo courtesy of the artist.

In approaching Lucier's work, we can recognize an obsession with the dynamics of subjective experience, in the form of listening and the activation of sound on the part of a performer and audience, as much as an obsession with physical phenomena. In this way, Lucier's work may point toward a bridging of the external world with states of awareness on the part of the listener or participant as an internal experience, and further, a staging of subjectivity and its position within the world. Such expanded terrain can be heard as an extension of Minimalist music, as in the works of La Monte Young, in so far as it develops a sonic palette distinct from traditional notions of musicality through investigating physical phenomena, as in the activation of spatial resonance. Yet, Lucier moves away and inserts, like Acconci, an addition to such legacy: that of subjective experience not so much marked by completion or plenitude as by contingency and relational uncertainty, either by relying on memory, the fevers of brainwaves, seeing in the dark, or the jagged inflections of a stutter.

More and Less Voice

While stuttering is caused by various reasons, such as developmental (occurring as a child begins to acquire language and form the ability to utter words) or neurogenic (whereby signal problems occur between the brain and muscles), the psychogenic remains the least understood, occurring within the mind of the

individual, as a psychosomatic effect. Following the psychogenic, the stutter is heard as a secret attempting to emerge against the force of language, for it tries to say something that must not be said; the stutter brings into audibility that which must remain out of bounds. Speech is arrested, contained within the oral cavity, causing a glitch or skip in the flow of words, as a somatic spark, as a hiccup on the way to communication. We can hear the stutter as a literal noise in the social configuration of individuality—while the individual is called upon to answer properly, to speak up and find the words to participate as a whole body, the stutter breaks such certainty with hidden anxieties. It blemishes or impinges upon the linguistic necessity to deliver clear information; it steals back the body from the loop of conversation, to mark one as incomplete: words falling short, mouth getting tongue-tied, voice swallowing itself.

In *I am sitting in a room*, Lucier speaks his stutter, makes it the point of a composition and sonic process, conversing with himself, at home, so as to exorcise his own somatic quivers. Such performativity creates a platform from which music and stuttering coalesce and, in doing so, invade the other: music is made to stutter (as a kind of experimental extreme) and the stutter is given its own musicality through which the composer overcomes anxiety—he speaks the stutter to a point of composition, tonality, and spatial completion. The stutter in this case is a form of controlled feedback: it comes back to haunt Lucier, yet to a point of comfort and composition, where the composer may reside, take up home, within his own somatic tick, similar to Robert Ashley's work *The Wolfman*, from 1964, where voice unleashes a form of controlled and harmonic noise. Combining vocalization with audio feedback, as well as prepared audio tapes, *The Wolfman* creates a sonic journey in which electronic noise, as a total excess of timbral materiality, creates musical form: Ashley's vocalizations initiate waves of feedback that fill a space with itself, returning to the composer as a harsh duet. Ashley's *Wolfman* operates as doppleganger, an alter ego shadowing his own articulations, literally, a hybrid monster, part-human and part-animal. Such hybridity finds another form in *I am sitting in a room*: here, architectural space and individual body merge, creating other forms of being and speaking.

I am sitting in a room states a phenomenological fact: it points to an existential certainty, asserting physical presence as a condition of being. Such certainty finds its reinforcement through an uncanny removal of the actual body through audio recording. Recording and playback, while removing the body, reasserts the body, yet one remodeled through a corporeal fantasy. We can hear Lucier again and again, and with each playback and recording his voice diffuses, not to disappear but to reappear in the form of architecture: over time the original voice softens and gives way to the acoustical presence of the room. The voice here is consumed by space, and the room bloated with voice, "populated but also polluted, truly saturated with speech."[9] The room takes on character, as a partner in Lucier's strange duet. In providing an acoustical structure for tonality, the room, in turn, secures a private space allowing him to escape the sociality of speech, to outspeak himself.

Lucier's speech is not a solo, for it comes back, each instance transformed, masquerading as the original, until by the end we hear thirty-two voices as one: it is brought back, as "an expanded embodiment"[10] that wears a new face each time, for the voice loses and gains character with each cycle. In effect, stutter becomes music through a kind of recontextualization—from body to room, from single individual to hybrid multiple, it is thrown beyond and against architecture, and in the process, past the psychic ordering of language (interior) and into compositional possibility (exterior).

Lucier's performance washes out, fuses with, and overcomes the stutter by pushing it into smoothness, by making it architectural volume. For the "room is a complex filter, accentuating some bands of energy, damping others, and altering the phase (time shift) and the pitch (frequency shift) of any sound caught in its space."[11] Through a fusion with acoustics, *I am sitting in a room* proceeds to believing in the possibility of speech minus the stutter, and further, without body, as tonality attempting to transcend individual voice.

Envelopes

To fuse the voice with surrounding space, in a harmonic plenitude, parallels what Didier Anzieu theorizes as the "sonorous envelope."[12] According to Anzieu, the sonorous envelope finds its first articulation in the mother's voice bathing the child in words of endearment and love. The maternal voice surrounds the child with an excess of gentle murmurs and whispers, words that cradle, like her embrace, the child. As Anzieu suggests, such sonorous plenitude comes to haunt the individual through life, and reappears in the voice of others, in the sounds of the environment, and, further, in musical experience. Music comes to function as an arena for reclaiming the sonorous envelope of childhood—to once again bathe in aural assurance.

The phenomenal momentum of Lucier's work, found not only in *I am sitting in a room* but throughout his career, in works such as *Vespers*, can be heard as bridging the divide between the individual and the phenomenal world, between an interior and exterior, between a looming perceptual haunted house and the ever-present environment. As Lucier professes, "[I] try to put people into harmonious relationships with them [natural phenomena]."[13] Musical composition for Lucier is a context for creating opportunities for integration. Yet *I am sitting in a room* remains bound to Lucier's person, as a means of seeking harmony, parallel to *Music for a Solo Performer*. Amplifying his own brainwaves, as source material for stimulating percussion instruments and other sounds, Lucier taps into hidden neurological activity as unconscious and secret events: synaptic spark equates with percussive attack, unconscious phantom triggers fragmented rhythm. The performance literally monitors and draws out such buried secrets. What we hear, then, is Lucier's psyche as musician, replacing the physical body of the drummer with that of brain activity. As in *I am sitting in a room*, *Music for Solo Performer*

exteriorizes internal mysteries, making them physically present—a drum solo by a motionless, meditating player.

Lucier's sonorous envelope, in which the composer wraps himself in an acoustical plenitude through which his stuttering voice returns to him without creases, as a narcissistic completion, finds its parallel in Acconci's masturbatory fantasy vocalized and amplified in the gallery as a monologue to the visitor. Acconci, in his solitary confinement, fantasizes possible escape—escape into another, into the production of seed, into the ramp, which acts as an architectural envelope wrapping him in darkness. Yet, while Acconci performs discord, Lucier creates harmony; Lucier integrates, through a phenomenological belief in pure speech, while Acconci breaks apart, through a performative speech that aims for the messiness of desire and the eventual collapse of his proposed integration. Both enact personal projects in which completion is totally fantasized.

The ramp in *Seedbed* is a kind of house for Acconci; it's an interior that amplifies, through hiding, the interior of his own fantasies. Speech, in being an "intensification of an interior"[14] vibrates beyond the body to "involve" those who hear the voice within their interior. Acconci, as nothing but voice, is nothing but interior fantasy—he is nothing but vocal presence and masturbatory vibration that paradoxically reflects his "yearning to cohere himself" by staging a relation to others. "In this way … he proves he is the 'self' … but also proves his dependence on this other."[15] Lucier's voice, in contrast, is resonance reinforcing itself; it is interior conducted through generations of audio recording and amplified playback, compounded by architecture, and made object. Yet Lucier's listener, like Acconci's, is an imagined other: private activity aims for a relation to another, as projected through an architectural envelope similar to Acconci's ramp. Here, the room allows the voice to become something else, to achieve the potential of smooth speech, signaling an overcoming of the lack registered in the stutter, for the stutter refers to a hidden problematic. In finally arriving, at the end of the recording, at such smoothness, at architecture, the listener is brought closer to a tonal plenitude in which noise, as heard in the stutter, disappears, awash in the flow of a phenomenal event.

What I've been pursuing here, through Acconci and Lucier's work, is a perspective on space in which relational exchanges come to draw into relief the intrinsic social and psychic performances to which architecture is always already complicit. Following their work, architectural space functions as both generator and conductor of social exchange, an amplifier and transformer of the voice, and a field for the negotiation of longing, fulfilled or not. Lucier's *sitting in the room* slides into *sitting in his own speech*. Through such an act, Lucier infiltrates Young's Dream House, making it a haunted house, whereby phenomenological fact becomes psychological unease; psychoacoustical listening, a sonorous envelope pricked with desire. The liberated sound of Cage, and the phenomenal aesthetic of Minimalism, is on the surface of Lucier, yet what's underneath is "the intersection of one man's voice with his immediate environment" in which "those

whistling tones are neither just any or all of the resonances, but only those that are shared by both the voice and the room."[16]

If Lucier builds architecture, it is an architecture imbued with the problematic of having a body. In turn, architecture allows an escape from such a body, by stripping him of that nagging stutter and refashioning personality outside the identifying jag of his speech. What Lucier and Acconci's work brings forward are the embedded tensions inherent to architecture. That speech, and the performing vocality of a situated body, lends to such investigation must, in turn, fall back upon how we hear speech, not only as found in an aesthetic object.

Notes

1. For more information on the acousmatic, see Trevor Wishart, *On Sonic Art* (Amsterdam: Harwood Academic Publishers, 1998).

2. David Behrman, quoted in Christopher Cox, "The Jerrybuilt Future," in *Undercurrents: The Hidden Wiring of Modern Music*, ed. Rob Young (London: Continuum, 2003), p. 40.

3. James Tenney, "The Eloquent Voice of Nature," in Alvin Lucier, *Reflections: Interviews, Scores, Writings* (Cologne: MusikTexte, 1995), p. 12.

4. Ibid., pp. 12–14.

5. Ibid., p. 322.

6. Trevor Wishart, *On Sonic Art*, pp. 158–159.

7. The version I am referring to here was made in 1980, at the artist's home in Middletown, Connecticut, and has been released as a CD on Lovely Music ([New York], 1990).

8. Alvin Lucier, *Reflections: Interviews, Scores, Writings*, p. 432.

9. Christof Migone, "Volume (of Confinement and Infinity): A History of Unsound Art," in *S:On: Sound in Contemporary Canadian Art* (Montreal: Éditions Arttextes, 2003), p. 81.

10. Ibid.

11. Aden Evens, *Sound Ideas: Music, Machines, and Experience* (Minneapolis, MN: University of Minnesota Press, 2005), p. 54.

12. See Didier Anzieu, *The Skin Ego*, trans. Chris Turner (London and New Haven, CT: Yale University Press, 1989).

13. Alvin Lucier, *Reflections: Interviews, Scores, Writings*, p. 196.

14. Walter J. Ong, "A Dialectic of Aural and Objective Correlatives," in *The Barbarian Within, and Other Fugitive Essays* (New York: Macmillan, 1962), p. 32.

15. Amelia Jones, "The Body in Action: Vito Acconci and the 'Coherent' Male Artistic Subject," in *Body Art/Performing the Subject* (Minneapolis, MN: University of Minnesota Press, 1998), p. 137.

16. Nicolas Collins, liner notes to Alvin Lucier, *I am sitting in a room* (Audio CD) (New York: Lovely Music, 1990).

Chapter 9

Word of Mouth: Christof Migone's Little Manias

Language, according to Judith Butler, "assumes and alters its power to act upon the real through locutionary acts, which, repeated, become entrenched practices and, ultimately, institutions...."[1] The voice is thus marked by the Law—by the social lexicon of proper speech. It registers, in its audibility, the ideological parameters of a given society through secret inflections, causing speech to tremble or whisper or fail according to a given situation. At the same time, the voice performs such lexicon in an attempt to speak through it, to get past the situational boundaries by appropriating and overspeaking language. In this way, the individual is formed by language and, in turn, forms language through enactment. While important to recognize such a dynamic as oppositional on one level, between what can be called individual speech against the speech of Law, it is just as important to understand the force of language and its outspokenness as forming an integral whole: each necessarily relies and in part creates the other.

This whole though is also a hole: the whole individual is emptied out by the very thing that completes it. That is to say, language brings one into consciousness while deflating individuality by forcing it into its network, by making the "song of myself" accountable on the pages of a social text. The whole then is a hole inside of which individuality is formed, given weight, though lacking and striving to fill such lack through the materiality of language itself: I speak and *respeak* in an attempt to find the words that will lead to a certain plenitude, a certain voluptuous fulfillment.

The voice, or the speaking subject, is thus embroiled in a performative tension whereby speaking is always already enacting an uncertain and tenuous connection to the real—one speaks in and out of oneself, fixed and unfixed at the same instant to the parameters of being, of social interaction, enacting the essential paradox of

the voice, identified by Steven Connor, in which the voice must leave itself in order to return, so as "to move from me to the world, and to move me into the world."[2]

Such paradox can be said to return to the speaking subject, to fill the mouth with hesitation, excess, charm, delight, and difficulty, as found in the work of artist Christof Migone. Performing, voicing, muting, mutating, making noise, Migone stages the difficulties of not so much having a voice, but of having a mouth. Connor's paradox for Migone is already past the initial paradox, the first home of the voice, prior to myself or the world, that paradox of having to speak through the very cavity that chews, spits, sucks, and slurps; that the speaking subject, as an articulating individual, is identified as such through the very conduit that, in turn, sputters, laughs, stutters, and cries, as embodied presence, which is also a lot of hot breath. The oral cavity as primary site of vocalization, as progenitor of the voice where paradox is fixed and unfixed, as a first-stage performance prior to the performance of the self: Connor's paradox is lodged in Migone's throat. To hear Migone's work, to listen to its gurgles, fizzes, and performativities, its sonics, is to enter a theater that is always offstage, behind the scenes, on the wings, for his attention is fixed on the *prior to* voice, the *prior to* narrative, the before the scene is cast, the quiver of the pen, the massaging of the body to unravel its kinks and knots. Migone's is a theater of the minute, before the voice ever comes out.

In contrast to Marina Abramovic and her expenditure of the voice in *Freeing the Voice*, Migone stages *attempts* to find his voice—one could say, his voice is *the finding of the voice* as a process, enacting the grappling with the fact that we speak, fashioning aesthetics out of paradox. Whereas Abramovic believes in the possibility of catharsis, of the enacting of the very tension at the heart of corporeality, in the throat itself, Migone performs the body without ever arriving at release, without transgressing to a point of liberation. Rather, performance is used to reveal, make explicit, to bring to the fore the inability to get past, outlive, or outspeak the voice itself.

Microphonic Speech

To get inside and arrive past speech in the same instant, the history of technologies must be underlined, for such history coincides with the developments of self-conscious acts of performing the voice found in modern culture. To perform the voice stands against, as a mobilized contrast, to using the voice in performance, as in traditional theater or spoken-word poetry; "performing the voice" stages the voice to speak *about* speech, to enact, through lodging the voice into the electrical devices of recording, the peripheries of individual presence: to amplify the underheard and overlooked, the arrested and the repressed, the eavesdropped and the overheard, and shove it into the center of language. Rather than recite words, deliver up narrative or psychological drama through enacting script, performing the voice plunders language to reinvent the voice—as in Artaud's sacrificial, ritualistic theater that calls forth a primal speech in which death and corporeality merge to form new versions of individual presence—without organs, without

God, without the self. His work gains momentum when it moves off the page and onto magnetic tape, in 1948, with *To Have Done with the Judgement of God*, for "sound recording inaugurated a new dimension to all possible forms of necrophilia and necrotopias, resuscitating the rhetorical figure of prosopopoeia, which manifests the hallucinatory, paranoid, supernatural, or schizophrenic presence of invisible, deceased, ghoulish, demonic, or divine others."[3]

Through its immersion into the prosthetic conduits of electronic technologies and the microphonic, the speaking subject as amplified, as nothing but tongue, underscores the heterogeneity of language articulated by Julia Kristeva in her term "signifiance," which "is precisely this unlimited and unbounded generating process, this unceasing operation of the drives toward, in, and through language. . . ."[4] Microphones necessarily multiply the body by emphasizing its location, as corporeal intensity, while displacing it, throwing it beyond the here and now, toward other centers, adding to the "unbounding generating process."

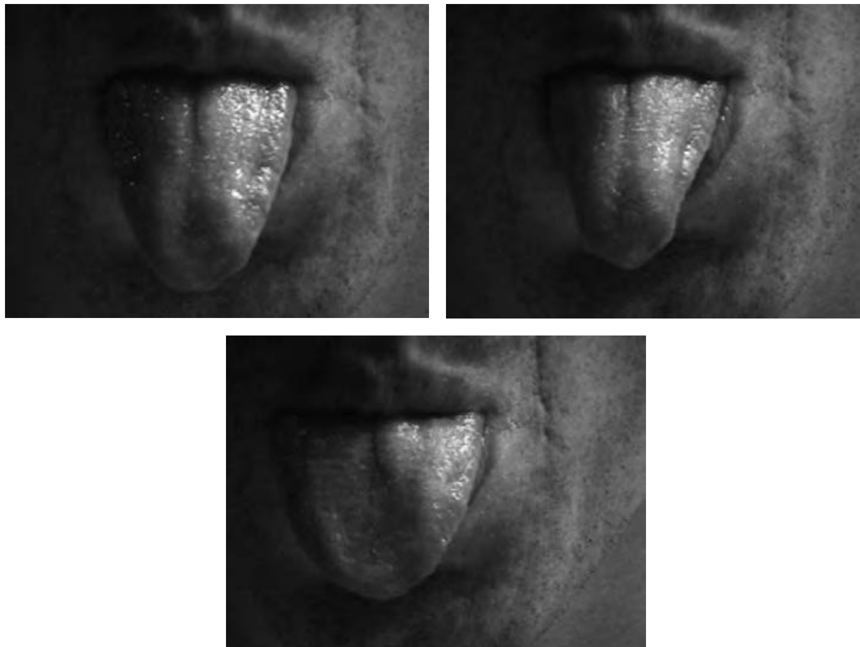
Signifiance is the process of practicing, in forms of presence, the movement in, through, and outside the boundaries that inscribe us within language through language itself. It is a textual production that frays the fabric of language. The microphone and recording technologies add something to Kristeva's semiotic formulations, for the drives, impulses, pulsations, and rhythms enacted through and against language in the moments of microphonic speech amplify the unconscious through an excessive orality that may in the end leave language totally behind. However, for Kristeva, Modernist poetry serves as the semantic battleground where the blank page and its linguistic scrawls (of Artaud, Mallarmé, Lautréamont, and Joyce) subvert and implement "structuring and de-structuring practice" of *signifiance* in and through language, whereas the microphone and the electrical conduits of amplification, tape machines, and sonic gadgets throw the material of both page and language into the air: sputters, spits, guffaws, hiccups, stutters, regurgitations, lisps, channeled through, processed, manipulated, and cut-up by the microphone, tape machines, and speaker systems. Here, poetic language does not so much expose the seeming unity of the individual, but it already lives inside a performative arena that multiplies and de-centers the individual by inscribing the body, not strictly through a textual experimentation on the page, but in the throes of a sonicity embedded onto recording media and out again, into vibratory air. It is more mouth than voice, more stutter than fluidity, more viscous than vehicular, "where its intelligibility is embodied."[5]

As Henri Chopin articulates, "Sound poetry finds its sources in the very sources of the language and, by the use of electro-magnetics … owes nothing to any aesthetic or historical system of poetry."[6] Chopin's sound poetry, as defined in 1967, echoes with Kristeva's theorizing, in so far as it aims to expand the terrain of language beyond traditions of poetic usage, to draw upon language while leaving it behind. Yet, it moves past Kristeva by already leaving the page so as to perform the voice, to practice the "structuring and de-structuring" of semiotic revolutions as vibratory motion, in which "linguistic resources are unfolded in all their richness,

and with the aid of a single instrument—or multi-instrument—the mouth, which is a discerning resonator, capable of offering us several sounds simultaneously as long as these sounds are not restricted by the letter, the phoneme, or by a precise or specified word."[7] In this regard, the use of recording technology, electronic manipulation, and microphonic devices may exit the field of the symbolic and fulfill what Migone describes as the "remainder remaining entirely beyond control."[8] The remainder is that addition to language that comes back to haunt it, to stagger its signifier on the way to completion, to intervene with a stutter, which for Migone brings the body up into words, as somatic jag, as communicable glitch, "where communication breaks to communicate its incommunicability."[9]

Evading

Migone's work *Evasion, or how to perform a tongue escape in public*, a performance with the instructions, "stick out your tongue as far as you can for as long as you can," delves into the viscous materiality of the mouth itself. It does so through a poetic practice that suspends language across the void of sense, as "that prolonged hesitation between sense and sound."[10] Hesitating on the threshold of sensical communication, prolonging the beginnings of speech, as if the voice were continually starting anew, finding expression along the synaptical charges of consciousness and in the syntactical thrust of orality, *Evasion* exemplifies Migone's practice: by uncovering an inside that suggests a different outside.



Christof Migone, *Evasion*, 2001. Photos courtesy of the artist.

Evasion, or how to perform a tongue escape in public—tongue held out, sustained, tiny droplet gathering at the tip, pointed tongue quivering, "this lasts forever, but that's never long enough. hold still, the trembling gives you away."[11]

In probing the mouth, *Evasion* implies the voice, "where tongue the fleshy organ is attempting escape from tongue the language."[12] The work engages orality without ever uttering a word, but by exposing the physical mechanism upon which it relies. Such orality is no longer an index of its speaker, or stitched to the fabric of language, but rather a sonicity whose status straddles the line of life and death, of presence and absence, plenitude and the void, of recognizability and absurdity. The tongue moves the body to tears, exhausting it to a point of drips— of spit and tear, of endured agitation. The tongue quivers, held out of the mouth, exposing its moist muscle to the arid outside, making sounds that never cohere, but rather, uncover the minute tensions on the way to coherence.

Migone performed *Evasion* in 2001 at Beyond Baroque, Los Angeles, presenting the work as both video image and live performance: a prepared video was presented on a monitor showing the artist enacting the work—tongue held out for as long as possible. Alongside the monitor, Migone sat and performed the gesture live, holding a light toward his face, framing the tongue as "tongue twice, same tongue but temporally apart, side to side, trembling differently … as a duet."[13] The audio of the work was heard from the videotape: a soundtrack derived from microphones placed in the mouth, trying to capture the micro-details of spit and tongue. Such a setup brings to life the corporeal fleshiness of the tongue: like Acconci's libidinal speech, or Lucier's architectural speech, Migone amplifies his own body, bringing it all too close, in minute detail. He aims for a similar intimacy, by bringing us into his mouth, up against the slick muscle of the mouth, and by revealing its inner sound. The extended tongue speaks another language, for it "heightens presence by presenting it bare, barely there."[14]

The Flaking Body—Snow Storm, South Winds, Crackers

Migone's theater of the innards uncovers the residue, the trace, the indication or instance of exposure: unveiling the mouth behind the word, the tongue behind the mouth, the spit behind the tongue … revealing "the multifarious, heterogeneous, and often contradictory processes of consciousness itself," for the "voice articulates body and language, place and knowledge, self and other, the imaginary and the symbolic, by founding an existential limit that is perpetually transgressed through speech."[15]

All leaks are universes of signs, to be harnessed for the writing of a different text: one of tactility, intimacy, viscosity, and uncertainty, of jump starts and shortcuts. As in *South Winds*, a series of recordings using farts as their source, which turns flatulence into a production of sonorous accents, inflections of the body: the fart is harnessed and dissected for its inherent sonics, extended, repeated, humorously contorted into an alphabet of the body: vowels of the ass that extend the

capacity for the self to articulate; or *Snow Storm*, a double-video work showing the artist scratching his head with a contact microphone so as to cause dandruff to cascade down across his black trousers. Like *South Winds*, *Snow Storm* brings the body out, producing residues of flakes and sonic texture founded on the itch—dandruff as visual melody sprinkling from a scalp obsessively scratched. Or, another work of Migone's, *Crackers* exposes the body in all its uncanny detail. For the project, Migone recorded participants cracking their bones. Fingers, backs, knees, necks, shoulders, elbows, jaws, toes, and ankles form a symphony of timbral pops, textured volumes of skeletal architecture and sonic secrets, outlining "a kind of map of the internal … a lexicon of cracks, an endless vocabulary of tearing aparts."[16] As in *South Winds*, *Crackers* amplifies the buried lunacy of the body by making audible its animate presence, as hidden detail.

What falls from the body is given center stage: the fart festival of *South Winds*, the orchestra of bone cracks in *Crackers*, and the dandruff flakes in *Snow Storm*. What stands out in these works is a relational proximity reminiscent of Acconci's performance works where he aimed to stand too close or follow behind. These works usurped and redefined the situational geography of individual presence and others by undoing their convention. By standing too close, by following behind, by making intimate, as in *Seedbed*, that which should be left outside, to other spaces, Acconci remapped and engaged different conditions of relation. For

Christof Migone, *Snow Storm*, 2002. Photos courtesy of the artist.

Migone, the proximate means getting inside; the geographic means mapping not the body as object, but the body as parts—its joints, its farts, its dandruff. And the voice is more tongue, more exposure than invitation.

"The body is a noisy place. It emits and transmits, it cannot contain itself, it has no built-in muffler. Its only silencer is willed … the orchestral renderings of our innards are rarely appreciated for their musicality"[17]— musicality though not of compositional structuring but of decompositional destructuring—of farts and spits that leak and thus expose an orchestral rendering of corporeal detail. Nonspeech, or speaking the unspeakable, letting the unspeakable slip, flatulence, drool, stutter … instances of drips and leaks: a language of intimacy … of the close-up and the proximate, or the too-proximate, the insides of the innards, "the bud of the bud and the root of the root of the tree called life,"[18] though exposed as sonic detail, as microphonic spittle.

Radiophonic Dreamland—Fantasies of Geography

In tracking Migone's work, I am interested to extend my investigation of performance, in which the voice and its location form a complex mingling: of situational spaces and psychological uncertainties. In conflating voice with architecture, Acconci and Lucier reveal individual presence as contingent, *in process*, beyond the certainties of completion, phenomenological gestalt, and harmonic integration. The speaking subject makes explicit such a situation by exposing audible tensions.

Moving from the internal behaviors of individual bodies, to one-to-one relations, Migone further amplifies such tensions. Working at CKUT-FM in Montréal, Migone produced the show "Danger in Paradise" between 1987 and 1994. Through the program, he activated radio space by inserting participatory acts (Describe Yourself), telephonic relays (gridpubliclock, Body Map), linguistic and phonic games (Counting Meaning, Dangerous Spelling), and performative actions (Deliberate Inhaling). These projects "evoke the disrupted and degenerate inner voice that so disquietingly haunts our thoughts and our speech"[19] by defining radio as a field of performance: studio, electronics, microphones, broadcast and transmission, telephones and callers, the ether and its random points of contact and reception all feature as an elaborate, diffuse, and dizzying arena from which to create audio work. What results, in turn, is the staging of identity itself, or that "disrupted and degenerate inner voice," as in *Body Map*, where callers were asked to locate themselves on a map of Montréal superimposed with an image of a body:

> Caller 1: I'm calling from a pinched nerve just below the left shoulder blade. I think Montréal's muscles are a bit stiff.
>
> Caller 2: I'm calling from a lymph node. Actually, it's kind a embarrassing, lymph nodes are boring.

Caller 3: As I see it, the center of gravity for this body is right smack at the corner of St. Laurent and Crémazie.

Caller 4: Montréal has more than one mouth.[20]

Body on top of body, voice laid over city-body, so to corporealize the urban terrain with "pinched nerves" and "lymph nodes."

The radio voice is devoid of the body—disembodied, fragmented, immaterial, ethereal, psychic, without ground … caught in transmission, of loose threads and chuckles, the radio voice is erotic, granular, and strangely proximate: it speaks to strangers by locating itself in their private spaces. The radio voice moves beyond a single room: it is profoundly displaced, a stranger to itself without location, for it dissipates into its own chamber, echoing and trailing out without response. This speech does not return to itself, rather it remains out there, which may add to Connor's "first paradox," a second—that of the radiophonic, for the voice must endlessly leave itself, beyond the acoustic mirror, for it to confirm its presence. This though, for Migone, is catalyst for *using* radio, for it positions voices and bodies in unsettled relations, whereby "each broadcast takes place inside an echo chamber of information, histories, biographies, life stories …" resounding with "the most unnerving question of all, the ghost question: Who's there?"[21]

In another program, "gridpubliclock," Migone sought to unravel the ghost question by turning himself, as radio host, into an active body outside the frame of the station. Leaving the station, Migone would request people to call in and take over, acting as host while he left to walk the streets. Walking the city, he would then call in to the station and request further directions from the callers as to where to go: additional callers were asked to call in, adding further instructions to Migone's strange nocturnal journey by directing him through the city to various destinations. Using public telephone boxes, Migone was a traveler, a lost radio body without a home; he became not the originating voice trailing out into the echo chamber, but the echo coming back, returning to the original site, to state: "I, I am out here." He came to embody the siteless radio transmission by occupying random points on the map as a body directed by other voices: he became the acoustic mirror reflecting back, in schizophrenic excitation, his own transmission, adding a twist to Murray Schafer's call for a "phenomenological approach to broadcasting" where the "voice of the announcer be stilled" so as to "present situations as they occur."[22] In removing the host, erasing program with the world, allowing the situation to occur, what comes flooding in is a world punctuated with psychology, giving Schafer's "radical radio" a turn on the dial.

In yet another program, "Describe Yourself," Migone asked callers to do just that: describe themselves. Listening in, overhearing another's self-portrait as a string of adjectives, features of a featureless face, leads to the erasure so exemplary of radio and radiophonic space: that of removing presence, dispersing it—the body, the personality, the face—across a vague, haunting, and multiple terrain, that "fearful void of the universe, for such is the infinite space of radio."[23] That space defined by

Weiss, echoed by Gregory Whitehead when he says, "So radio is certainly most captivating as a place, but a place of constantly shifting borders and multiple identities, a no place where the living can dance with the dead, where voices can gather, mix, become something else, and then disappear into the night—degenerates in dreamland"[24]—that captivating space then performed by Migone: with other voices, of callers and their descriptions—of manic narratives and schizophrenic splits—and of geographic journeys, across the city and its dreamland.

The radiophonic dreamland occupied by ghosts, by the captivating punctuations of a siteless/sightless erotics, finds an alter ego in Matt Rogalsky's radio sampling. Developing original software that extracts gaps found in radio broadcasts, Rogalsky's "S" project eavesdropped on BBC 4 Radio over the course of one day (December 12, 2001, the one-hundred-year anniversary of the first radio transmission across the Atlantic), collating all the silences into twenty-four CDs. Such gaps though are never totally silent, containing instead the clicks, hums, scratches, and fizzes between, for example, words, bulletins, songs, or phone calls—in essence, radio as stream of transmission. Here, radio performs itself, Rogalsky as host to its mistakes, acting as shadow to radio's other software, that of Cash: technology used to filter out all the gaps and pauses before it reaches transmission, thereby increasing a station's advertising abilities. "Time is money" has found no better articulation. For Rogalsky, we might say "money is time," in so far as the artist cashes in on radio's leftovers, its aborted transmissions.

Rogalsky maps silence to trace its messages, as indicated by Whitehead's ghosts or Migone's bodies, outlining another mode of communication, that of the mistake, the break, the extract. He creates a kind of megaphone for all the voices found in radio dreamland—as in his *Perfect Imperfect*, where he mapped the silent spaces of Elveden Hall in Cambridge, UK, by shooting off a starter's pistol throughout the building's three floors. Recording the acoustics through stereo microphones and DAT (digital audio tape), the artist acoustically mapped the building, bringing to life all the buried reverberations of the historical site.

Beyond Dreamland

Where then does the speaking subject end up? How do we hear, in the sonic effluvium of amplified and modulated speech, across radio lines, the conditions of language? For in Migone's work, the speaking subject is no longer necessarily an identity, fixed by a set of characteristics, named or centered on the page or periphery of language, but a mobile and spasmodic sonics splattered across the field of meaning. Migone buries language to discover the nerve ending of the very drive *toward* orality: he inserts the microphone just a bit further down, connecting a circuit to the insides of that primary point of approaching utterance: by opening the phone lines to other voices, by generating radiophonic orality, by stimulating speech in and across identity, by problematizing the very ability to speak by stuffing the mouth, spitting up and out, slurping microphones and bracketing the body

to get at its micro-fissures and outpourings. What then comes out, on the other end of amplification, is not only sound or sense but also the materiality of a physical relation.

In contrast to Kristeva's semiotic belief that Modernist poetry performs a kind of rupture on the field of the symbolic, making an opening onto a periphery of meaning, thereby "revolutionizing" the subject and its integration into social norms, Migone's work seems to perform the failure of not only language but the semiotic potential of peripheral meaning: meaning never recovers itself, solidifying into lexicon. Rather, the speaking subject remains just that: a subject bound to "grapple with the very fact of speech itself."[25] Such grappling parallels what I see in Acconci's and Lucier's works, for each probes the complications of the here and now that the voice (and the body) seems to assume by mobilizing a psychic tension in which the voice speaks its inherent incompletion: Acconci by staging his own pathos, fixating on a self-absorbed desire; Lucier by speaking his stutter into a form of architectural-musicality, making it object through an act of recording, which necessarily eliminates his presence; and finally, with Migone, through his use of an orality that never arrives at sense but falls back upon itself, swallows itself, revealed in somatic ticks, agitated tongues, and vocal noise. He turns farts and dandruff into articulations by making language corporeal, and corporeality integral to speech. Such a move adds to or supplements the heterogeneity of Kristeva's signifying practices by sticking a microphone up his ass, into faces, and against joints, by tuning the radio dial onto geographic space, nocturnal streets haunted by "degenerate voices," the nowhere of radio-land.

Whereas Lucier softens his stutter, by creating a fusion between himself and architecture, Migone accentuates it by forcing it out, as an unresolved intensity; whereas Lucier harmonizes, in a phenomenological fusion, Migone disrupts through corporeal abuse. Each, in marking the voice onto recording media, through processes of performance, occupy the phantasmic spectrum defined by recording technology: Lucier's narcissistic recuperation of himself as fused with the world, inside a nostalgia for the imagined possibility of perfect speech, brings the speaking subject into an erotic commingling with architecture—Lucier sitting in his room realizes his fantasy through unification with recording processes; on the other side, Migone's suppressed utterances, his *performing the voice*, his farts and cracks, break apart any semblance of unity through a glottal orality that can never be recuperated by language: Migone speaks through farts and dandruff. It is my view that each, in turn—and Acconci's speech produced through performative tensions—contributes to an expansion of sound's presence by unearthing and embodying the difficulties of being in the here and now.

Contextual

I have been pursuing the voice here for a number of reasons: to follow an investigation of art as it develops throughout the 1960s and into the 1970s and how

sound figures in such history, and to uncover an expanded vocabulary of the ways in which sound is relational, through modes of spatiality. Performance art offers a challenge to the developments of Minimalism by explicitly complicating the phenomenological imperative so alive in sculptural installation work, as well as Minimalist music. It does so by, among other things, using the voice as a means to stage the body and the tensions of experience—that is, to incorporate the specifics, rather than the generalizations, of the self, as the locus of perception and experience, within an aesthetic palette. Just as sound is used to get at the heart of perception, as in the work of Fluxus, the voice is used to get at the heart of the body.

I understand the early works of Acconci and Lucier as figuring in relation to historical developments of the time, namely in the wake of Conceptual art in the late 1960s. For Conceptual art, like Minimalism, shifts attention away from the singular object as a totality in itself and instead looks toward the very spaces, information, and conditions surrounding the object, how the art object is an amalgamation of forms and their functions condensed into a temporal and spatial moment: when we look at the art object, what we see is not so much its form but the situational parameters surrounding it and the structures that make its very presence possible. This is necessarily phenomenological—what I perceive is a set of relationships that determine perception—and importantly, for Conceptual art, political—what I witness is a situation determined by an ideological, cultural apparatus. Following the works here, we might add the buried and difficult psychologies of subjective narratives and their subsequent social tensions.

Such operations can be understood in relation to the developments of postmodernism and its theoretical frameworks, for postmodernity's general debunking of the mythologies surrounding the artist, in turn, figures in poststructuralism's ontological questioning of the state of the subject. Thus, Kristeva's intersecting of social and political ideas with psychoanalytic theory gives fuel to the unconscious as a reservoir for "poetic revolutions" while maintaining a relation to the very structures (of language) such poetics aim to explode. Conceptual art makes possible, by ruling out subjective expression as unquestionably a route to freedom, the reassertion of a corporeal intensity, exemplified in Acconci and the performative surge of the late 1960s.

Conceptual art, as well as the environment of the 1960s and 1970s in general, makes self-conscious the speaking subject by distrusting the excess of presence, its fevers and flows, for such corporeal excess was seen to only reinstate the hegemony of the social order. The deadpan intellectualism of Conceptualism thus replaces the heroic splatterer of paint with the philosophical imperative to interrogate the conditions of meaning; its serial and geometric fabrications dilute the spontaneity of intuitive making; the ephemeral trace and dematerialized object empties out the potential of forms to grant access to a stable signified, insisting instead on the ever-shifting terms of knowing; and the innocence of spatial constructs to simply house and give space to the viewing subject is challenged by critical

appraisal of the very conditions of institutions and architectures. Thus, on every front, Conceptualism and its related strands usurp the plenitude of Modern art, as both formalistic process and revolutionary trickery. Yet, this is not to overlook that such modern heroics does find its place within artistic practices of the 1960s; it could be said to simply shift its register, remake itself, and cast an altogether different glow. Within this glow, one can glimpse a longing for certainty: on the conditions of subjectivity, the assurance of presence, and the relational possibility of incorporation. Thus, Acconci's staging of the male condition is tenuously tied to its own volatile sense of transcendence, as figured in the spectrum of desire and fear in the face of the other; and Lucier's generative articulations of his own speaking voice as a kind of material presence reinforcing itself. To adopt the voice, as a sonic register of the body, and the fevers of presence positions the individual as not only an object of attention, but as a process in action. To follow Acconci and Lucier leads us to the subject *on trial/in process*, not as a cathartic release of heroic potential, but as a body searching its own limitations; not as stable object to be seen, but rather as a performing sound to be heard, for sound, by nature, is always *in process*.

I would like to refer back to the work of John Cage, as well as the work of Fluxus and Minimalism, to attempt to stage an intersection of two opposing views of sound and its acoustical potential. On the one hand, the movements away from musical representation and the arguments of musical messages and toward the phenomenal complexities of the sound world, from found sound to micro-tonal frequencies, led to a reliance upon the sound object and source by emphasizing the origin from which sound originates: Cage's and Fluxus's projects are theatrical presentations of material processes that generate sounds as by-products: music as open form. Yet, the presence of sound, and the belief in the possibility of its immediacy to lead us to "real" experience, brings with it the problematics of social reality: Cage's extravagant confusion draws in the particulars of sonic viewpoint, and the aesthetic gags of Fluxus refer us to an intensity of real materials and real effects. The interest in the real is given concrete form in Minimalist aesthetics of both music and sculpture, which makes the viewer and listener complicit within the making of a work's meaning: meaning derives not from the object alone, but at the moment of its apprehension and appreciation. Yet, the relational consideration of listener or viewer within a particular space brings with it the sense that such things are stable references: space is a given architectural fixture and the listening subject, a figure moving around whose sensual experience results in immersion and plenitude: La Monte Young's Dream House of sonic excess that bathes the listener inside a space of vibratory bliss. What marks this move is a general distrust of language: Cage's "letting sounds be themselves" moves from meta-description to material insistence; the Fluxus project plays games with language to arrive at

immediate presence; and Minimalism, while discursively active, remains resolutely bound to corporeal experience.

In contrast to this listening experience, I've wanted to pursue the other side of the spectrum by addressing the work of Acconci, Lucier, and Migone, where sound fails to complete the subject, fails to deliver up a plenitude of listening, and instead reveals the intensities of the body as caught between language and its fluidity, between symbolic values and semiotic rushes, between plenitude and deflation. Their works seem to aim not for escape, from language and its inherent social structure, but instead leap into the messy performativity of speaking as a subject. From here, descriptions of sound must contain not only the field of erotic hearing, or corporeal plenitude, of liberated listening, but also the emptying out of presence, a death initiated by the expenditures of the voice.

What these artists enact is their own negotiation with subjectivity as housed within social and architectural environments: Acconci amplifies his state of lack through performing desire and fear, in and against spaces and other people; Lucier's *I am sitting in a room* accentuates subjective experience as inherently *in process*—the compounding of his voice, through recording and rerecording, while opening up the possibility of pure speech, in turn, reveals this as pure fantasy; and Migone's microphonic vocalizations leave language behind by adding too much body, too much spittle and the fine hairs of utterance. Following Kristeva, each artist registers the subject "on trial," caught in the mechanics of language, in the gears of the symbolic and its peripheries. The voice here hints at possible "revolution" while reinforcing the impossibility of fulfillment.

Following the voice, as a performative operation in Performance art, musical composition, and audio art, has led to a recognition that the power of sound, and its ontological status, may be found in its ability to allow for a possible representation of the edges of corporeal presence, where the individual may remain beyond recuperation or liberation. To follow the performing voice points toward the broader possibility of sound as a medium for the negotiation of social and psychological pressures, without arriving at resolution, but rather allowing one to remain in and against the network of psychic intensities that relies upon language while straddling its periphery.

Notes

1. Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (London and New York: Routledge, 1999), p. 148.

2. Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), p. 7.

3. Allen S. Weiss, *Breathless: Sound Recording, Disembodiment, and the Transformation of Lyrical Nostalgia* (Middletown, CT: Wesleyan University Press, 2002), p. 83.

4. Julia Kristeva, *Revolution in Poetic Language*, trans. Margaret Waller (New York: Columbia University Press, 1984), p. 17.

5. Christof Migone, "Untitled Performance," in *Writing Aloud: The Sonics of Language*, eds. Brandon LaBelle and Christof Migone (Los Angeles: Errant Bodies Press, 2001), p. 165.

6. Henri Chopin, "Open Letter to Aphonic Musicians (I)," from liner notes to *OU – Cinquième Saison* (Milan: Alga Marghen, 2003), p. 35.

7. Ibid.

8. Christof Migone, "Untitled Performance," in *Writing Aloud: The Sonics of Language*, p. 174.

9. Ibid., p. 167.

10. Paul Valéry, quoted in Allen S. Weiss, *Breathless*, p. 78.

11. Christof Migone, "hold, still," a performance text, 2001, provided by the artist.

12. Christof Migone, in conversation with the author, 2004.

13. Ibid.

14. Ibid.

15. Allen S. Weiss, *Breathless*, p. 80.

16. Christof Migone, "Crackers," in *Site of Sound: Of Architecture and the Ear*, eds. Brandon LaBelle and Steve Roden (Los Angeles: Errant Bodies Press, 1999), pp. 91–92.

17. Christof Migone, artist statement on the project *South Winds*, 2003, provided by the artist.

18. E.E. Cummings, untitled poem, from *Selected Poems 1923–1958* (London: Faber and Faber, 1997), p. 115.

19. Allen S. Weiss, liner notes to Christof Migone's CD *Hole in the Head* (Quebec: OHM/ Avatar, 1996).

20. Excerpt from the Body Map radio program, a live radio performance in which a reclining body is superimposed on the island of Montréal. People called in to find out where they lived in this city-body. Statement provided by the artist.

21. Gregory Whitehead, "Radio Play Is No Place," in *Experimental Sound and Radio*, ed. Allen S. Weiss (Cambridge, MA: The MIT Press, 2001), p. 89.

22. R. Murray Schafer, "Radical Radio," in *Sound by Artists*, ed. Dan Lander and Micah Lexier (Toronto and Banff: Art Metropole and Walter Phillips Gallery, 1990), p. 214.

23. Allen S. Weiss, *Phantasmic Radio* (Durham, NC: Duke University Press, 1995), p. 99.

24. Gregory Whitehead, "Radio Play Is No Place," in *Experimental Sound and Radio*, p. 89.

25. Migone's interest in "grappling with the fact of speech" provides an insightful glimpse into his work, for it remains bound to the fact, rather than idealizing a possible alternative. In an unpublished interview from 2002, Migone stated: "… it just makes sense to people that our lives often don't make sense at the same time as they do make sense—we go back and forth between being elated one second to being totally depressed the next and all these sorts of movements from positive to negative—what is fascinating is not strictly the opposites but all the in-betweens." The "in-betweens" and the oscillations back and forth, across opposites, resound with what I am underscoring, that is, to speak and perform through the tensions at the heart of being a body.

Public Supply: Buildings, Constructions, and Locational Listening

Aural phenomena are much more characteristically vectorized in time, with an irreversible beginning, middle and end, than are visual phenomena.[1]

—Michel Chion

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'm not interested in making music exclusively for musicians or musically initiated audiences. I am interested in making music for people.[2]

—Max Neuhaus

Introduction to Part 4

Public Supply: Buildings, Constructions, and Locational Listening

To speak about architecture and sound is to confront a complex situation, for the acoustical possibility of space amplifying, cutting off, or affecting the experience of sound has seen its articulation in a history of "acoustic architectures," from concert halls, cathedrals, and cinema houses to sound studios and recording facilities.[3] The science of acoustics mathematically charts out the potential for creating sound spaces for the experience of listening through construction, proportional exactness, and usage of various materials; in turn, such science may decrease, block out, or thwart sound's physical presence by deadening reverberation and diffusing vibration. In this way, acoustical experience is always embedded in the conversation of sound and space, as a reciprocal exchange, for sounds are positioned within given spatialities and are thus affected by their materiality, their relation to other spaces, and the general environmental geography. Such effects flow in reverse, for space is partially given definition by the acoustical presence of environmental sounds, whether outside the given space or within, from a space's own internal infrastructural workings, such as the hum of air-conditioning and ventilation or lighting systems.

The sound-space interplay is inherently conversational in so far as one speaks to the other—when sounds occur, they are partially formed by their spatial counterpart, and spatial experience is given character by the eccentricities of sound events. This conversational interaction has not gone unnoticed by practitioners, from composers to artists to performers to architects, from Greek amphitheaters to medieval churches, Renaissance cathedrals to recent concert halls, as in the Tokyo Opera City hall designed by Takahiko Yanagisawa[4] or the Jean Nouvel concert hall in Copenhagen, both of which utilized advanced technologies in determining acoustical fidelity. While acoustics offers insight into the relational exchange occurring between sound and space, it does so by often remaining "true" to the sound

source, in terms of fidelity, or by controlling the more idiosyncratic moments of sound's emanation and ultimate trajectory.[5] Such idiosyncrasies are, in fact, what I am seeking here. It is my intention to engage such interaction by addressing the development of sound installation. To move from the making of a musical object or work to the construction of environmentally and architecturally active "music" entails a shift in compositional and performative approach, for such work incorporates the complexity of acoustical events informed by the presence of a broader set of terms. Sound installation seeks the acoustical conversation so as to chart out new spatial coordinates, to stage relational intensities that often threaten architecture and bodies, and to network spaces with other locations, proximate and distant. The locational intensities charted out by Acconci and Lucier lead out toward a broader social architectural environment cultivated overtly in sound installation, outside the confines of single rooms, staircases, and galleries.

Beyond acoustical interplay, sound and architecture bring to the fore different sets of terms that oscillate between aurality and visuality, and their differences. Architectural understanding and practice may be seen to operate through a general emphasis on visuality: the rendering of architectural drawings, the continual demand for visual information, the plethora of graphic information architecture generates, amplified in digital software, and the ultimate construction of fixed forms and stable objects, all governed by the logic of sightlines, visuality, and material texture. Architecture is a sophisticated graphic practice.[6] In contrast, sound operates through zones of intensity, ephemeral events, immersive and noisy, vibrating through walls, from under floors, from bodies. It operates according to a different notion of borders and perspective—it is unfixed, ethereal, evanescent, and vibratory; whereas architecture is fixed, drawn, charted out, and built. To bring sound into play as an architectural material or experience thus partially counters the inherent dynamic of building, lending to space and the architectural imagination an element of the experiential and sensual immediacy.

While we may underscore such relations as oppositional or dichotomous, the project of sound installation, and sound art in general, stages the integration of the sonic with the built, nurturing mutuality between sound and space, which at times must also be heard as argumentative, antagonistic, and problematic. Sound installation activates this intersection, intervening within architectural spaces and making sonic additions. Thus, we locate our listening within a spatial scene, drawing the architectural experience into an investigation of acoustical space.

Sonic Geographies

It has been my intention to chart out an historical overview of sound's development as an artistic medium and its particular relation to location and modes of spatiality, so as to uncover sound art's relational dynamic. In order to do so, I have attempted to continually juxtapose artists with composers, thereby highlighting the often underrepresented crossover between the visual arts and the sonic arts.

As has been discussed, from the early 1950s through to the 1970s, sound played an integral part in visual and musical practices, expanding the disciplines of music composition, art installation, and performance practices by utilizing the intensities of aurality, from language and speech, recorded sound, and spatial noise to amplified and acoustic events, within space and inside the ear. With the development of Installation art in the late 1960s and early 1970s, sound is further defined as a spatial and environmental element through sound installation (as already seen in the work of Michael Asher). Sound installation positions a listener inside a complex space defined by a general relation of the found and the constructed. The appropriation of found sound, and its location, in the making of music, as can be heard in Cage's work, from the late 1940s, and through Fluxus, which sought the everyday as place of artistic experience, can be distinguished from sound installation as it firmly moves away from the time of sound and toward its spatial location. Or, more accurately, it frees up sound's durational performance to emphasize spatial and environmental conditions. It leads a listener toward the everyday, not by staging a happening but by insinuating itself into the found, so as to heighten spatial perception, bridging music/aurality with questions of site-specificity, exemplified in the works of Max Neuhaus, whose inauguration of sound installation incites an integration of the visual and sonic arts.

The developments of sound installation provide a heightened articulation of sound to perform as an artistic medium, making explicit "sound art" as a unique and identifiable practice. In bridging the visual arts with the sonic arts, creating an interdisciplinary practice, sound art fosters the cultivation of sonic materiality in relation to the conceptualization of auditory potentiality. While at times incorporating, referring to, or drawing upon materials, ideas, and concerns outside of sound *per se*, sound art nonetheless seems to position such things in relation to aurality, the processes and promises of audition, and sonic culture. Such potentiality must be glimpsed in the ways in which sound transgresses the hierarchy of the senses, seeking the dramas of the aural to make objects, create narrative, amplify or unsettle meaning, and invade space. Overlapping and at times drawing from musical culture, the practice of sound art pursues more active relations to spatial presentations, durational structures beyond the concert experience, and within more general public environments that often engage other media, inciting the auditory imagination.[7]

Sound installation arises out of the general historical moment in which Installation art gains definition. Though what it adds to such work is the legacy of experimental music and its performative vocabularies, developed by Fluxus and Minimalism. Often credited to Neuhaus,[8] sound installation brings together sound and space in a provocative and stimulating manner, often appropriating architectural elements and construction, social events, environmental noise, and acoustical dynamics, in and out of the gallery, while drawing upon musical understanding. In this way, sound installation replaces the insular domain of musical performance with spatial geographies, the investigations of electronic systems

(which Neuhaus was well-aware of) and their subsequent noises[9] with the conditions of urban space and its planning, positioning a listener inside a greater geographic field.

In conjunction with the work of Max Neuhaus, artists such as Maryanne Amacher, Michael Brewster, and Bernhard Leitner lend further definition to the field of sound installation, each pursuing sound's dialogue with architecture, spatiality, and environmental situations in more depth. Such artistic work finds a unique echo in the more overt architectural projects developed by the composer Iannis Xenakis. By following their works, it is my intent to locate sound's architectural features. While their works arise from within distinct geographic and cultural settings, each contributes to the argument that sound and places are inherently conversational, reciprocally conducive, and actively integrated as a potential sounding instrument. Sound installation thus furthers the relational dynamic of sound by wedding it more firmly to a spatial operation that necessarily extends out, beyond walls and the limits of buildings, while delving further inward, toward the proximity of the skin and the inner soundscape of the mind.

Notes

1. Michel Chion, *Audio-Vision*, trans. Claudia Gorbman (New York: Columbia University Press, 1994), p. 19.

2. Max Neuhaus, *Max Neuhaus: inscription, sound works vol. 1* (Ostfildern, Germany: Cantz Verlag, 1994), p. 34.

3. For an important study of early and modern developments of acoustic architectures, see Emily Thompson, *The Soundscapes of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900–1933* (Cambridge, MA: The MIT Press, 2002) and *Soundspace: Architecture for Sound and Vision*, ed. Peter Grueneisen (Basel: Birkhäuser, 2003).

4. James Glanz, "Art + Physics = Beautiful Music," in *The New York Times* (18 April 2000).

5. With this in mind, it is important to highlight a few examples in which sound and its spatial architecture create opportunities for exploring the dramas of their exchange. IRCAM, in Paris, and built in 1973, contains a sound studio purposefully designed for spatial definition of sound: sound diffusion through multiple speaker system, and modulated baffles for attenuating and "sculpting" sound, the studio allows for the manipulation of sound through acoustic positioning. In conjunction with IRCAM, the newly opened SARC, at Queen's University in Belfast, allows for creative and scientific sound manipulation and creation through its sonic laboratory that contain movable acoustic wall panels, flexible ceiling panels that position overhead speaker systems at various heights, and the transmission of audio from below the floor. Another recent acoustic project is Arup's SoundLab, which allows for acoustic testing for architectural projects. The SoundLab essentially enables a client to actually listen to the acoustic space before it's been built: through computer modeling and sound distribution, through a twelve-speaker system, a series of "sound scenarios" can be presented in the Lab, from cocktail parties to concerts, enabling adjustments to be made.

6. In a lecture given at the Bartlett School of Architecture in 2001, Mark Wigley suggested that architects are experts in the field of "typography" because of their understanding of graphic marks to signify and convey meaning.

7. While sound art has taken a definitive surge in cultural attention in the last five years, I want to underscore that such entrance occurs tentatively and ambivalently. For it seems sound art continues to hold an unsettled place within artistic institutions, which could be said to unearth the impasse between an overtly "visual" institutional structure with an intensely "sonic" medium. Bernd Schulz (curator from the Stadtgalerie Saarbrücken in Germany, whose program of sound art exhibitions started in 1985) provides an interesting observation when he says: "The inexpressibility and cognitive impenetrability of the phenomenal experience make it difficult to secure for sound art the place it deserves in the art world." (See Bernd Schulz, Introduction to the exhibition catalog *Resonances: Aspects of Sound Art* [Heidelberg, Germany: Kehrer Verlag, 2002], p. 15.) Attributing this to both technical needs required to set up sound work, along with a general mistrust in the media intrusion of sound and musical vocabulary into the museum setting, Schulz points out an ongoing question as to sound's presence within visual art institutions. This is further echoed in what curator Christine van Assche identifies as a "museological" problem, that of exhibition architecture built to accommodate sound art. (See Christina van Assche, "Sonic Process: A New Geography of Sound," in *Sonic Process* [Barcelona: ACTAR, 2002], p. 5.) That van Assche has found a solution in the architecture of the "sound studio" as the optimum spatial configuration to which the museum should turn in presenting sound art (as realized in "Sonic Process," which van Assche curated for the Pompidou Centre in 2002) does not so much resolve the issue as skirt its persistence. While the darkened and isolated sound studio may overcome certain problems by lessening interference and sound bleed between respective sound works, it falls short in fostering the full dimensionality of sound art as a complex, rich, and dynamic practice to which interference itself bespeaks.

8. While it is not my interest to argue who did what first, I do want to highlight that sound installation as a production finds earlier incarnations in the work of Yasunao Tone (discussed as part of Group Ongaku in Chapter 3): his project for the Yomiuri Independent Salon in 1962 (a group exhibition related to the early days of Fluxus) at the Minami Gallery in Tokyo consisted of a tape recorder with a mechanical loop device that played a continuous, recorded sound from under a crumpled sheet of white cloth.

9. Neuhaus's work with percussion led him to engage more acutely with electronics as a means to extend the instrument. Between 1964 and 1968, he toured the United States and Europe performing a version of Cage's *Fontana Mix*. Coined *Fontana Mix – Feed*, Neuhaus realized Cage's work by creating acoustic feedback loops through kettle drums: by placing the drum between a loudspeaker and a contact microphone, turning up the volume on the microphone, and controlling the subsequent loop of feedback, Neuhaus was able to mix four channels of feedback into an orchestra of shrilling, piercing, and surprisingly tonal work. See Max Neuhaus, *Fontana Mix – Feed*, Audio CD (Milan: Alga Marghen, 2003).

Chapter 10

Tuning Space: Max Neuhaus and Site-Specific Sound

Like the composer La Monte Young, Max Neuhaus rigorously constructs sound experiences by working with the specifics of a given space or location and the tuning of frequency: audibility becomes inconceivable outside the functioning qualities of architectures and the particulars of a given place. Whereas Young seeks the intensity of frequency and psychoacoustics through just-intonation, Neuhaus aims for a tuning of sound and place as an expanded instrument.

Working as an established percussionist throughout the 1960s, Neuhaus shifted his practice to more artistic modes after confronting what he saw as an "inadequacy" in the traditions of musical presentation. Rather than situate the musical moment within a concert hall, determined by conventions of the proscenium stage and directed by the musical argument, Neuhaus sought to reach for a more public realm in which the experience of sound might surprise perception:

> The impetus for my first sound installation [*Drive In Music*, 1967] was an interest in working with a public at large. Inserting works into their daily domain in such a way that people could find them in their own time and on their own terms. Disguising them within their environments in such a way that people discovered them for themselves and took possession of them, led by their curiosity into listening.[1]

The move from the concert hall and its overdetermined conventions to the "public at large" articulates an underlying move from "music" to "sound," a process already initiated in the works of Cage and others. What distinguishes Neuhaus though is the construction of the sound material and its ultimate positioning. For Neuhaus, the "public at large" meant that strategies for making and positioning sounds needed to take on more "public" processes, thereby expanding the aesthetical and philosophical frame in which sounds may enter and exit. Echoing some of

Cage's concerns for shattering the musical object with ordinary sound, Neuhaus positions such ethics within a bolder public position by seeking the uninitiated, in the time of their movements, within the spaces of the everyday.

Drive In Music and *Public Supply*

Following Neuhaus, sound installation is founded upon the idea of making a sound work more public, or rather, making the experimental strand of musical practice susceptible to a different set of conditions and questions.[2] To consider the public at large is to announce both a frustration with certain cultural parameters within one sphere and a belief in a possibility exposed by another. Such a possibility for Neuhaus exists outside of a territory defined by his own musical education and tradition, however experimental, and inside a larger set of terms given currency within the domain of the visual arts. For the visual arts and, in particular, its cultural atmosphere around New York in the 1960s, makes explicit modes of addressing a public, producing objects and events in conversation with bodies and spaces, thereby undoing the art object for a more integrated and live experience.

Drive In Music, from 1967, is considered Neuhaus's first sound installation.[3] Situated on Lincoln Parkway in Buffalo, New York, the installation consisted of a series of seven radio transmitters located intermittently along a half-mile stretch of the roadway. Each transmitter broadcast a particular sound, thereby defining a particular area or zone of the roadway by giving it its own sonic signature. Listeners could hear the work while driving down the roadway, tuning into the specific radio frequency, each sound mixing and overlapping as one drove through one zone and into the next. *Drive In Music* existed in the ether, as material picked up by an individual car radio and mixed by the driver's speed, location, and trajectory. In addition, weather conditions played a crucial factor in the experience and given sound mix, according to the particulars of any given day. "Depending on which direction a driver entered the piece, how far to the left or right side of the road he was, how fast he moved through it, and what the weather conditions were, the work was different. He assembled it for himself as he passed through it and for himself only."[4] Thus, the presentation of a sound work had to contend with an increased set of conditions determined and made explicit by that space of the public. In this regard, Neuhaus invited an audience or listener to claim the work for him or herself, "where the shifting location was suddenly enhanced to become one's very own musical performance."[5] Directed by invitation,[6] an audience comes to play a part in the work's operations—here, listening, driving, and the weather conditions activate and partially determine the final outcome.

In dispersing the art/sound object across radio frequency broadcast from multiple transmitters, the work activates a geographic area infused with the uncertain patterns of weather and a visitor's own decisions. Such a far-reaching

work is indicative of Neuhaus's approach and, in turn, contributes to the legacy of sound installation as a practice by charting out this expansive potential. Such a shift radically explodes the confines of Minimalist sculpture and music, and how the perceptual exchange of object and viewer is sought. Whereas Minimalism houses a body and an object within a neutral space, focusing on the optical and acoustical properties of perception, Neuhaus's sound installation mixes such terms into a partially uncontrollable situation, unsettling perception by introducing greater input.

In a similar fashion, his *Public Supply I*, from 1966, dramatizes the degree to which Neuhaus sought out the public at large:

> We installed ten telephones at the radio station, and I built a kind of switching/mixing system and semi-automatic answering system. You've got to remember there were no telephone answering machines in 1966, and live call-in shows didn't exist. The only answering machines around were huge things that the telephone company had. So there was nothing to draw on. The system for answering the calls was incredibly simple. There was a lever that went under the receiver, and as the phone rang the thing lifted up the receiver. There was a plastic cup with a small speaker in it over the microphone. There was also a microphone in a cup over the earpiece; this sent the sounds of the incoming call into the mixer. All these phones were sitting on the floor popping up and popping down![7]

Developed and presented at WBAI in New York, *Public Supply I* set in motion a process by which the public contributed sonic material, with callers calling in, sending sounds over the telephone lines, Neuhaus mixing and controlling the incoming calls, creating combinations of sounds, feedback loops, and soundscapes of textures and noise, the work connected people from around the city, forming a spontaneous orchestra, for "people heard the sound that they were making but also the other people [through their own radio] that were combined with them. At that moment it became a group activity—a process of people making sound together, listening to it, and adjusting what they did according to what was going on. I think this is the heart of the musical process—this dialogue."[8]

Making Connections—Music as Dialogue

Musical process as dialogue, sound work as public participation, composition as the orchestration of environmental conditions, Neuhaus's work from the late 1960s can be heard to extend a process initiated by Cage, and furthered by Fluxus and experimental music's concern for the extra-musical, and the relational dynamic of Minimalism. Yet, what Neuhaus adds and makes explicit is the degree to which the extra-musical, and listening as act, must find new contexts in which to operate. With Neuhaus, the extra-musical is no longer "extra," for it operates outside the musical terrain to which the extra is but a supplement.

Rather, Neuhaus seeks the specificity of sound through its situatedness, directing the ear to the found not by pointing it out as necessarily musical, or by housing it within a controlled cultural context, but by modulating its volume, shifting the proximate with the distant, the visible with the invisible. Thus, sound is never an extra-musical addition but more a perceptual and spatial event infused with urban space, environmental conditions, traffic and driving, phone calls and their radiophonic orchestration.

The dialogue he refers to is a doubling up, an answering back and forth, a returning of the found transformed, as a concert of disparate elements. Such dialogue is further developed throughout later works. Installed on a traffic island between Forty-fifth and Forty-sixth Streets, and Broadway and Seventh Avenue in Manhattan, his legendary *Times Square* installation is technically located under the traffic island, inside the subway tunnel beneath. A large loudspeaker mounted below emanates a deep resonating drone, like a ventilation hum or some mysterious mechanical object.[9] Sonically, the work converses with the existing sound environment to bring it into relief:

> From the grillwork in a small concrete island set between complex currents of traffic an equally complex set of tonalities flows. It is adjusted to compete with the harshness of the aural environment—that is, to make itself heard—and at the same time to comment on its setting, to accent the sound of traffic, to question it, and to shift the nature of its comments as one moves about in the vicinity of the piece.[10]

Neuhaus's site-specific sounds thus begin with the found, by drawing upon its inherent characteristics: tonal sonority, reverberant and resonant space, the sociality of environments, and the ebb and flow of amplitude. Each element adds to an observable environment, building up character through their intensities, their presence and impact on perception, over the course of time.

As an artist, Neuhaus "enhances an aural situation in such a manner that the change is almost imperceptible to listeners accustomed to its sounds, thus making the perception of a space, an environment, a location with its specific features a conscious act."[11] By sculpting aural experience, Neuhaus's work raises aurality as an issue bound to the specifics of place and location. What are the limits and measurements of the aural environment, and how am I situated within it? How do I add or subtract from the topographical evolution of the audible environment? What is my role in perceiving sound and how do such sounds define place? Thus, in dispersing a sound work across a much greater geography, in seemingly unbounded fashion, Neuhaus, in turn, fixes sound to its spot: in its unbounded intermixing, between source and environment, sound is wrapped within certain limits, fixed to particular locations, proximate to a given found soundscape, whether a particular bandwidth in *Public Supply*, a roadway in *Drive In Music*, or a traffic island in *Times Square*.

Such operations are furthered in his installation *Time Piece*, exhibited at the Whitney Museum in 1983. *Time Piece* reiterates the artist's general involvement with existing environments and their aural life, but this time by reflecting back, through a process of transformation, found sound. *Time Piece* was installed in the front sunken sculpture garden at the Museum, on Madison Avenue in New York. Working with live microphones placed facing the Avenue, the work appropriated these sounds and fed them through a series of computers, which then generated a transformed reproduction: the pitch of sounds was altered, and their location within the present was shifted by delaying their transmission. Thus, the audible environment was given an additional layer that altered its existing tonal range and real-time relay. In addition, the work was structured to run through a twenty-minute cycle, beginning with total silence, slowly rising in volume, until finally reaching the level of the given environment, then suddenly disappearing into silence, only to start again. The twenty-minute cycle directed attention through both an addition and subtraction: we begin with silence, then increase the additional sonorous layer, only to remove it in a way so as to heighten consciousness of what is already there.

Listening

Neuhaus, in aiming for a spatialization of sound, draws out a listening experience by underscoring what Pauline Oliveros refers to as "listening to listening": "When I discovered that hearing is not necessarily listening I began to listen to my listening. As ways of listening unfold I feel an expansion of possibilities."[12] Referring to her own musical development, Oliveros points out a distinction between listening and hearing that features throughout forms of sound practice. Listening and hearing as separate modes of perceiving, of being attentive to sound, oscillate across levels of consciousness, echoing Roland Barthes's proposal that hearing is a physiological condition, whereas listening is a psychological act.[13] As a psychological act, listening is decisive; it expands outward and draws inward by attentively incorporating surrounding environments and their audibility into the folds of consciousness. Oliveros's "deep listening" remains open and sensitive to the "field of sound," for "listening … means that it is possible to focus at any time in any direction.… "[14] Concentrating on this field of sound creates a heightened involvement with a given environment, as a means of cartographically locating sounds, their possible sources, and their meanings, not entirely as communicable message, but as an environmental condition. "Through listening, a development unfolds that seems both open and enigmatic: a development of relationships that become knitted together into an ever increasing involvement."[15] Listening thus sparks understanding by remaining open, susceptible, attuned to things outside oneself. In creating possibilities, listening weaves self and surrounding into sympathy, or what Oliveros calls "inclusive listening," where "many places at once are treated as one rather than many."[16]

Deep listening, which I take as that point when listening attends to the whole field of sound, as a partner in the unfolding of time and space, acting upon and being acted upon in a mutual intensity, underscores a relation to sound and its inherent situatedness through the lens of time. For sound and space, in being wed in acoustical and environmental dynamics, activate time by inaugurating inclusive listening: listening follows events through a sonorous unfolding. Inclusive listening embraces sound as a perceptual link to a broader sense of awareness by a process of "listening to my listening." What one, then, listens to is not so much the space of listening, the ambient noise and the performative sound one is also making, but the time of one's own listening: to attend to sound is to temporally live the passing of its sonorous flow, its repetition over the course of time, the unfurling of cycles of audibility, daily, seasonally, and other.

To "make the perception of space a conscious act" is to not only subscribe to a certain phenomenological observation or analysis but, in turn, to articulate, through cultural practice, a "politics." While Oliveros's "inclusive listening" gently positions itself in balance with surrounding environments, it nonetheless hints at an underlying potentiality found in relational dynamic fostered by such conscious acts of listening. For listening, as instances of both surveillance and investigation work reveals, may, in turn, uncover a range of possibilities in which truth shifts from the environmental to the political. To hear "many places at once as one rather than many" is to piece together multiple threads of information, assembling narrative out of disparate elements, lending significance to the relational and associative connections found between the many. Inclusive listening, from this perspective, may charge the environment with a sensitive ear that while identifying harmonious possibility may also eavesdrop on forces operating against it.

Neuhaus's concern for the public at large, and the breadth of public space, in all its humming and vibrating and resonating, insinuates listening into a field of cultural politics where sound and space intermesh in the fabrication of urban conditions, the sociality of the built environment, and artistic practice converse. I raise the issue of a politics of listening with the intention of problematizing a certain criticism that keeps Neuhaus within a purely "aesthetic" domain, that is, as pure form directed at the senses. While this is certainly a dynamic and poignant aspect of Neuhaus's work, it is not the only operation or current moving through his projects. For what, in turn, marks Neuhaus as an interesting artist are the multiplicity of crosscurrents that pull in the facticity of space and place through aurality and its materiality. Neuhaus's installation works are contextually specific, appropriating a given spatial situation and turning it inside out, revealing its properties through invigorating perception. Such invigoration though is not without its tension, for to appropriate found space, amplify environmental sounds, and assert sound into the public realm brings with it a critical perspective. Such perspective finds articulation in a form of modulating the built environment—reflecting back, recording, and transforming, shifting perspective and

turning environments into instruments, of performance and audition, Neuhaus creates audible commentary on how public space is conceived. Such perspective may be glimpsed more fully in his ongoing interest and work with warning signals for emergency vehicles.

His Siren Project, developed initially in 1978 and partially realized in 1989, aims to redesign the warning signal of emergency vehicles. Having recognized that the warning signals of police cars, for example, often traumatize a public, causing panic and a general sense of uncertainty about where the vehicle is coming from and where it's going, Neuhaus began to research the history of siren design. Recognizing that the acoustic conditions surrounding warning signals had changed drastically since early versions—of trumpet blowers, loud bells, and whistles—all of which rang out across a less dense urban environment, tests were conducted using disused police cars in an abandoned airfield in Brooklyn, and then in a canyon in the Californian desert. Finally arriving at a series of alternative designs, Neuhaus sought to make the siren more "informative" and less "startling," so as to lead a public out of the way by announcing the coming of an emergency vehicle. Rather than startle and panic a public, the signal should inform and direct a public toward safety, allowing officers to navigate more efficiently through the dense city. After persistent work, Neuhaus partially realized the Siren Project in 1989 by constructing a series of sound patterns based on bursts of sound punctuated by periodic silences.[17] Though still waiting for a siren manufacturer to implement the work, Neuhaus continues to speak out for more sensitivity and discussion on sound in the city.

Working with urban planners and city politicians comes as part of Neuhaus's desire to address the "public at large" so as to move beyond the conditioned structures of museums and concert halls. The Siren Project definitively articulates the artist's "aesthetic" project as motivated by additional interests that must be positioned in and among urban planners and city politicians. Not that the artist is a politician, but rather his works contain a political shadow that, in turn, must be kept within the sounds themselves: engaging his work is to also position one's listening perceptually and critically.

Following the Shadow

To work with public space through usurping given bureaucratic structures, working through and against them, stands out in Neuhaus's overall projects and finds echo in the work of Gordon Matta-Clark. A contemporary of Neuhaus working in New York in the late 1960s until his death in 1978, Matta-Clark's artistic works span an incredible breadth, from drawing, film, and photography to his renowned building cut-outs, such as *Days End* (1975). Indicative of his cut-outs, *Days End* uses the derelict structure of a nineteenth-century steel warehouse on Pier 52 in Manhattan to dissect and transform architectural space. Making cuts into the building, along its southwest corner, across the roof and floor, with a dramatic sail-like crescent cut

out on the west façade, the warehouse's dark interior was opened up and suffused with shafts of light. Another of Matta-Clark's works, *Office Baroque* (1977), set out to redefine a derelict office building in Antwerp into a playground of the senses: cutting across the symmetrical lines of space, openings that break apart the figure-ground relation, *Office Baroque* altered the foundations of architectural usage by inserting a sculptural intervention.[18]

Though Matta-Clark is not directly related to or involved with the medium of sound, I want to use his work in contrast to Neuhaus's as a way to discuss forms of spatial practice. Matta-Clark, like Neuhaus, surprises architecture with an altogether different order, one based on an appropriation and subsequent reworking of form, opening up altered perspectives on and through buildings, expanding the sculptural notion of an object through multiple spaces. Matta-Clark's cut-outs are radical alterations of space that reposition the body so as "to convert a place into a state of mind."[19] Such urban infiltrations pose counternarratives as to how architecture may perform. What Matta-Clark enacts is a disruption and subsequent deconstruction of such order through extracting, cutting up, digging, and splitting. Following Matta-Clark, architecture should be understood not so much as a single building, or act of design, but as a symbolic system that profoundly contributes to the formation of individual experience. As discussed, like language, we can view architecture as forming the basis for an understanding of the development of personal identity: against architecture subjectivity is brought forward, for architecture fixes one into a certain ordering that goes beyond physical spatiality—or rather, it complicates such spatiality by rendering it symbolic and culturally coded. In other words, architecture functions within the larger sphere of social values by partially representing a given bias. Such representation occurs through the physical contours of spatial design, where the body is held within architecture and partially determined by its design: it literally dictates one's movements as a cultural and social body. In turn, architecture liberates the individual, for spatiality allows free movement, comfort, access, and connectivity. Like language, architecture operates as a system that lends definition to the individual by allowing a conscious exertion of will (speech, articulation, reflection in language, and free movement, access and mobility through architecture), and by confining it to a set of values (conventions of speech, limits of articulation, and the harnessing of free movement and access). Architecture frees the individual and traps him or her at the same moment.

Neuhaus's own work has steadily infiltrated the public sphere, operating in unexpected places, from Times Square to the Paris Metro, and crucially, against architectural spaces. His work for Documenta IX (installed in 1992 and still open as a permanent exhibition) sets out to enfold a listener in a complex sonic event determined by sine-wave frequencies, acoustical reverberations and resonances, and an environmental intermixing of the found and the constructed. Installed in the AOK health insurance building in Kassel, Germany, *Three to One* creates distinct zones of sound on each of the three floors of the building. Using the staircase

positioned in the middle of the building, a visitor moves up and down and through the varying environments, from the "full-bodied, vibrant note" of the first floor, to the second, which is "filled to the brim" with sound, and finally to the third, which "expands as the two notes [from below] converge, seeming to become a whole open landscape of a space."[20] Listeners, here, partially create the work, or perform, as in *Drive In Music*, by maneuvering through the given installation, shifting space and sound according to their own physical location, and moving in and out of varied zones of intensity, sound color, and the temporal passing of auditory movements.

Whereas sound installation generally moves from the "time of music" to the "space of sound," Neuhaus's work suggests that it does so by *temporalizing* space: sound adds or subtracts according to durational movement; it pushes against spatial envelopes through reverberation and resonance, increasing spatial presence and then removing it through silence, sonic absence, decay, and fade-out. To encounter sound installation, one spends time within space, immersed in a listening that brings one to space through an acoustical unfolding wedded to movement and duration. Overlaying the inclusive listening described by Oliveros onto architecture adds a sonorous perspective outside pure acoustics, to include the interconnective narratives created only through paying attention to the relational involvement fostered by the built environment of which sound is such an active part.

Christine Kozlov's work, from 1970, *No Information: Theory* brings to the fore the temporal dimension by replaying space.[21] Consisting of a microphone, tape recorder, and speaker positioned within a given space for a period of time, the tape recorder captures live sounds happening in the space over a period of two minutes, while amplifying the sounds recorded the previous two minutes. In essence, the work creates a loop in which one hears the recent past while participating in the new recording itself that is, in turn, recording the sounds being amplified. Sounds build up to create an aural composite of time and space, though in such a way as to make the two inseparable, as time-space fixed together. Sound thus acts as a glue binding duration to spatiality, the counting of two-minute cycles to acoustic response, listening to one's presence as interfering contributor. Time here is not so much a dispersed flow moving into the future, but compounded and brought into a form of acoustic materiality through repetition and recycling. It comes back, as a past dragging us into the present, only to return as a future event.

Such play with time and space through audio recording is also at work in Roelof Louw's installation works from the early 1970s. His *Tape Recorder Script 6*, exhibited at the Whitechapel Gallery, London, in 1971, consisted of two rows of tape recorders at either end of the gallery space. Upon entering the gallery, a voice came from one of the recorders and instructed a visitor to "move from A to B." After a number of minutes, the voice reappeared, across the room at another recorder, instructing visitors to move again to the other side of the gallery. Additional works, such as *Tape Recorder Script 7 & 8*, operate in the same

fashion: arranging tape players at specific intervals or places within a given space, a performer records the work by following Louw's instructions, such as: "at requisite intervals [four feet and nine inches in the case of *Script 7*] in accord with the way the participant feels, reports are to be made in a negative, indefinite and affirmative manner."[22] Recordings are made either instructing movement, observing details of the space, or revealing personal feelings as to the experience of the participant. As in Kozlov's work, there is a jag in time and space, for the recording, as a past moment, is made present by inciting a participant's involvement, either directly (by recording live their presence) or through implication (by referring to the space and the visitor). Louw "transforms the gallery space into a space of imagination, laced with 'psychic tracks'"[23] that make space out of time, marking through temporal points a spatial delineation. In Kozlov's and Louw's works, time invades space, infiltrating its corners, its crevices by inserting sound, activating the body by repeating it, mirroring it back as acoustic materiality, as a body absorbing and deflecting, producing sound, as in Kozlov's work, for one could imagine visitors yelling, clapping hands, and stomping feet to contribute to the instrument at work, as participants in the making of this space-time event.

As Elizabeth Grosz proposes: "Space is the ongoing *possibility* of a different inhabitation"[24] (my emphasis). Such possibility is both the fabrication of different spatial forms through which inhabitation takes place, either covertly (in tearing down walls inside one's own house) or explicitly (cardboard cities for the homeless), as well as the twisting of temporal phenomena—for inhabitation is the embodiment of space, yet one that has to occur, and thus, as an event, is always situated within time. Matta-Clark's *Day's End* was a cutting up of space by appropriating, without permission, Pier 52, inviting visitors into the project, inhabiting its spatial delights (and dangers!) by invading the warehouse, against the authority figures.[25] Kozlov's gallery installation invites the visitor to attend to a creative inhabitation in which embodiment means acoustic intervention and contribution always wed to the virtual: the acoustical future of one's own presence. And in Louw's work, inhabitation occurs through psychic identification in which a visitor follows the auditory tracks left by the performer. And Neuhaus's *Time Piece*, his *Times Square*, his *Public Supply*, and *Drive In Music* cast a sonic net across a given space or environment—Boston airwaves, New York highways and city streets, underground or aboveground—so as to activate how one moves, occupies, and engages in space: here, the possibility of different forms of inhabitation occurs through placing the ear at the center through which listening steps out of line to find its place within a different temporal zone, that of performative presence: I move through a listening space and am made aware through time's physical event. Repetition, rhythms, flows and explorative pauses, accentuations and exclamations punctuate spatiality with other vistas, passages, and meeting points.

This temporalizing of space can be heard as an architectural performance, for auditory events conversant with space utilize it as an instrument. Space is a potential awaiting activation through durational insertion, whether the passing of

sunlight through a cut-up warehouse or the shifting of sound colors throughout a building. While the aesthetic of sound installation, as Neuhaus himself articulates, aims for the "space of sound" by attending to perception, it is through time that such attendance is made possible. For "perception is that which propels us toward the real, toward space, objects, matter, the future, while memory is that which impels us toward consciousness, the past, and duration."[26] The activation of perception through sound may draw attention to space, its material presence, and any perceptual phenomena, and it does so by activating our memory of spatial experience, of the event-space happening there, for sound installation is distinct by offering up information that is simultaneous and yet durational, present and passing: I glimpse the given installation as a set of information that is there all at once and yet that only comes to the fore through my movements, through my listening to, my attending to its evolution, as embedded within and conversant with space.

Matta-Clark's work performs two actions: it destroys one structure while creating another. Like the work of Neuhaus, his cut-outs undermine and renew architecture by deconstructing its inherent logic. Both do so through what I see as an addition of not strictly sculptural effects but durational movement: Matta-Clark's cuttings open space up to outside elements, particularly the introduction of light, inviting a renewed sense of embodiment. Opening up the building, severing its seams, creates new apertures through which light may enter, as in *Day's End*, animating the cut-outs, the splits, and the removals, while in turn inciting the spatial imagination.[27] His work then accentuates, and in a certain way articulates, the claim that architecture is an embodied and lived event rather than a static object. If "Space … is emergence and eruption, oriented not to the ordered, the controlled, the static, but to the event, to movement or action," then Matta-Clark compels us toward new forms of occupation within the built.[28]

Duration can be witnessed in Neuhaus's installations, equally inciting the spatial imagination through their auditory fracturing and demarcating. By positioning sound to activate the built environment, Neuhaus relies upon the durational movement of acoustical events and those situated within. As in *Drive In Music* and *Times Square*, sound not only accentuates space, through reverberation, movement, reflection, and volumetric addition, but it animates it through the time of its event, of walkers passing through its sonorous occupation of city space. And his work *Time Piece* functions in concert with Madison Avenue, its urban intensities, and in some respects, predictability, through a cyclical trajectory that pierces the Whitney courtyard throughout the day. The architectural order that Matta-Clark transforms to surprise the senses and the location of our own bodies in space finds parallel in Neuhaus's adding and subtracting, concerting, and deconstructing the given environment through appropriating space and turning it inside out, amplifying perception. Neuhaus's dedication to a site-specifics that bring together the listener and the environmental flux of events historically displaced the culture of new musical practice onto a larger context. Such

a project, while making reference to certain musical attributes related to tonality, frequency, and compositional structures, moves more overtly into questions of spatiality, environmental relations, the mixing of the found and the constructed. What are the consequences for spatiality Neuhaus's work initiates? How does architecture change in relation to an active sound intervention that seeks to initiate forms of inclusive, dynamic listening? The cultivation of sonic additions within the built environment seeks an individual's movements—sound surprises the ear by introducing a heightened dynamic, arising either from below in Times Square or from the ground in a park in Geneva. In doing so, Neuhaus reveals that inhabitation is not solely spatial, but temporal and auditory.

Notes

1. Max Neuhaus, *Max Neuhaus: inscription, sound works vol. 1*, ed. Gregory des Jardins (Ostfildern, Germany: Cantz Verlag, 1994), p. 82.

2. Certainly, music has always functioned as a social bond, featured in practically every public gathering and event, from state fairs to wedding ceremonies to Sunday barbecues. What Neuhaus and others articulate is dissatisfaction with conventions of art and music stemming from the classical traditions in which audience is found through a cultural filter defined according to, for example, class, taste, education. For more on the subject, see the work of Richard Leppert, particularly the anthology *Music and Society: The Politics of Composition, Performance and Reception* (Cambridge, UK: Cambridge University Press, 1989).

3. Described by Neuhaus in a lecture in Tokyo, 1982. In *Max Neuhaus: inscription, sound works vol. 1*, p. 63.

4. Max Neuhaus, *Max Neuhaus: inscription, sound works vol. 1*, p. 64.

5. Dasha Dekleva, *Max Neuhaus: Sound Vectors* (University of Illinois at Chicago Master of Arts dissertation, Art History department 2003), p. 39.

6. The work was supported by the Albright-Knox Art Gallery in Buffalo and was announced through an advertisement taken out in a local newspaper. In addition, maps were provided at the driveway of the gallery.

7. Max Neuhaus, *Max Neuhaus: inscription, sound works vol. 1*, pp. 45–46. *Public Supply I* was the first in a series of "broadcast" works that used radio as an infrastructure, followed by *Public Supply II – IV*, from 1968 to 1973, and culminating in his work *Radio Net* in 1977, which linked together 190 radio stations across the United States.

8. Ibid., p. 46.

9. Initially installed in 1977, and de-installed in 1986, then re-installed in 1987 only to be de-installed in 1988, and re-installed again, with the support of the Dia Foundation, in 2000, *Times Square* demonstrates not only Neuhaus's commitment to a certain artistic ethos but also his obstinate dedication to working through bureaucratic structures.

10. Carter Ratcliffe, untitled article, in *Max Neuhaus: inscription, sound works vol. 1*, p. 26.

11. Jean-Christophe Ammann, untitled article, in *Max Neuhaus: inscription, sound works vol. 1*, p. 21.

12. Pauline Oliveros, in an interview with the author, 2001.

13. Roland Barthes, "Listening," in *Responsibility of Forms*, trans. Richard Howard (Berkeley, CA: University of California Press, 1991), p. 245.

14. Pauline Oliveros, in an interview with the author, 2001.

15. Gemma Corradi Fiumara, *The Other Side of Language: A Philosophy of Listening* (London: Routledge, 1995), p. 114.

16. Pauline Oliveros, in an interview with the author, 2001.

17. Neuhaus conducted tests (under the guise of shooting a film) in the city of Oakland in the early 1990s, and in 1991 the U.S. Patent Office registered the sounds. Patenting sounds can be extremely difficult, as seen in the recent court case with Harley Davidson in which the motorcycle manufacturer sought to patent the sound of its engines. After years of deliberation, the courts declined the patent, claiming that there was no way to specify the quality and exactness of the sound.

18. For further information on Matta-Clark, see Pamela M. Lee, *Object to Be Destroyed: The Work of Gordon Matta-Clark* (Cambridge, MA: The MIT Press, 1999).

19. James Attlee, "Introduction: How to Explain?" in *Gordon Matta-Clark: The Space Between* (Tucson, AZ: Nazraeli Press, 2003), p. 40.

20. Doris von Drathen, untitled article, in *Max Neuhaus: inscription, sound works vol. 1*, p. 110.

21. See Ursula Meyer, *Conceptual Art* (New York: Dutton, 1972), p. 172; and Lucy Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (Berkeley, CA: University of California Press, 1997), p. 80.

22. Kenneth Baker, "Roelof Louw: Challenging Limits," in *Artforum* (May 1972), p. 49.

23. Ibid.

24. Elizabeth Grosz, *Architecture from the Outside* (Cambridge, MA: The MIT Press, 2001), p. 9.

25. Visitors to the work were led through the warehouse, careful to avoid the large holes cut across the floor. As Horace Solomon recalls: "It was incredible to walk across the bridge over the cut he made in the floor of the pier. The interior section was of such a big scale that it was not possible not to feel threatened by it." Interviewed by Joan Simon, in Mary Jane Jacobs, *Gordon Matta-Clark: A Retrospective* (Chicago: Museum of Contemporary Art, 1985).

26. Elizabeth Grosz, *Architecture from the Outside*, p. 121.

27. Such aspects of Matta-Clark's work are reiterated in the work of Shoei Yoh. His Light Lattice House in Nagasaki, Japan, is constructed by inserting cuts into the walls at equal distances, thus forming a light grid throughout the space. See Luca Galofaro, *Artscapes* (Barcelona: Editorial Gustavo Gili, 2003), p. 46.

28. Elizabeth Grosz, *Architecture from the Outside*, p. 116.

Chapter 11

Other Architectures: Michael Brewster, Maryanne Amacher, and Bernhard Leitner

Activating space through implementing and inserting auditory features shifts architectural understanding. Fusing listening with spatial narratives, audition with inhabitation, and the movements of time and body as dramas of discovery, sound installation heralds new forms of embodiment. Such spatial activations feature throughout the works of Michael Brewster, Maryanne Amacher, and Bernhard Leitner, each by putting sound at the front of spatial experience and expanding the early works of Max Neuhaus.

While Neuhaus seeks to create an artwork that engages the public at large, through installations of systems of sound production, the work of Michael Brewster aims for the specifics of the ear as found in direct acoustic environments. Active since the early 1970s, the California artist has been working with sonic material in defining "sound sculptures."[1] For Brewster, sound sculpture is about creating form through the interaction of sound in space: frequencies tuned to a given architecture are amplified to create sculptural presence.

Generally, we think of interior spaces as quiet rooms minimizing the amount of interference and remaining slightly outside our view: rooms are meant to simply fulfill the spatial need to dwell, as a neutral background to habitation and experience. In essence, interiors are meant to remain silent against the personalized ways in which they are put to use and how they take on character. This usage though for Brewster is, in contrast, one that amplifies the room itself as a sound-producing object, as foreground. This shift of attention pervades Brewster's work and methods, and functions as an operative term in his vocabulary of sound, space, and perception, which pushes sculpture up into a different material condition, that of acoustics. For ultimately what is at stake in his work is the form and function of

the art object in general, and how these are stitched together in a perceptual and ontological play. Brewster's work over the past thirty years has set the stage for a rethinking of the very nature of sculpture, and by extension the object, continuing the legacy of the "expanded field" argued so pointedly by Rosalind Krauss in 1978, where sculpture entered more dramatically into conversation with the site-specifics and complexes of landscape, environment, and architecture. This expanded field in essence pushes sculpture up against its very own disintegration: Carl Andre's minimal repetitions leads one into an infinity of form, or Robert Smithson's entropic spillages of tar or glue dissipate into their natural environments. From here, sculpture becomes more an event seeking the specific dimensions, conditions, and natural attributes of existing environments and spaces. Yet for Brewster, the notion of the expanded field creates opportunities for a continual recuperation of sculpture by rethinking its formal qualities in aural terms. For the sound sculpture neither fully dissolves into an existing terrain nor ever fully resuscitates itself as an autonomous object. Rather, sculpture, in remaining pure wave and sonic resonance, exists relationally, activating space as well as the ear canal.[2] Here, the phenomenal intensity of hearing straddles the line between total immersion and material ephemera, between being absorbed in the accentuated facets of sculptural work and its ultimate disappearance into quiet.

Michael Brewster, "See Hear Now" exhibition, Los Angeles Contemporary Exhibitions, 2001. Photo courtesy of the artist.

Held at Los Angeles Contemporary Exhibitions in 2001, Brewster's exhibition "See Hear Now" demonstrates his continual investment in probing the inherent complexity of sound and space. Working with prepared audio works (consisting of synthesized sound) amplified in a specially constructed room, acoustically specified in material and dimension (roughly fourteen feet wide by twenty-eight feet long by fourteen feet high), his work draws upon acoustical dynamics to create sculptural experience. His created room specifically prolonged the propagation of sounds and added to their reflection, thereby immersing a listener inside intensified zones of sound that created material presence through the phenomenon of standing waves. Through this, sound and space remained in a kind of feedback loop, one supporting and amplifying the other. In doing so, architecture operates to literally aid in the construction of the sculptural work, multiplying the volumetric presence of its features, whether quick "sprinkles" of sound or elongated sweeps.

For Brewster, this effect has the potential to allow material flexibility, in which sound and space can be molded to bring forward sculpture out of sound. Whereas acoustics for recording studios aim to absorb, diffuse, and ultimately eliminate standing waves, Brewster's acoustical play wraps a listener inside such phenomenon, harnessing sound's inherent tactility. As Brewster explains: "Each portion of the [sound] spectrum exhibits unique qualities and behaviors. Low frequency sounds, for instance, which have long wavelengths, are omni-directional and volumetric. High frequency sounds have short wavelengths and are mono-directional and linear."[3] His work *allAROUNDyou*, from 1998, consists of a series of high-pitched tones that rise up into the room and descend again, varying across differing frequencies while at the same time rising in volume. The movement of the frequencies from a single four-inch woofer activates the space by creating specific zones of sound. Like acoustical pockets, these zones are present as stable yet flexible masses that one walks through, overlapping one with the other, marking invisible yet prominent boundaries. In another work, *full o' stuff* (2000), exhibited at Pomona College in Claremont, California, the artist built a freestanding column with a single chrome button on it. Upon pressing the button the work started: amplified through a single loudspeaker mounted inside the column, a vector of sound is thrown into the space and left there to hover at a range of 3,000Hz, creating a kind of cloud of sound in the center of the space, before dissipating. Such acoustical possibilities open up architectural space to a multitude of transformations, for acoustics may create rooms within a room, hovering as micro-spaces within an existing space.

What marks Brewster's work beyond the science of acoustics is his pursuit of sculpture "in the round," for hearing senses "all directions and dimensions simultaneously."[4] "In the round" is quite literally sculptural, yet sculpture that for Brewster hovers in an ever-shifting spatiality, oscillating between architecture and perception, space and sound, frequency and phenomena; a nomadic sculpture in which movement is integral—a listener has to continually resituate him or herself not only to find the sculpture but, more important, to realize it.

Maryanne Amacher, City Links series. A five-year Telelink installation, transmitting the live Boston Harbor sound environment received by a microphone overlooking the ocean at Pier 6 to Amacher's studio at the Center for Advanced Visual Studies, Massachusetts Institute of Technology, Cambridge, Mass. (Nov 1973–May 1976); and the Artificial Intelligence Laboratory, MIT (May 1976–Nov 1978). Photos courtesy of the artist.

In contrast, the work of Maryanne Amacher shifts attention from standing waves and the acoustics of airborne sound to that of structural vibration. Contemporaneous with Brewster, Amacher has been working with sound installation for the last thirty years. Her projects mirror much of Neuhaus's strategies, from early works using telephone lines to relocate live sound from one location to another, to music performances staged across a dispersed environment, and to her interest in sound phenomena and the activation of heightened listening experiences. Amacher's work articulates the driving force behind much sound installation. Through working with technology and extended systems of sound amplification, her focus is led to a deeper concern for architecture and geographic location. Started in 1967 and ending in 1980, her *City Links* series consisted of installing microphones at given locations and feeding these sounds to another, distant location to create "synchronicities of different places."[5] From the Buffalo airport to Boston Harbor, the *City Links* series exposed to Amacher the "tone of place":

> In regular music you don't have any models to learn about spatial aspects because usually the performers are on stage or the music's on a record and you don't really hear things far away and you don't hear things close-up and you don't hear nothings and you don't hear things appearing and disappearing and all these kinds of shapes that emerge from this.[6]

Broadcasting using FM transmission or through 15kc telephone link, Amacher could listen to the distant and the proximate, the sound environment as a complex spatial event in which nothing and then something comes through, acoustic shapes dancing, a sonic play of various characters. One such installation work lasted for three years and consisted of a microphone installed at Pier 6 in Boston Harbor and fed directly to her studio at MIT.

Over the course of its installation, Amacher lived with the sounds of Boston Harbor, hearing all its rhythms and voices, the tone of the place, which Amacher identified as hovering around a low F-sharp, or 92Hz. "It could have been coming from anything and I wasn't making a scientific analysis to know exactly what was producing this tone, but that was the tone of this space, really; the color of it."[7]

The tone of place led Amacher to develop and elaborate her installation works into expansive sound environments specifically drawing upon architectural space. Her series of works *Music for Sound-Joined Rooms*, started around 1980, reveal such interests through narratives about growing life forms, or growing musicians, as in a Petri dish, which would develop over the course of the work to inhabit a space. For one such installation, speaker systems were positioned throughout an abandoned house in St. Paul, Minnesota,[8] so as to lead a visitor through the space. For Amacher, the work aimed to create intense levels of energy circulating throughout the house, which would force people out, up onto a nearby hill, to "observe

this whole Victorian house, this whole structure sounding ..."[9] thereby turning the house into a sound environment that was more energy than sound, more body than ear.

The installation revealed for Amacher the potential of working with architecture, not only as a spatial outline of air-space, but as structure.[10] As Amacher describes: "An entire building or series of rooms provides a stage for the sonic and visual sets of my installations. Architecture especially articulates sonic imaging in 'structure-borne' sound, magnifying color and spatial presence as the sound shapes interact with structural characteristics of the rooms before reaching the listener."[11] The work is positioned *against* architecture rather than within. Locating sound in adjoining rooms, along a hallway, sounds occur structure-borne, traveling through walls, floors, corridors, and ceilings. Installation works such as *Synaptic Island* (1992) and *Maastunnel Sound Characters* (1995) position architecture as an instrumental body, for structure-borne sound creates sound by elongating the length of a sound wave. For instance, "The wavelength we feel for an airborne sound-wave for middle C is only four feet [whereas] the structure-borne sound wave is over twenty feet."[12] Utilizing such sonic behaviors, space can be incorporated into the sculpting of particular sound work: rather than house a work, work can literally become a house.

Amacher's "sound characters" operate to immerse the listener/viewer in a specific narrative of sound and space, as a "sonic theatre" in which the material

function of architecture shifts to that of vibration. Exhibited at the Tokushima 21st Century Cultural Information Center, *Synaptic Island* initiated a complex scenario by relying not only on the architectural space but the neurological life of an individual. Amplifying varying frequencies, the installation activated what the artist calls "the third ear." The third ear essentially hears sounds not so much amplified from outside but created inside the ear as it resonates with given frequencies. Neurophysiologically, the body produces its own internal sonics through the acoustical excitation of sound waves in space, operating to trigger additional sounds or micro-frequencies heard entirely inside the head. Dependent on the exterior, yet derived from its own unique experiential features, psychoacoustic listening occurs as individualized vibrations. Here, noise vibrates both the architecture of rooms as well as the ear canal, situating a listener within a spatiality that penetrates as well as absorbs the body.

Both Amacher and Brewster redesign architectural space by creating additional zones of experience: for Brewster, volumetric presence is not confined to walls and the layout of cubes, but rather through clouds of sound that hover within space, as separate and distinct volumes that carry weight, mass, texture, and color; for Amacher, architecture's boundaries, in turn, do not stop at the wall but proceed up the wall, into space and through the body, shifting the definition of what it means to inhabit space. For in this sense, space comes to actively inhabit the body.

The works of Brewster and Amacher begin to teach us lessons about sound and space and the potentialities of their interwoven exchanges. Thus, the Minimalist ethos of subject-object relations inaugurated through considerations of the formal properties of sculpture and its perception must be seen to intensify through the work of sound installation. The phenomenology of space and its production through sonic interplay draws out Merleau-Ponty's original thoughts on perception and how the "ambiguous, the shifting" nature of reality is "shaped by its context."[13] The redrawing and redesigning of spatial experience in these works seems to reinforce such observations by increasing the degree to which we come to relate to the very experience of our perceiving the real.

Brewster's and Amacher's works find additional parallel and emphasis in the works of the Austrian artist Bernhard Leitner. For Leitner, listening is understood to extend to *all* parts of the body, and sound to touch a deep nerve. "This is one of the most interesting aspects of my work with acoustics, that entirely new concepts of space open[ed] up through extended hearing, through bodily hearing."[14] Describing his artistic practice, Leitner brings to the fore sound's direct and influential relation to the body. His work is a rich interweaving of three key aspects of sound installation: sound, space, and listening are brought into a dynamic relation in such a way as to reveal the limits and potentials of all three. The science of acoustics, often used to limit the degree to which sound may intrude upon a person, for Leitner, is the very opportunity to infringe upon the body, defining what he calls "sound spaces":

Bernhard Leitner, *Sound Chair*, 1975. Courtesy of Archive Leitner.

> It became clear to me rather quickly that I hear a sound that goes under me with the soles of my feet, that I hear with the skullcap, that—and this was really decisive—that the boundaries of sound spaces can also go through the body, so that the body is not something standing vis-à-vis or on the other side of this whole concept. It is in it and the boundary can pass through the body.[15]

For Leitner, the definition of both space and sound do not keep the body over there, either outside as a view upon space, or beyond, as a listener to sound. Rather, embodiment is implicit within both: physical presence moves through, against, and within any boundaries.

Leitner has spent the last thirty years charting this relation, where the interactions of sound, space, and the body create new architectures, beyond the fabrication of walls or the limits of the skin to find internal zones of resonance, "the physical aspects when sound waves hit us, penetrate us, move within us...." For "certain frequencies directed at organs have an impact on them, on their state of tension and their structures."[16]

His *Sound Chair* series, originating from 1975 and furthered through future versions, exemplifies this interest. Fitting four loudspeakers into a specially

designed chair, the *Chair* sends specific sounds to specific points on the body. Low, droning cello notes and horn and bowed sounds move from the lower region of the body to the upper torso, oscillating back and forth, to create wavelike movements that are felt more than heard. The work speaks directly to an interior by caressing the skin, passing through it to arrive at deep points of the body, from the kidney region to the back of the knees. The work uncovers the sound space of the body, where "the listening body, the acoustically perceiving body" parallels the ear, creating multiple levels of perception: one external, the other internal. Bodily hearing creates a deep awareness of physical sensation, diffusing perception of sound toward the tactile sense that touches the body as a whole. As Prof. D. Linke and Prof. G. Ott examined, *Sound Chair* "enhances relaxation and provokes new modes of perceiving and experiencing one's own body" by slowing the heart rate, inducing a condition of sleep and dream-state[17]—sound space as physiological therapy, sonic touch as lullaby.[18]

To get at the inside, demarcating the sound space that for Leitner is always an interior is furthered in a more recent project, *Headscapes*. Designed for headphones, the work consists of sixteen audio tracks that derive from past research and work. *Headscapes* is meant to activate areas of the brain, stimulating neural activity so as to turn one inside out, locating oneself against the internal coordinates of psychic space, for "while hearing as an indicator of external space has been the subject of considerable scientific research, in-head sound localization has scarcely been investigated."[19] As in Amacher's "third ear" experiments, Leitner's *Headscapes* explores the physiognomic phenomenon of "in-head localization." Whereas traditional views of acoustical localization presupposes that the self exists in separation from the exterior to which we as bodies move, navigate, and, along the way, utilize sense-perception. Thus, the self is posited as an interior in relation to an exterior. In-head localization undoes such dichotomy by uncovering the spatial coordinates within: here, the self navigates not so much through the world out there, but through a world in here, identifying topological gradations, geographic fields, and structural points. Such a view makes less rigid notions of interior and exterior, and, by extension self and world—for we begin to recognize that the exterior out there is always manifest not only in our sensual experience of them, but our own internal journey through their effects. *Headscapes* turns the eye inward to "watch the sound movements in the head … for where vision can no longer see, the 'acoustic' eye surveys and observes the interior space of the head, which has no scale in terms of acoustic perception of space."[20] *Headscapes* is created to draw out this internal journey by moving sound directly into the body, into that interior space of the listening mind. Like *Sound Chair*, Leitner seeks particular points of the body, developing avenues along which to carry auditory events that may spark interior movements—that may generate a sonic architecture of the mind.

Leitner's internal discoveries though derive much of their catalyst from research into external spatial interests. Throughout the early 1970s, Leitner studied

Bernhard Leitner, experiments in sound movement and spatialization, 1972. Courtesy of Archive Leitner.

the effects of space on the movements of sound and, in turn, the spatial possibilities of sound traveling through space:

> The speed of a sound-line, back and forth movements, changed tempi in repetition, staggered lines, changes in direction, angled lines, sound lines crisscrossing on a plane; parallel sound lines as part of a path; funnel-shaped passages becoming narrower through a crescendo moving toward the mouth of the funnel.[21]

Leitner's descriptions chart out experiments in moving sound through space. Utilizing multiple loudspeakers attached to wooden beams, amplifying recorded sounds—of sustained drum rolls, bowed cymbals and cellos, the notes of a horn—across multiple audio channels, Leitner was able to create geometric patterns of sonic movements: circular motions of one sound oscillating against a larger elliptical movement of a second sound; lines of sound that move from point to point, directing the ear across the room, crisscrossing against a second line of movement; sounds beating across the floor in X formations, or up a wall and back down again. Such movements were there for one to walk through, following sound or leaving it behind so as to register one's sense of spatial presence: how does this line of sound lead me into an altered sense of space? How does this circular motion of frequencies position the body? Sound space expands and contracts, pulled up and rolled down, wrapping an existing room with its sonic envelope only to peel it away, exposing hidden cavities where one sound folds over another. Leitner's early experiments echo that of Michael Brewster's, and his early "sound drawings" began while a student in the late 1960s. "A simple click from a concealed device in one location, answered by a second click from an opposing wall, would prompt the observing mind to follow the path of its own imaginary line."[22] Through such activation, a particular space took on multiple perspectives as the auditory imagination followed the sonic construction taking place.

Movement for Leitner is essential to creating "sound architectures." As explained in his article published in *Artforum* in March 1971: "In sound-architecture the shape of space itself is defined by traveling sound …" so as to change "the proportions and the message of an existing space."[23] Such transformations offer aesthetic, scientific, medical, and social opportunities. "To a long, neutral, exhausting corridor for a large number of people (in airports, for example) circling lines of sound are added transverse to the axis of the corridor at certain intervals." As a result, "the corridor acquire[s] an ornamentation, a new rhythm" and is thus "humanized and rescaled for the individual."[24] Proportion, scale, rhythm, and mood of space can be adjusted, attuned, and made other through the insertion of the invisible medium of sound, not solely to alter its architectural presence, but its spatial message, turning an "exhausting corridor" into a humanized space.

The early experiments lead to a vocabulary of how to implement sound for the design of spatial effects. His extensive architectural projects since the early 1980s demonstrate an elegant understanding of the intermixing of physical presence,

spatial materiality, and bodily experience. Architecture for Leitner does not stop at the material surface (wall), the endpoints of perspective, or the fixing of joints and trusses. "Creating spaces with the vocabulary of sound introduces new forms of expression—the potential for a fundamentally new experience …" for it is "above all the intensity, the rhythm, the speed of the moving sound and their interrelated variations that determine the shape of a space."[25]

Sound introduces another form of spatial boundary by drawing out alternative figurations within an existing space. His *Sound Space* (1984), installed at the Technical University in Berlin, consists of a square room open to passing people from a nearby staircase and adjoining rooms. To create a distinct spatial experience, Leitner initially attempted to soften the reverberation of the space (susceptible to the noises of the staircase and rooms) by installing perforated metal panels that have an acoustically absorbent material behind them, a kind of membrane that holds sound rather than deflects it. These were clad across a steel, skeletal structure, emptying the room of sound reflection. In addition, forty-eight loudspeakers

Bernhard Leitner, *Sound Space*, Technical University, Berlin, 1984. Courtesy of Archive Leitner.

were mounted behind the panels that amplified given sounds: trombones, trumpets, percussive beats, as well as "tongue, mouth, guttural sounds." These sounds were used to create different acoustic movements that would bring to life a medley of spatial descriptions, such as "interferences, intertwinings, kneading, prickling space, rhythm space, bracings, rustling space, soft walls, convulsive space, and circular space."[26] The frequencies, tones, and textures of the sound sources created spatial articulations that positioned a listener within various motions, rhythms, and movements—"an electronically manipulated tabla drum traces circular lines that create a vault of sound …" or "rapidly struck cello creates the illusion of a sound cord stretched across the space. . . ."[27] The work draws lines and circles and other shapes of sound, locating the ear along trajectories of sonic movement that pulls and pushes against a given architecture: the lines of walls are redrawn inside the room, the corners are pulled inside out, space is inverted so its end and beginning come from above and from below.

While creating a variety of spatial experiences within a given location, Leitner's work veers away from the musical dialogue Neuhaus seeks: the interplay of the found and constructed amplified by Neuhaus is softened in Leitner: his *Sound Space* installation shuts out the nearby staircase and the other rooms to create an isolated sound chamber within which the projection of other spaces may occur. In addition, the structure-borne intensities sought in Amacher's work, occurring by appropriating an entire building, its hidden structures, so as to vibrate given characteristics (to locate "the tone of place"), stands in contrast to Leitner's singular perspective: *Sound Space* avoids the adjoining rooms and their structures. Yet Leitner's spatiality teaches us that while structures vibrate and places resonate and architecture is an opportunity for creative inhabitation, it is also a space for more subtle performances: that architecture is a practice of building space. What Leitner opens up is the realization that sound may operate as an actual material, shifting architectural definition from that of walls to aural zones, sonic intensities, and a multiplicity of perspectives.

Other Spaces

These examples add to the realm of sound installation by attending to the complementary, reciprocal, and complex relation of sound to architecture, either by tuning sounds to resonate a given room, by producing sculpture through perceptual activation, or by vibrating a given structure, and thereby throwing sound into the air as determined by architectural structure, materiality, and its reverberation. As a listener, one is made aware of one's own body, as ear canal, as sensitive skin, as vibrating sympathetic vessel. Such corporeal intensities seem to underscore sound art in general and may contribute to its fixation upon phenomenology and perception. In turn, sound art may open out onto a generous set of terms, possible descriptions, narratives, and experiences in which the work is defined in the moment of its apprehension, invisible and yet present, open and yet controlled.

For in keeping to the spatial and temporal moments of its becoming, sound art, and sound installation in particular, contributes to questions of spatiality by adding to the list as to how one might inhabit architecture.

Notes

1. While the term "sound sculpture" for Brewster is specifically about an "immaterial" presence, as pure sound wave, sound sculpture itself as a form of art practice has many practitioners whose work is often much more "material," from Jean Tinguely, Takis, Harry Bertoia, Bernard and Francoise Baschet, and Hugh Davies to Matt Heckert, Trimpin, and Max Eastely, and many more. All these artists generally work with objects that either kinetically produce sound or are activated by mechanistic automation or through physically touching the object. In addition, the mounting of piano wire throughout a space features as a further "sculptural" strategy, for the piano wires incorporate the given room or space into its instrumentality, as seen in the work of Terry Fox, Paul Panhuysen, and Ellen Fullman, and somewhat in David Tudor's *Rainforest* work. In contrast, Brewster's sculptural work is activated by a listener's physical relation and movements through a sound field that is completely void of objects.

2. Brewster's work, and others', such as Neuhaus's, could be positioned within the general move toward a "de-materialized" art object indicative of Conceptual art in the late 1960s and early 1970s. It is worth noting though that there is no mention of their work in many of the historical publications surrounding Conceptual art, such a Lucy Lippard's *Six Years* or Ursula Meyer's *Conceptual Art*, as well as current histories on the subject, such as *Conceptual Art* by Tony Godfrey, *Conceptual Art* by Peter Osbourne, and the Conceptual art anthology edited by Alexander Alberro and Blake Stimson, all of which do not mention the work of Neuhaus, or others, such as Michael Brewster (who was certainly participating in the West Coast Light and Space artistic community). While this is partly due to a categorical territorializing of Conceptual art as a specific group of artists with a specific agenda, from an historical point of view, it seems important to engage that very category in terms of critically assessing what it makes possible. It is my argument that the developments of sound art should be addressed as contemporaneous with the developments of a critical practice as witnessed in Conceptual art.

3. From a statement by the artist on the exhibition. Published in press materials by Los Angeles Contemporary Exhibitions, 2001.

4. Michael Brewster, "Here, There or Where?" in *Site of Sound: Of Architecture and the Ear* (Los Angeles: Errant Bodies Press, 1999), p. 102.

5. Maryanne Amacher, in an interview, *Musicworks* 41 (Summer 1988), p. 4.

6. Ibid.

7. Ibid.

8. The work was sponsored by the Walker Center for Art as part of the New Music America festival.

9. Maryanne Amacher, *Musicworks* 41, p. 5.

10. For more information on her and Brewster's work, see Elizabeth Martin, *Architecture as a Translation of Music* (New York: Princeton Architectural Press, 1994).

11. Maryanne Amacher, liner notes from the CD release *Sound Characters (making the third ear)* (New York: Tzadik Records), 1998.

12. Elizabeth Martin, *Architecture as a Translation of Music*, p. 33.

13. Maurice Merleau-Ponty, *Phenomenology of Perception*, trans, Colin Smith (London and New York: Routledge, 2002), p. 13.

14. Bernhard Leitner, interview with Bernd Schulz, in *Resonances: Aspects of Sound Art* (Heidelberg, Germany: Kehrer Verlag, 2002), p. 83.

15. Ibid.

16. Ibid.

17. See study as shown in Bernhard Leitner, *Sound Space* (Ostfildern, Germany: Cantz Verlag, 1998), p. 82.

18. In conjunction with the lullaby, the sonic touch can also be threatening, as witnessed in military experiments in using sonic frequencies to assault the body. These acoustical weapons provide the potential to kill enemies by, for example, stopping the heart or damaging internal organs through utilizing specific frequency ranges.

19. Bernhard Leitner, "Headscapes," in *Earshot* 4 (2003), p. 75.

20. Ibid.

21. Bernhard Leitner, *Sound Space*, p. 34.

22. Peter Clothier, "Listen, from Different Points of View: The Acoustic Sculpture of Michael Brewster," in *Michael Brewster: See Hear Now* (Los Angeles: Los Angeles Contemporary Exhibitions, 2002), p. 17.

23. Ibid., p. 41.

24. Ibid.

25. Bernhard Leitner, "Headscapes," in *Earshot* 4 (2003), p. 72.

26. Bernhard Leitner, *Sound Space*, p. 138.

27. Heinz Ohff, ibid., p. 142.

Chapter 12

Composing Intensities: Iannis Xenakis's Multi-media Architectures

Developing relationships between sound and space in sound installation practice finds its early spark in the work of Iannis Xenakis. His highly unique musical output unquestionably derives much of its impetus and informative material from his architectural experiences. Because of this, it seems important to address his work and its contribution to the legacy of sound art in developing vocabularies for the particulars of aural spaces.

As an assistant to Le Corbusier from 1951 through the early 1960s, Xenakis was exposed to issues of modern engineering and design, architectural planning and spatial form, and related ideas. Already an established mathematician, Xenakis's contribution to some of Le Corbusier's late projects reveals an uncanny insight into his compositional procedures and sonic explorations that were to define his musical career. The two in fact run parallel to each other and articulate his general concerns at the time, and throughout his career, to chart out "aggregates" of sound movement through space and time.

As a resistance fighter in Greece during the Allied occupation in the early 1940s, Xenakis, like many of his contemporaries, such as Stockhausen and Berio, was exposed to an "intensified soundscape" consisting of the noises of war. Air raids and demonstrations turned the city into a reverberant terrain punctuated by previously unheard movements of sound and light, bodies and voices, technologies and machines. Coupled with his political activism at the time, which often placed Xenakis in the midst of demonstrations and fighting, we can understand some of his spatial and musical concerns by appreciating his experience and the horrors of being in a war-torn city. As Xenakis recounts:

> Athens—an anti-Nazi demonstration—hundreds of thousands of people chanting a slogan which reproduces itself like a gigantic rhythm. Then combat with the enemy. The rhythm bursts into an enormous chaos of sharp sounds; the whistling of bullets;

> the crackling of machine guns. The sounds begin to disperse. Slowly silence falls back on the town. Taken uniquely from an aural point of view and detached from any other aspect these sound events made out of a large number of individual sounds are not separately perceptible, but reunite them again and a new sound is formed which may be perceived in its entirety. It is the same case with the song of the cicadas or the sound of hail or rain, the crashing of waves on the cliffs, the hiss of waves on shingle.[1]

Within military conflicts, the city is an orchestra of oppositional forces clashing throughout its streets, whereby territories are determined by large crowds in struggle with even larger forces that order and then break up its flows, movements, and rhythms.

Xenakis's recollections point toward the basis for his early composition *Metastasis* (1953–1954). Employing mathematical ideas, the composition is composed primarily through the use of Fibonnaci series (a sequence of numbers that are the addition of the two previous digits). The sequence is used to determine the durational movement of the work, while dividing up the sixty-five separate parts of which the work is made into aggregates. Like the disruption of order in the demonstration in Athens, *Metastasis* consists of a large mass of sound splintering into multiple movements: glissandi sweep from a central focus and out into individual trajectories. Like an explosion, sound scatters. Scored for an orchestra of sixty-one instruments, the composition establishes a textural field that remains unstable, unfixed, moved by various speeds and pitches, according to a highly rarefied precision. Such technical precision operates through an employment of modularity, running counter to the dominant methods of Serialism at the time. "Whereas serial operations establish an order of succession for the values of a particular parameter, the Modular method is a standard of measure by which the proportions of parts may be determined."[2]

Developed in 1948, the Modulor was a proposed overarching form of measurement Le Corbusier applied to new architecture. Based on the proportions of the human figure and their relation to the golden ratio (1:1.618), the aim of the Modulor was to aid in modern fabrication methods being developed across Europe following World War II. Given that many cities were in desperate need of reconstruction, architects and engineers sought to develop methods of prefabrication to expedite building and the transportation of parts and materials to a multitude of sites. The new architecture was to be based on standard measurement with an overarching aesthetic style that could be applied to a number of situations and serve a multitude of programs.

For Xenakis, the Modulor meant the ability to transport or employ mathematical measurement across the field of music: his was a form of musical design that sought to manifest intense movements of sound materials by carrying large bodies of sound to a diversity of points, in fluid and dynamic manner. To transport, to vectorize, to splinter and sweep across an intensity of space, sound was computationally figured, refigured, and deployed as a force of movement. Glissandi were

instrumental in this movement and can be heard throughout Xenakis's work. As Xenakis describes, "The *glissando* is a straight line slanted in space ... it is pitch and time rolled into one. The points marking time and pitch are ordered, which means they be can transcribed onto an oblique straight line."[3] Time and pitch as intensities by which movement occurs—the duration of getting from A to B—is marked along a horizontal axis whereas changes in pitch proceed vertically. In utilizing the glissando, time and pitch are wed into a dynamical thrust that is both organized and intense, maximizing transformative movements of sound. *Metastasis* is a radical flourishing of musical imagination that aims for not only the transportation of sound masses but also their transmutation across ranges of pitch.

Musical Design

At the time of Xenakis's first music composition, he worked on Le Corbusier's Couvent de St Marie de la Tourette, acting as principal architect to develop some of the more dynamic elements of the building, namely the west wing façade, which is structured around a series of undulating glass screens that filter sunlight in variable rhythms. As Matossian observes in her insightful biography on the composer, Xenakis "had solved an architectural problem with an essentially musical solution, a detailed polyrhythmic study with light and shade as the dynamic range."[4] Consisting of four floors of large windows spanning the façade, Xenakis created a series of movements by inserting concrete divides across the windows, thus breaking up the view through an undulation of openings and closure: leading into large open rooms, the window-structure creates space by using light, shade, and the movement of time over the course of the day and the seasons. Bands of shade cut through the space, creating lines that shift, move across the floors, and fade into the interior of the rooms; rectangles of light pan across the floors and into the rooms, creating zones of intensity modulated by the sun's direction and its durational passage throughout the day. Accentuating such dynamic, the concrete divides occur unevenly, widening out then closing together, allowing more light at certain points, then narrowing its entry into extended pockets of shade. Such rhythm excites the space with a poetic and dynamic detail: light as material presence is given structure, harnessed into Xenakis's design to activate the space; like an instrument, the architecture is played by the mass movement of sunlight.

The large-scale effect of the design demonstrated to Xenakis the ability to think "architecturally" with regard to temporal phenomena:

> I found that problems in architecture were the same as in music. One thing I learned from architecture which is different from the way musicians work is to consider the overall shape of the composition, the way you see a building or a town. Instead of starting from a detail, like a theme, and building up the whole thing with rules, you have the whole in mind and think about the details and the elements and, of course, the proportions. That was a useful mode of thinking.[5]

Xenakis's reference to "beginning with detail, like a theme" is an apparent allusion to Serialism. Thus, we can read in Xenakis's work an inherent criticism to the reigning mode of musical practice at the time. In later articles, such as *The Crisis of Serial Music*, and his general development of what he called Stochastic music,[6] Xenakis would build up an argument against Serialism, claiming that it overlooked the temporal aspect by creating "static" music while at the same time relying too heavily on "linear thinking": while Serialism created the series (tone row) in linear fashion, it destroyed such series by creating the effect of stasis. "Linear polyphony by its present complexity destroys itself. What one hears is in reality no more than a heap of notes in various registers."[7] Xenakis instead began with the overall shape of the composition, understanding complexity in totality, and then worked to detail such complexity through understanding its movement through time and space. As Sharon Kanach, a long-time collaborator of the composer, recounts, while "most musicians begin with a detail and elaborate from there, Xenakis always knew where he was going, which probably accounts for the sheer force of his music."[8]

Diatope and Polytope

Xenakis's enthusiasm for the architectural finds its articulation throughout his career. From his composition *Terretektorh* (1966), which specifies an intermingling of orchestra and audience, Xenakis hints at the creation of a "new architecture" suitable for contemporary musical experience:

> The orchestra is in the audience and the audience is in the orchestra.... A large ballroom giving a minimum diameter of 45 yards would serve in default of a new kind of architecture which will have to be devised for all types of present-day music, for neither amphitheatres nor concert halls are suitable.[9]

"*Terretektorh* is thus a Sonotron: an accelerator of sonorous particles, a disintegrator of sonorous masses, a synthesizer" that "tears down the psychological and auditive curtain that separates him [audience] from the players."[10]

What this new type of architecture could be is left vague. And "all types of present-day music" is not exactly clear. Yet what comes to the fore is a concern for not only writing music but also devising architectural means for presentation. Such concerns are found, in turn, in the work of Karlheinz Stockhausen. "The type of music house I'm talking about requires a special kind of architecture.... There would be two orchestral areas, divided by a wall.... Or there could be four orchestral or four sound sources, and this hall would have the shape of a four-leaf clover...."[11] His interest to create the ultimate music house in which a diversity of music could be experienced, housed within several small auditoria, echoes Xenakis's ambitions and finds its partial realization in 1970. The West German pavilion at the Osaka Expo was built specially to present Stockhausen's music. Designed to accentuate sound movement, the spherical pavilion seated five hundred and fifty people on an acoustically transparent floor in the center of the sphere, which included a mobile

platform that could bring listeners to varying levels. Surrounded by fifty loudspeakers, including ones under the floor, audiences were immersed in an acoustically dynamic sound environment. What such spatial concerns articulate is a profound sense of using sound to create space and spatial experience. Thus, to write music is also to create a spatial envelope in which to hear such music.

A few years after his work on the Monastery with Le Corbusier, Xenakis would develop the design strategy and engineering technique for the Philips Pavilion. Commissioned in 1956 for the World's Fair in Brussels (to open in 1958), Le Corbusier responded by proposing "an electronic poem" in which "light, color image, rhythm and sound join together in an organic synthesis."[12] Again, serving as principal architect, Xenakis would steer the project into its final hyperbolic paraboloid structure, which takes its cue from his *Metastasis* composition, in which sweeping surfaces physically manifest the slanted lines of *glissandi*.[13] "In the Philips Pavilion I realized the basic ideas of *Metastasis*: as in the music, too, I was interested in the question of whether it is possible to get from one point to another without breaking continuity. In *Metastasis* this problem led to glissandos, while in the Pavilion it resulted in the hyperbolic parabola shapes."[14]

The design demanded a rigorous series of tests through which to model the structure and develop strategies for construction. Again, Xenakis's highly acute mathematical understanding enabled such development and, in turn, paralleled his curiosity for movement and temporality: the Philips Pavilion would be experienced over the course of eight minutes by visitors entering one side and exiting another. Thus, the very structure from the beginning had built into it a sense of time in terms of visitors structured experience and movement, for the Pavilion was also to demonstrate Philips's electronic capabilities. Advanced lighting and cinematic systems, along with state-of-the-art loudspeaker design and sound mixing capabilities, were to be utilized, allowing for an unprecedented presentation of sound and light effects. For Xenakis, the building itself had to be structured around a notion of movement and "space-time": the hyperbolic paraboloid structure expresses a flourishing series of vectors that seem to pull at the base of the structure, piercing the sky and opening up like an exploded envelope.

The Philips Pavilion, as a space of light, sound, and rhythm, with music by Edgard Varèse and Xenakis[15] and film work by Philippe Agostini, could be understood as a potential "new architecture" for new music. Containing over four hundred speakers (designed by Philips) the space is an early multi-media spectacle in which architecture is both container for *and* expression of media: the architecture is like a projection of form, a diffusion of sound particles, a generator of a temporal agitation of the senses.

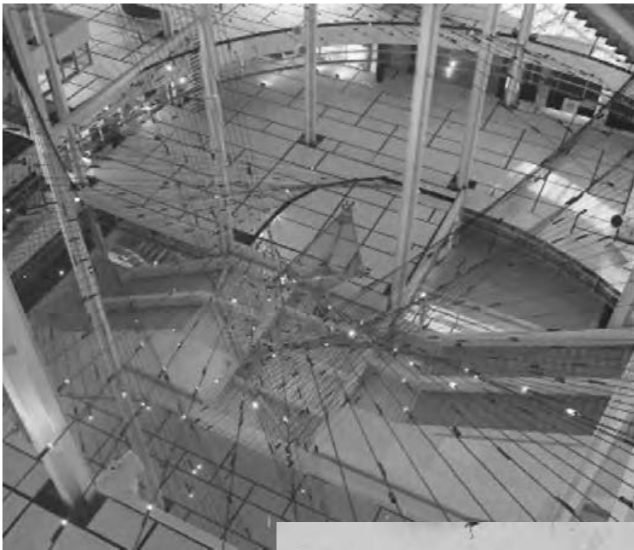
Spatial Intensities

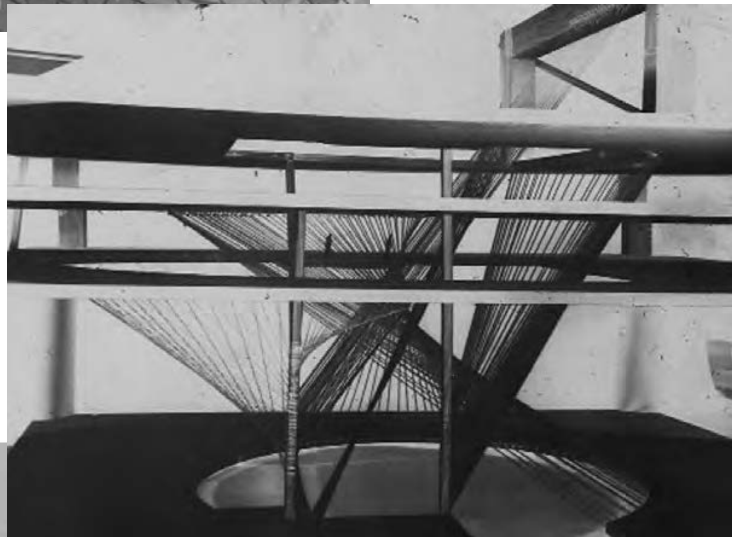
Mixing sound and space, light and movement, sound intensities with spatial ones, Xenakis was creating a unique vocabulary and vision for a total aesthetics that

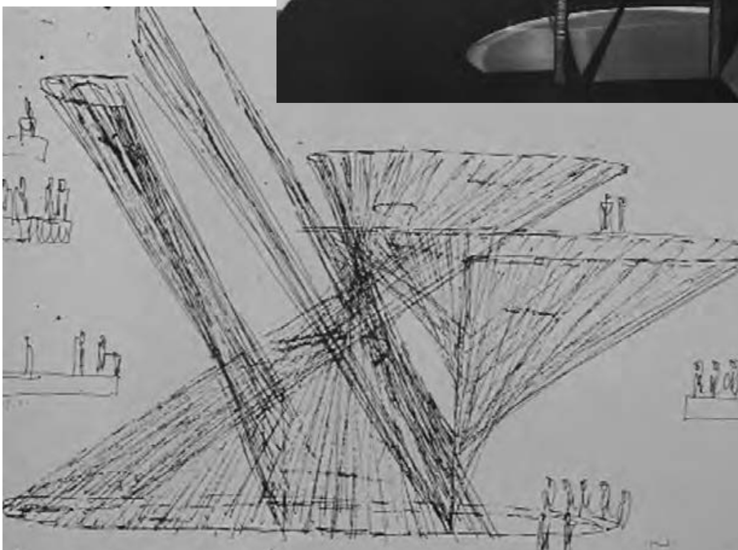
would forge multi-media environments. His composition *Terretektorh*, in pushing audience and orchestra into each other, creates a confrontation in which "each one individually will find himself either perched on top of a mountain in the middle of a storm which attacks him from all sides, or in a frail barge tossing on the open sea, or again, in a universe dotted about with little stars of sound."[16] Such theatricality aimed to overturn the audience-orchestra divide, replacing it with an intensity of affective and corporeal experience reminiscent of the electronic poem of the Philips Pavilion. The experiences of the Pavilion no doubt left their mark on Xenakis and lend to his future work an unquestionable emphasis, among other things, on the spatialization of sound contained within an overarching spectacle of intense light and sound movement hinted at in *Terretektorh* and realized in his future Polytope and Diatope projects.

Xenakis's activities are thus based on designing not only music but also an architecture in which all the senses can merge. With *Terretektorh*, Xenakis imagines "different speeds and accelerations of the movement of sound" through which "new and powerful functions will be able to be made use of, such as logarithmic or Archimedean spirals, in time and geometrically" and further "ordered and disordered sonorous masses, rolling one against the other like waves, etc."[17] The spatial intensity in this composition echoes Xenakis's design for the Philips Pavilion and a general spatial ingenuity twisting the Modernist aesthetic of grids and cubes on its head. The Pavilion completely disrupts such aesthetic by employing curving lines and swooping surfaces, and by being without central perspective; the Pavilion literally enveloped the visitor, cocooning him or her inside an architectural womb that was cruel and voluptuous, dark and spectacular, in which the senses were bombarded with light, film projection, and sound coming from all sides. Such interests continued to excite Xenakis, and in 1966 he was given the opportunity to realize a "cinematic stereophony" in which sound and light would in effect define an architecture of experience.

Utilizing 1,200 strobe lights, eight hundred white and four hundred color, mounted across a looming cable-structure forming a weblike shape crisscrossing in the space in curving hyperboloids, the design for the French Pavilion at the Montréal Expo was to be a totally automated sound and light spectacle. To achieve this, Xenakis developed a series of configurations of light to occur over the course of six minutes. Like the Philips Pavilion, the Montréal Polytope was structured around a visitor's presence over the course of a given time. Within six minutes, nearly 90,000 changes of light occurred; like a cinematic experience, the lights were structured like frames of a film in whose flickering rhythms movement occurs. Thus, the lights were a kind of animation sweeping across and throughout the space, appearing here, then disappearing, rapidly shifting focus and point of attention. In contrast to such movement, Xenakis composed *Polytope*, a work of four identical orchestras. The composition consists solely of extended *glissandi* that seem to glide through the space amplified through audiotape playback.







Iannis Xenakis, Montréal Polytope, 1966. Courtesy of Xenakis family collection.

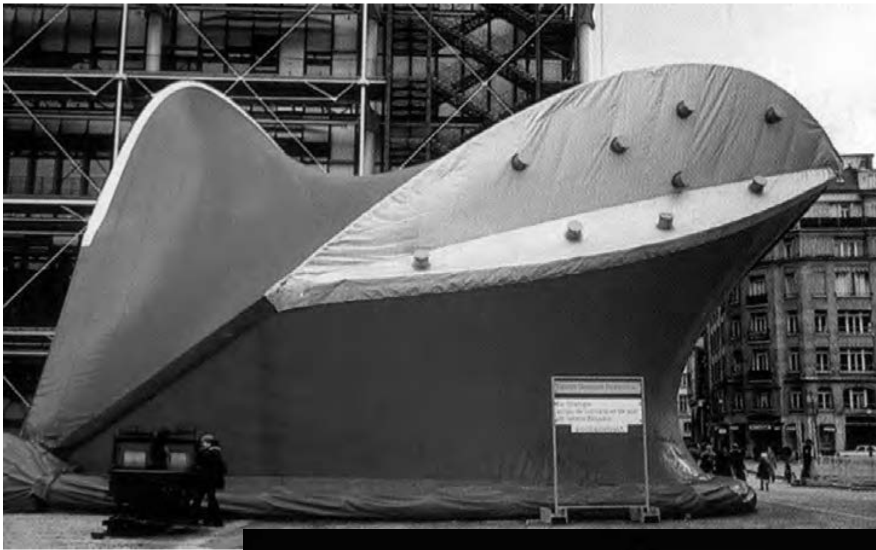
Xenakis's Montréal Polytope underscores his work as inherently architectural and mathematical in character, and with the project Xenakis was able to realize such interests in the form of spatial experience: the work functions as a sound installation which visitors move through, enveloped in sound and light as a sonic and optical phenomena. "With vertical and horizontal segmentation and the differentiation of superimposed layers,"[18] sound and light are used not as additions to, but as material to create space: lights flicker and sweep, articulating points and lines while sound glides along, trailing through stages of pitch to bring the ear to levels of excitement or plateaus of force.

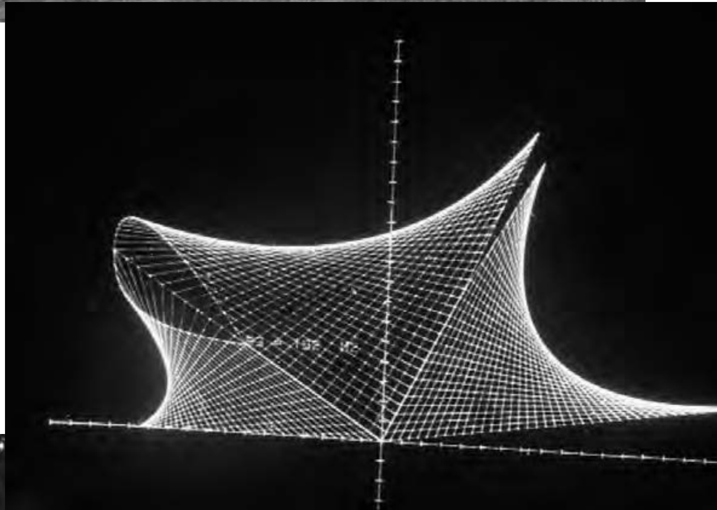
Xenakis reaches for a condition that is *becoming*, in flux, alert, and alarming. If we can understand his early compositions as critical of Serial composition in so far as it arrives at *stasis* through *linear* thinking, we can see his later spatial spectacles as critical of Modern architecture in so far as spatial experience is often grounded in quite static and linear forms: cubic space, symmetrical perspective, volumetric repetition, all keep to a formal language that leaves the extremes of corporeal and perceptual experience aside. Whereas Xenakis replaces Serial composition with a becoming-music, a durational movement that displaces the center with a complexity of vectors and lines of occurrence, he, in turn, replaces the vanishing points of architecture with curving surfaces, modulation of repetition, and an intensity of multiple foci prescient of much postmodern and deconstructivist architecture.[19]

Xenaksis's project for Paris in 1978 further demonstrates his pursuit of a spatial experience of light and sound. Whereas the previous Polytope projects often utilized an existing structure or building in which to create a work, the Diatope for Paris consisted of a unique tent-like structure designed specifically to house his sound and light event. The structure was designed as a modulation of a sphere, with two curving extensions that fanned out approximately sixteen meters from the ground. As Matossian explains, the Diatope "did not have a constant radius of curvature like the sphere but a different radius of curvature at each spot giving a variable form of smooth surfaces recalling the Philips Pavilion."[20] The canopy-like structure contained 1,600 strobe lights with eleven loudspeakers placed in a circle around the space. In addition, six columns held laser beams, along with reflecting mirrors, which no doubt were further reflected by the glass tiles making up the floor. The audience sat within this mesmerizing display, occasionally being lit up from below, hovering as if suspended above a bright sea. Xenakis's *Legend of Er* poured from the speakers, a series of sweeping electronics originating from the sounds of an African mouth harp, Japanese tzuzumi, and found objects used as textural sources. The forty-six minute program placed the spectator "under constant attack."[21]

Movements

The development of sound installation situates sound in direct relation to architecture and environmental geographies. Spatial forms, acoustics, psychodynamics of listening, and corporeal experience all come to the fore in the practice of sound





Iannis Xenakis, *Diatope,* Paris 1978. Courtesy of Xenakis family collection.

installation—space not as static object, but as live instrument. The consequences of such moves further dissolve the musical object, replacing it with location, place, spatiality, the presence of bodies, environmental input, and the interference of local noise. The work of Neuhaus, in initiating sound installation, stands as an example of pushing musicality toward remaining sensitive to the specifics of each place and each time: his work consists of a process of relating art to its context by drawing upon local noise as material input, whether that be the sounds of traffic, weather conditions or phone calls by the public. Such interests still find their place within contemporary sound installation. The works of such artists as Christina Kubisch, Rolf Julius, Mark Bain, Bill Fontana, Bruce Odland, Steve Roden, Stephen Vitiello, Bernhard Gal, and many others, as well as the works of Brewster, Amacher, and Leitner, can be seen and heard in relation to Neuhaus's early works in so far as site-specific interests become paramount.[22] Remaining sensitive to what is already there, to create situations that draw together the found and the constructed, bridging musicality with noise, private with public, to generate productive co-mingling, sound thus edges into constructive and deconstructive potential by revealing spatiality as an audible condition, bringing to life spatial form by making us aware of its temporal occurrence and passing.

The interaction of sound and space finds expression in Xenakis's highly idiosyncratic and unique sound and light spectacles. Xenakis furthers a tradition within musical composition in *positioning* sound within a given architecture. The work of Edgard Varèse no doubt held an important place in Xenakis's own aesthetic and philosophy.[23] Varèse's long-standing interest in developing alternative sound experiences based on utilizing new electronic technologies for both production and presentation was to find its ultimate realization in his work for the Philips Pavilion. As such, it also marks a culmination of his own career and heralds the beginning of the potential to place sound within an elaborated spatial experience.

The sonic spectacles of Xenakis congeal the composer's ongoing concern for architectural space and the spatialization of sound by motivating directly the formal design of space: lights outline spatial movements by animating a fantastic universe of color, flicker, and darkness in cinematic force; sound envelopes the listener in a cocoon of sonic movement that comes from all sides; and the intermingling of such media creates an architecture that is not so much fixed in volumetric certainty as made present through a temporal becoming. Such work, while remaining somewhat outside the cultural and aesthetic category of sound art and sound installation, nonetheless runs parallel to the work of Neuhaus and the developments of the genre, supplementing it with a fixation on mediatized theatricality.

Notes

1. Nouritza Matossian, *Xenakis* (London: Kahn and Averill, 1986), p. 58.
2. Ibid., p. 65.

3. Iannis Xenakis, *Sound and the Visual Arts*, ed. Jean-Yves Bosseur & trans. Brian Holmes and Peter Carrier (Paris: Dis Voir, 1993), p. 50.

4. Nouritza Matossian, *Xenakis*, p. 66.

5. Iannis Xenakis, in Nouritza Matossian, *Xenakis*, p. 69.

6. The Stochastic process is based on probability theory, in which events are not predictable on a micro-level but only at the macro-level. For Xenakis, Stochastic music is based on developing a mathematical structure that functions on a macro-level to organize the movement of sound events that are random only within a set of possibilities or densities. Aggregates of sound are thus held within an overarching net of sound movement.

7. Iannis Xenakis, in Nouritza Matossian, *Xenakis*, p. 85.

8. Sharon Kanach, interviewed by Rahma Khazam, *Earshot* 4 (2003), p. 62.

9. Iannis Xenakis, in Nouritza Matossian, *Xenakis*, p. 182.

10. Iannis Xenakis, from liner notes of the CD release *Iannis Xenakis* (Berlin: Edition RZ, 2003), p. 12.

11. Karlheinz Stockhausen, in Michael Forsyth, *Buildings for Music* (Cambridge, UK: Cambridge University Press, 1985), p. 321.

12. Le Corbursier, in Nouritza Matossian, *Xenakis*, p. 110.

13. While Le Corbusier had initially come up with the Pavilion's general shape, relating the building's footprint to that of a "stomach" or a "bottle" supported by metallic scaffolding, it would be Xenakis who would determine its geometry and structural shape. For a thorough and insightful history and analysis of the Philips Pavilion, see Marc Treib, *Space Calculated in Seconds* (Princeton: Princeton University Press, 1996).

14. Iannis Xenakis in Bálint András Varga, *Conversations with Iannis Xenakis* (London: Faber and Faber, 1996), p. 24.

15. Xenakis produced *Concret: PH* using the facilities of Philips in Paris. The recorded work was produced through manipulating the sound of charcoal burning.

16. Iannis Xenakis, in Nouritza Matossian, *Xenakis*, p. 182.

17. Iannis Xenakis, from liner notes of the CD release *Iannis Xenakis*, p. 12.

18. Ibid., pp. 9–11.

19. Considering Xenakis's work and general enthusiasm for intense sonic and visual experiences, and the spatial and geometric forms he designs, it is hard not to think of the works of such contemporary architects as Greg Lynn, Peter Eisenman, Bernard Tschumi, and Frank Gehry, in which architecture is conceived more as a series of flows, ruptures, and movement rather than cubic, linear, and grid-based objects. Xenakis thus brings to life Le Corbusier's Modulor Man by housing him within a heterogeneous, dynamic multiplicity.

20. Nouritza Matossian, *Xenakis*, p. 223.

21. Ibid., p. 226.

22. Such a list of contemporary artists, while housed under the title of "sound installation," must also be understood in all their distinction, which may be outlined according to the ways in which sound and space are made conversant in each of the artist's approaches. Yet, overarching through their work is a general thrust toward site-specificity, the presentation of sound in relation to existing conditions (aural and other), and the general belief in listening as a means *into* architecture and environmental understanding.

23. Varèse's use of sirens in his compositions *Americas* (1918–21) and *Ionization* (1930–31) put to use glissandi so as to move sound through space, finding future resonance in Xenakis's own work.

Soundmarks: Environments and Aural Geography

Sounds cannot be known the way sights can be known. Seeing is analytical and reflective. It places things side by side and compares them.... Sights are knowable. Sights are nouns. Sounding is active and generative. Sounds are verbs.[1]

—R. Murray Schafer

Recorded sound thus always carries some record of the recording process.... Every sound I hear is thus double, marked both by the specific circumstances of recording and by the particularities of the reproduction situation.[2]

—Rick Altman

Introduction to Part 5

Soundmarks: Environments and Aural Geography

The works of sound installation seek out a specificity of sound in which location and listening intersect. The place of sound becomes as much a part of auditory experience as the material of sound itself. Architectural form, spatial music, and place-based sound feature as opportunities to situate a listener within an intensification of immediate experience that expands beyond a point of focus to an environmental situation: from Neuhaus's sound interventions that stimulate conversations between found sound and constructed audio, to Leitner's architectural experiments in which acoustics is extended to activate the body, inside and out. What these artists and approaches underscore are the proximate and the local: found sounds mirrored back to their origin, local sonics amplified through architectural construction, a listening to what is immediately surrounding, in public and private spaces.

Such locality is of paramount concern for the study of environmental sound, or what acoustic ecology has deemed the "soundscape." Initiated in the early 1970s in Canada, acoustic ecology (or "soundscape studies") continues today as a growing community and field of research that spans the globe, with offices in the United Kingdom, Scandinavia, Australia, and North America.[3] It promotes active listening, environmental awareness, cultural practice sensitive to questions of place, and location-oriented musical education. While pinpointing local sound as a powerful presence affecting the human condition, ecological balance, and the rhythms of life, acoustic ecology, in turn, expands locality to global proportions. Whereas sound installation in the work of Neuhaus, or even Amacher, works with locational sound as a bounded geographic space, acoustic ecology situates local sound in relation to the ecology of the planet, and the presence of a single sound is understood to activate the entire field of sound, its balance and evolution. Thus, to listen to a sound is to listen to the entire body of the sound world in micro-detail.

Acoustic ecology can be situated historically in relation to the development of Land art of the early 1970s. Extending the art object to an environmental context, Land art works sought the out of the way, the distant point on the map, so as to engage more natural elements and their intrinsic forces. Sunlight, wind, rain, lightning, the forces of erosion, snowdrifts, or mudslides feature as materials within large-scale sculptural interventions. Exemplified in the works of Michael Heizer, Nancy Holt, Mary Miss, Robert Smithson, and Walter de Maria, Land art expands Minimalism's concern for the viewing body toward the natural world as partner in aesthetic experience. In much the same way, "soundscape composition" aims to stimulate a conversation between environmental sound and musical work, wedding the discovery of place-based sonority with deep listening. The specificity of the gallery space as well as the concert hall or music studio, in their steady contamination by the corporeal, phenomenal, and psychic instances of artistic and audible practice, is defined not so much by its own characteristics but by an environmental materiality. Smithson's own distinction of "site" and "non-site" thus articulates an attempt to make clear the actions taking place outside, in the desert or forest, and those presented inside, within the gallery space and in front of an art audience. The gallery as "non-site" functions to provide a place to house the "site" of the actual artistic work and, in doing so, to allow such work the cultural platform it requires: presenting a pile of stones on a gallery floor taken from the Salt Lake in Utah does not so much present itself as an artwork but rather indexes the actions of the artist in making his *Spiral Jetty*. The "non-site" is thus a space of discourse whereby artistic reflection and criticality takes shape, considering the distant lake and its artistic addition through the actual materiality of its "site."

While maintaining a rich and broad understanding to sound, acoustic ecology operates not only through aural research, educational workshops, and conferences, it also uses music and the aesthetical realm of sound art to extend its research, to make of sound and its lessons an aesthetic experience in which listening, environmental awareness, and global relations come into play. Thus, composition becomes a form of research conveying cartographic routes in and through relations to place. The distinctions of "site" and "non-site" find resonance in acoustic ecology's artistic and musical works, in so far as sounds are removed from their indigenous environment and composed into a "musical" work, presented through the channels of cultural production, whether on CD and radio, or through performance and installation. Yet these sounds are given weight by their continual referral to the actual site of their origin: the streets of Vancouver, the flows of the Hudson River, or the array of bird calls taking place in the deserts of the American Southwest make apparent an artistic practice taking place, out there in the fields and deserts, on the city streets, and in the forests, while being transformed, through the particulars of an artistic practice, into cultural objects.

It is my interest to address acoustic ecology and its strands of theory and practice with a view toward expanding understanding of sound and how it relates to

place: in what way does sound inform me of my sense of location, as an immediate and distant geography? And how does such relation form the basis for an artistic project? The works of Hildegard Westerkamp and Steve Peters will be used to take a critical angle on what I perceive as acoustic ecology's often contradictory work; for, like Smithson's direct interaction with environments, to harness environmental sound raises the problematics of how the specifics of place are defined. The recording of place often leads to contrary results, for to bring place to life one has to contend with the interferences of its very representation, mediation, and ultimate dislocation. To follow such contradictions, the work and practice of media artist Yasunao Tone will be considered so as to bring to light other modes of working with sound and its position within environmental contexts. His work will form the basis for pushing forth a different understanding of what it means to listen environmentally, by implementing *dis*informing strategies. Such comparisons lead us, in turn, to current viewpoints related to media art and the incorporation or expansion of broadcast technologies, as in the work of Bill Fontana. Focusing on the work of Fontana will allow for considering soundscape composition that works *with* the given interferences of technologies and the dislocation of place-based sound. Fontana harnesses soundscape composition's contradictory tendencies by making complex musical systems that keep place alive even while transposing it onto extremely distant locations. The tensions inherent to Smithson's "site" and "non-site" find resolution in contemporary methodologies that actively transport, dislocate, and mend the differences between places. This can be recognized generally within current understandings as to what site-specific practice may mean. As Irit Rogoff articulates, site-specificity's legacy is marked by certain assumptions as to what place is, leading to a form of practice that sought to establish "rapport" with a site. "Rapport" for Rogoff implies a tendency toward approaching sites as though one could expose "deep structures" existing just below the surface. In contrast to site-specificity, Rogoff proposes the term "field work," which for her is defined by "being spatially inside while being paradigmatically outside."[4] To achieve such distinctions, field work seeks to inhabit the given space or site through methods of "complicity," which spatially replace notions of "frontal confrontation" (rapport) toward other ways of thinking through issues embedded in every place. What is at stake for Rogoff, and the notion of field work, is how artistic or creative practice in pursuing location-based forms of working may continue to spatially and geographically remain sensitive to the very actions and assumptions it imposes on place. To achieve a more active criticality, the very roles an artist plays in working with place, and the assumption that site-specific practice will eventually expose the truth rather than pursue its availability, should be understood rather as opportunities for inhabiting the very problematic such assumptions produce.

Acoustic ecology raises issues pertaining to sound and audition and their locational specifics, which can be understood to operate along some of the fault lines of site-specific practice mapped out by Rogoff. In considering works of soundscape

composition, and intersecting them with Tone and Fontana, the particulars of "acoustical truth" may be overturned to suggest various perspectives on how place can be heard.

Notes

1. R. Murray Schafer, "I've Never Seen a Sound," in *S:On: Sound in Contemporary Canadian Art*, (Montreal: Éditions Arttextes, 2003), p. 67.

2. Rick Altman, "Material Heterogeneity of Recorded Sound," in *Sound Theory, Sound Practice*, ed. Rick Altman (London and New York: Routledge, 1992), pp. 26–27.

3. The World Forum for Acoustic Ecology (WFAE) was started in 1993 after the First International Conference on Acoustic Ecology held in Banff, Alberta, Canada.

4. These quotes, and the remaining, are taken from a lecture by Irit Rogoff presented at the University of Copenhagen in 2004. For more on her thinking, see Irit Rogoff, *Terra Infirma: Geography's Visual Culture* (London: Routledge, 2000).

Chapter 13

Seeking Ursound: Hildegard Westerkamp, Steve Peters, and the Soundscape

The development of the World Soundscape Project (WSP, now known as the World Forum for Acoustic Ecology) in the early 1970s marks an important step in the recognition of auditory experience. Initiated by R. Murray Schafer (and others, such as Hildegard Westerkamp, Barry Truax, Howard Broomfield, Peter Huse, Bruce Davis, and Jean Reed) at the Simon Fraser University in Burnaby, British Columbia, the WSP aimed to raise consciousness on the effects of sound on the human condition by analyzing and collating environmental sound through recordings, information databases, community surveys, workshops, artistic and musical work, and research projects. By developing such explicit awareness it, in turn, added to experimental music and the emerging field of sound art the possibility of working directly with the "soundscape." "Soundscape" refers to environmental sound as found in given places and at given times. As Paul Rodaway describes:

> The soundscape is the sonic environment which surrounds the sentient. The hearer, or listener, is at the center of the soundscape. It is a context, it surrounds and it generally consists of many sounds coming from different directions and of differing characteristics.… Soundscapes surround and unfold in complex symphonies or cacophonies of sound.[1]

From mountaintops to city streets, lakesides to sidewalks, glaciers to small villages, the soundscape is that which exists and of which we are a part, as noisemakers, as listeners, as participants. It locates us within an aurality that is extremely proximate—under our feet and at our fingertips—while expanding out to engage the radically distant and far away, from birdcalls from above to winds whistling

from remote horizons. The soundscape is all sounds that flow and get carried along in the full body of the sound spectrum, from above and below audibility, as pure energy, molecular movement, in fractions of sonority that integrate through a reciprocal intersubjectivity human experience with the earthly whole.

Marking the Ear

R. Murray Schafer's *The Tuning of the World*, published in 1977, sets out to take stock of the acoustic environment. Recordings from around the world, soundwalks and listening exercises, radio broadcasts and pedagogical projects, feature as approaches toward developing a flexible and intuitive strategy for marking out the parameters, delineations, and categories of acoustic experience and its material operations. He situates sound within the mythological beginnings of earthly presence, from the Dionysian to the Apollonian, to the alchemical and Gnostic, to siren songs and celestial harmonies. Schafer maps out correspondences across continents, histories, myths, and literatures, locating the tone of the world from bird song and insect life through to street cries and city noise. He listens to the sounds of the world, gaining insight by tracking the full range of audible life, learning the language of other species:

> The definition of space by acoustic means is much more ancient than the establishment of property lines and fences; and as private property becomes increasingly threatened in the modern world, it may be that principles regulating the complex network of overlapping and interpenetrating acoustic spaces as observed by birds and animals will again have greater significance for the human community.[2]

Acoustic space, its definitions and demarcations, its overlapping and interpenetrating nature, hovers at the core of Schafer's analysis, which proposes, in his book's final chapter, "acoustic design" as a discipline. Acoustic design for Schafer should function alongside any form of urban development and architectural work, for the designing of the built environment has radical implications for the acoustic environment: population density, noise pollution, the erasure of "soundmarks," obliteration of clear acoustic territory all result from a lack of acoustic awareness on the part of urban planners.

For Schafer, the modern soundscape increasingly consists of a high degree of harsh noises, what he calls "lo-fi" sound—sounds that impose themselves indiscriminately and with an increased level of disturbance upon the body, society, and the environment. Acoustic ecology sets out to reduce such noise, to limit the progressively loud and abrasive sounds indicative of advanced industrial societies. In contrast, "hi-fi" sounds "have a low ambient noise level and discrete sounds emerge with clarity,"[3] thus allowing one to integrate more harmoniously with the environment. Built into acoustic ecology is an inherent system of values by which sounds

are measured, assessed, and mapped out. As defined by Schafer, acoustic ecology is "the study of the effects of the acoustic environment, of soundscape, on the physical responses or behaviorial characteristics of creatures living within it. Its particular aim is to draw attention to imbalances which may have unhealthy or inimical effects."[4] Yet, counter to such "moralizing," acoustic ecology's proscriptions proceed from a belief in what Truax refers to as "communicational relationships" offered through acoustic information, for "the exchange of acoustic information in a soundscape can be thought of in terms of 'feedback' concepts" through which "orientation" and "the awareness of self in relation to others" is nurtured.[5] The soundscape is not only sounds out there but also sounds produced by people (and animals!) and their communicational interaction with sounds of the environment, which are not only other people but sounds that orient us within our everyday experience, such as fog horns, church bells, even the sound of one's telephone. For acoustic ecology it becomes of paramount concern to draw attention to acoustic understanding by preserving the clarity of the "acoustic horizon" and the flow of acoustic communications—to keep clear the channels by which acoustic spaces define themselves and through which relations are formed and maintained. While allowing for the possibility that "noise" may be part of such communications—as in the case of city traffic, which may contain numerable signifiers through which one may orient and feel at home—more often than not, noise is referred to in the negative.[6]

What acoustic ecology lends to a history of sound art is a social, musical, and ontological register, for in proposing sound as a category for bureaucratic consideration, sociological study, and environmental concerns and design, acoustic ecology raises the bar on auditory understanding and its relational nature.[7] Schafer's belief in the power of sound to either harm or uplift an individual, as a marker for environmental health or damage, and as a necessary medium for the construction of the built environment, raises sound and aural culture into the center of attention while adding a refined vocabulary for enhancing an understanding of the materiality of sound and its impact. While forms of sound installation sought increasingly to compose sound and space as an integrated material condition, bringing the architectural fabric and its spatial delineations into and against the sonorous invisibility of frequency, tonality, and found sound, acoustic ecology's program of locating the movements of audition in and through the world ultimately outlines how such movements figure beyond the strictly architectural.

Recording, Notating, Documenting

At the core of acoustic ecology is the act of audio recording, as seen in the World Soundscape Project, resulting in numerous recordings. The impulse to make field recordings extends to the very beginning of recording technology. Ethnographic and anthropological studies utilized recording technology in the gathering of field data: indigenous sound could be captured and held on cylindrical spools and heard

again. Such processes thus enabled, to some degree, a more thorough consideration of sound's ability to embody and convey information pertaining to particular cultures and their environments. From music to speech, environmental life to ceremonial events, sound provided a source for probing the details of difference.

The intention behind the WSP was based on capturing environmental sound in all its breadth and diversity across the globe, preserving important "soundmarks"[8] and gaining insight into people's understanding and awareness of acoustic environments. From arctic winds to cooing pigeons in Trafalgar Square, wild boar to wild children, the eccentricities, delights, and intensities of the sonic environment were to be harnessed, transposed onto magnetic tape, and held in archives for posterity. The initial investigations were based on a detailed study of their immediate location around Vancouver (published as *The Vancouver Soundscape*[9]), then toward a more in-depth study of Canada, in 1973. *The Soundscapes of Canada*, a radio series broadcast as part of the CBC Ideas radio series, was initiated and recorded by Bruce Davis and Peter Huse and consisted of recordings made across Canada, highlighting local accents, regional characteristics, and diverse sound fields. These initial investigations led to a European tour in which the group was to investigate five villages, one each in Sweden, Germany, Italy, France, and Scotland. *Five Village Soundscapes* gathered together hundreds of hours of audio recording, contributing to the WSP's analogue tape collection of over three hundred tapes.[10] It was, and is, believed that such an archive was essential to developing an auditory culture sensitive to the phenomena of sound in all its potential and effectiveness. Locating such potential meant locating the geographic specificity from where sound springs—to seek the origin of sound's immediate presence while relating this to global conditions and the larger spectrum of sound's migrational and emanating trajectories. Acoustic ecology proceeds with a seeming nostalgia for the "primary sound," seeking to locate the mythological beginning of sound, the *Ursound* from which the sound world itself is born. "To find it we must return to the waters of instinct and the unshatterable unity of the unconscious, letting the long waves of Ursound sweep us beneath the surface, where, listening blindly to our ancestors and the wild creatures, we will feel it surge within us again, in our speaking and in our music."[11] To cast a net of microphones across the globe sets our ears on finding the truth of sound, so as to arrive finally at the original soundscape.

In conjunction with audio recording, subprojects of the WSP include notating environmental sounds by developing a system of signs and marks that aim to measure the soundscape in various locations. Classifications according to physical characteristics, referential aspects, and aesthetic qualities are used to systematically quantify sound events, marking their duration, frequency/mass, fluctuation/grain and dynamics, and noise levels. These analytic features are supported by subcategories such as Mythological sounds, the Sounds of Utopia, and the Psychogenic Sounds of Dreams and Hallucinations, infusing the scientific with subjective impressions.[12] Categorizing sounds found in the environment oscillates between

defining objective structures and properties while underscoring subjective observation and experience, stitching together empirical data with metaphoric and poetic imagery. To measure sound, to quantify and qualify its materiality according to its place within environmental situations, acoustic ecology bridges decibels and dreams, relying upon intuition and analysis to fully describe how sound behaves and how, in turn, we behave because of it. Such dichotomy may point toward a greater recognition of the materiality of sound to set into relief through being absolutely present the immediate while evoking a past that is always already there, coupled to sound's instant of emanation. For sound's evanescent nature both spawns the analytic imagination while evading its grasp, supplying such imagination with degrees of fantasy and poetics.

In setting out to archive, notate, and document environmental sound, acoustic ecology relies upon recording technology's referential character to fully mimic and embody "real" sound. Recording was, and is, understood to carry sound to our ears intact, combating its evanescence and retaining through a temporal slippage its signifying body. The WSP was based on two gestures: extending out across the globe, tuning into diverse sound events, microphones aimed at picking up the drama of the sound world, while at the same time, fixing sound, embedding it on tape, cataloging its life to bring it back home. The act and the archive, the live and the recorded, the there and the here set each other into relief by operating through a technological sleight-of-hand. To bring the globe home partially runs the risk of undermining the soundscape in general, for what the soundscape (and the environment in general) teaches us is that place is always more than its snapshot. This is not to overlook the genuine sensitivity with which acoustic ecology operates, for certainly such contradictions do not go unnoticed by those active in the field. Yet it is my interest to explore this dynamic at work in acoustic ecology as opportunity for confronting and utilizing the problematic of cultural production that aims for the real. For acoustic ecology creates its own mythology around the use of audio recording and its technologies, even while trying to get past it: microphones, audio tapes, headphones, radio broadcasts, speakers, and amplification systems function as magical tools for tapping the buried unconscious inside environmental sound, locating its messages by partially hallucinating in front of the acoustic mirror of its recording. Thus, through acoustic ecology we might discover not only the environmental and communicational pathways of sonority but also how such pathways are brought forward through levels of mediating technology and imagination.

Dreaming the Soundscape: Hildegard Westerkamp

The works of Hildegard Westerkamp, a German/Canadian composer working with Schafer in the 1970s as part of the original team establishing acoustic ecology and the World Soundscape Project, continue today to investigate sound and environments through installation projects, recordings, workshops, and collaborative

works. Known for her involvement in field recording and "soundwalking," her audio CD *Transformations*, released in 1996, reveals her process of using these to create compositional tapestries based on narrative, found sound, poetry, and electronic treatment. Incorporating these into "soundscape composition," her works draw us into relation to environmental conditions by harnessing and abstracting their sounds, as in her work "A Walk Through the City," from 1981. A composition based on environmental recordings in and around the Skid Row area of Vancouver,[13] and inspired by a poem by Norbert Ruebsaat, the work oscillates (like many of Westerkamp's works) across the real and the imaginary. Low drones are intertwined with car horns and the sound of traffic as found on a busy street—brakes shriek and blend into sustained musical notes, like sheets of sonic ice grating and then sliding across each other, scraping, then tapering into a distant voice narrating a text: "somewhere a man is carving himself to death for food . . ." announced from a tinny megaphone, then subdued by strange murmuring voices—children's voices, or a baby gurgling? The work veers between harmony and discord, beauty and a haunting melancholia, concrete sound and its transformation into abstractions. As Westerkamp reveals: "I transform sound in order to highlight its *original* contours and meanings"[14] (my emphasis). Such "original" contours and meanings are to be found not strictly within the acoustic shape and dimension of the sound object, but in the contextual location of its origin. Original meanings bring our attention to origin and its tracing through compositional method.

As part of her transformation of found sound into acoustic and sonic depth, "A Walk Through the City" is just that—a journey through a particular city, and a particular area of that city, which poetically winds its way into various states of awareness: from factual to fictional, documentary to docudrama, directing our attention to the deaths of Skid Row while maintaining a sonic palette rich in texture, nuance, and tonality. In what way does such sonicity serve the actuality of the work's drive to show us something of the city? Like all levels of abstraction, whether painterly, musical, or spoken, they conceal while at the same time reveal another shape to reality.

To register the specifics of environments, audio recording supplies more than a means of documentation. What is proposed in much soundscape compositional work is the possibility of harnessing the real while getting closer to its submerged sonority: audio recording constructs place in a way that brings to the fore its acoustical life. Westerkamp and other soundscape composers may operate along the lines of what Michel Chion refers to as "reduced listening"—"listening for the purpose of focusing on the qualities of the sound itself (e.g., pitch, timbre) independent of its source or meaning"[15]—though in a way that disavows the aim of such reduction, for soundscape composition returns to the source with renewed and vigorous attention. It pulls us away then pushes us back in. Westerkamp's work seems to suggest that such reality may only be heard through entering into a shift in listening consciousness whereby dreamlike states open the way toward active listening and ultimate participation. Her musical transformations function

to transform consciousness—to drop it just below the line of awareness so as to awaken the ear to "original contours and meanings." These original meanings hark back to Schafer's claim for the Ursound, to the collective unconscious of our aural memory, that primary location of unity and instinct. Such interests position acoustic ecology, and the processes of soundscape composition, squarely within an engaging contradiction: that of transcendental visions embedded in obsessions with material reality, which while aiming for Ursound gives us Skid Row, and vice versa. Thus, the sonorous flights of Westerkamp are, in turn, grounded and fixed in their own locational specificity.

Presence Through Absence

To deliver up the real through audio recording and sonic investigation, much soundscape work and composition relies upon accentuating personal presence. Like their research into quantifying and qualifying soundscapes, objective information is incorporated into a greater vocabulary, rich in subjective experience. Westerkamp's recordings tell us not only about a city, but about the city captured and composed by the artist. Her sounds reach our ears because of her being there as a presence that while removed nonetheless remains in the recording, as an implied personality, however subtle or overt.[16] The realness of place thus partially relies upon the actuality of the person. The acoustic feedback articulated by Truax here finds its parallel, for Westerkamp's musical work situates the composer within a communicational model in which recording means looping self and environment in a weave of the found and the compositional. Her compositions arise through a belief in *contributing* to the very soundscape under observation, for "the sound wave arriving at the ear is the analogue of the current state of the physical environment" changing through "each interaction with the environment"[17] as it travels. Sound picks up, collects, and is given shape by environmental presence. Thus, to capture environmental sound to bring it home gains significance by situating the subjective body inside the sound wave and its ultimate journey.

Another of Westerkamp's compositions, "Kits Beach Soundwalk" (1989), exemplifies this dynamic through vocal narration. Based on her radio program "Soundwalking," which aired on Vancouver Co-Operative Radio through the late 1970s, "Kits Beach Soundwalk" consists of environmental recordings made one "calm winter morning, when the quiet lapping of the water and the tiny sounds of barnacles feeding were audible before an acoustic backdrop of the throbbing city."[18] Overlaid on top of this recording, Westerkamp speaks to us: "It's a calm morning. I'm on Kits Beach in Vancouver. It's slightly overcast and very mild for January. It's absolutely wind-still." The narration continues, telling us details of the environment, her own position, and the environmental conditions, observing animal life, from seagulls to feeding barnacles. Yet at a certain moment, she begins to play with the recording by referring to the actual technological process behind what we are hearing. For instance, in describing the scene, she says: "I could shock you or fool

you by saying that the soundscape is this loud," at which point the background humming sound of the city is taken up, becoming suddenly louder; she then continues by saying, "but it is more like this," taking the volume down again. Such play opens up a space within the recording that accentuates her actual presence in the real environment while revealing the compositional components of constructing what we are hearing. Here soundscape becomes sound manipulation brought to the fore when she further tells us that she is using band filters and equalizers to get rid of the sound of traffic in the background to "pretend we are somewhere far away." Moving away from the city, and the looming acoustic presence of traffic and urban noise, to focus attention on the tiny sounds of barnacles feeding in the water—to enter this new world is to move into a different listening: high-pitched clickings that push the soundscape toward microscopic detail. From looming traffic and the calm of a wintry day to the minute scrapings and rustlings of eating barnacles lapping in miniscule detail at the water's edge, "Kits Beach ..." takes the ear on a different journey than in her city walk, channelled through the soundscape by narration, by self-exposed technological manipulation, and by changes in scale, from the background to the foreground, from city life to oceanic detail, from being here to being elsewhere, and, ultimately, to "the tiny voices ... of dreams, of imagination." The journey is furthered as she begins to recount recent dreams, which in themselves are about different soundscapes, of high-pitched, tiny sounds, "which are healing dreams." One dream of women living in an ancient mountain village weaving silken fabric transforms into a million tiny voices "whishing, swishing and clicking"; and another where she enters a stone cottage to hear four generations of a peasant family, eating and talking, which becomes "smacking and clicking and sucking, and spitting ... and biting and singing and laughing and weeping and kissing and burping and whispering. ..." Her Rabelaisian dream-soundscape mingles with the soundscape of Kits Beach, ancient voices overlaid with feeding barnacles, Ursound with this sound, the myth with the here and now. Her voice, speaking of dream against the backdrop of Vancouver's shifting aural presence, makes for a reflective invitation, directing one's own listening to place, inner journeys, details of the minute, the Ursound of one's own aural unconscious. Recording technology—from filters to equalizers—instigate the recovery of that internal, primary soundscape of unconscious musicality, while creating overlays with real life. The mimesis of recorded place thus wears two faces, one being the simulation of presence, as in the city's noise, the other the stimulating of poetic drifts toward mythological origins.

Contexts of Dreaming

Soundscape composition can be heard in contrast to musique concrète and the acousmatic tradition, to which Chion refers in his "reduced listening," in so far as soundscape work while reducing listening does so by reminding the listener of context as the source of sound. Whereas Chion and Schaeffer's acousmatic ethos

strips sound of any visual referent, linguistic description, or direct narrative, relying instead on the qualities of sound itself, its manipulation and construction, Murray Schafer's World Soundscape Project understands such qualities as always infused with traces, marks, bodies, and species from its original location. Schaeffer and Schafer thus occupy two extremes on the sonic spectrum; one strips context and the other emphasizes it. The acousmatic dreamspace as found in the cinema for the ear meditates on a musical journey through timbre, texture, tonality, electronics, collage, and sonic extremity, while Westerkamp's dream is one that brings the ear *back* to context, either as Skid Row or oceanic beauty, as urban life or ancient village. Both the actual and the dream, the original and the origin, function as contexts, reminding the listener of the place of sound.

Looking Inward

Listening, for Westerkamp, asserts the possibility of unifying the individual, stitching subjectivity into the world, as a positive confirmation of being. Soundscape composition sets the stage for such unification by working directly with the environment, tuning itself as a form of cultural production to the ecological body of nature. As she explains:

> Soundscape work without the journey into the inner world of listening is devoid of meaning. Listening as a totality is what gives soundscape work its depth, from the external to the internal, seeking information about the whole spectrum of sound and its meaning, from noise to silence to sacred.[19]

Such thinking runs through the general ethos of acoustic ecology and soundscape composition: to engage listening so as to invite people to hear the whole being of the world, for sound is embraced as that which signals the dynamic becoming of all things—it is the trace of the animate, the voice of the sensate environment, and its inner emanating presence. Thus, to record, compose, and playback such sounds through a musical work gives to listeners a heightened experience of the world, wedding them to its inner sonority. Listening, we travel to this inner space to hear the outer world in all its magnificent detail, echoing Schopenhauer's original exclamation: "The unutterable depth of all music by virtue of which it floats through our consciousness as the vision of a paradise firmly believed in yet ever distant from us, and by which also it is so fully understood and yet so inexplicable, rests on the fact that it restores to us all the emotions of our inmost nature, but entirely without reality and far removed from their pain."[20]

Acoustic ecology's interests lie in reducing the noise of the world, cleaning the ears so as to make one aware, fully present in the presence of the sound world. Drawing connections between "noise pollution in today's urban environments and the health and sacredness of our inner sound world," much of their work,

from compositions to workshops, attempts to heal the individual by creating "journeys into the inner world of listening." Thus, noise stands in direct opposition to the inner world, for as Paul Hegarty observes, noises "bring you to your body … a body made ear,"[21] emphasizing not so much the inner journey but the outer skin, not so much the sacred but the profane. Following Hegarty, sound can force one out, to exert the exterior, pressurize the individual into disrupted sense of self, for "listening is always in the presence *of*, rather than *in* presence …"[22] (my emphasis). That is, noise is always in contrast, as a difference that keeps one out, in confrontation with an exterior that refuses passage beyond itself.

To arrive at the inner journey for Westerkamp means moving from "noise to silence, from the external to the internal, from acoustic onslaught to acoustic subtlety, from worldly to sacred sound experiences,"[23] limiting noise, reducing extreme sounds, cutting back volume, so as to create a merging of the senses with place—the self and surroundings sympathetically mingle to reach the dreamy origin of presence. Yet, it would seem to reduce sound, minimize its presence in terms of volume, quality, texture, and spatiality, would, in turn, silence the crowd, and soften social space, cutting back on bodily presence, the gibberish and blabber always found in environments that contain people (not to mention other species). In short, to be inner seems to imply a minimal outer, for "noise deforms, reconfigures … dissipates, mutates"[24] rather than unifies, or makes whole.

Westerkamp's work, and much acoustic ecology work, paradoxically oversimplifies the sound world by reducing it to such binary terms, making the journey into sound resolutely quiet, withdrawn, dreamy, and private. Yet, it does so paradoxically by relying on an outside, the environmental earthly happenings always out there, in the noisy world. Whereas Hegarty's consideration of noise opens up a field of potential in which listening may lead the individual *into* the world by underscoring noise as a "you," and not an "I," for by "not having a being for me, and in not having the character of being—for, it [noise] does not allow the 'I' to be either," concluding that "the self of noise is a 'you.'"[25] Following such thinking, in short, noise is always a stranger. While Westerkamp, like Truax, recognizes noise as part of the sound world, as part of soundscape composition, she reduces an appreciation for its place within sound experience, and how we experience the world and each other. At what point then does noise become noise pollution? How does it slip from positive to negative, from acoustic subtlety to acoustic onslaught? This occurs precisely, following Truax's own communicational model, on the level of "information." To recall, "lo-fi" sounds disrupt clarity, confusing the spectrum by which acoustic messages can travel and inform a listener, binding environments to their ecological life and defining acoustic spaces, whereas "hi-fi" sounds "invite participation and reinforce a positive relationship between the individual and the environment" for the "listening process is characterized by interaction."[26]—interaction because information gets through, messages are delivered, and one responds with an equally clear message. In other words, sound finds its recipient, settling into the spectrum of waves, finding its place within the place of the sound world.

Noise disrupts this feedback loop, blocking out the movements of information, unsettling sound from its place, removing the feedback loop by adding too much or too little, crisscrossing the spectrum with too much wave, too much hum, or too much mixing. Noise then is understood to operate on the level of information: it remains a *dis*informing antagonist. Thus, for Westerkamp to locate the inner sound journey—to those stone cottages and ancient villages of the unconscious—one must feel at home, and among friends.

Finding Place

It is my view that in place-based, site-specific sound work, place paradoxically comes to life by being somewhat alien, other, and separate, removed and dislocated, rather than being thoroughly mimetically real. For the recording of environments gives definition to a specific place, revealing its inherent characteristics and events while operating to displace such specifics, to locate them elsewhere. That is to say, as a listener I hear just as much displacement as placement, just as much placelessness as place, for the extraction of sound from its environment partially wields its power by being boundless, uprooted, and distinct. Thus, difference and displacement form a backside to soundscape composition's emphasis on immersion and origin. Here, we could propose that to listen deeply is to arrive at a place of alienation, not necessarily disheartening but rather productive. For the pursuit of the environmentally poetic may not necessarily lead to harmonic plenitude between oneself and the world—as Westerkamp herself suggests, knowing place is never complete, for it always contains things beyond one's grasp, as instances of "interference," which may in the end be part of what it teaches us.[27]

While such dislocation is precisely why the artist Max Neuhaus refuses to document his installation works through audio recording—for to record the sound would be to undermine the site-specificity his work aims for—for Westerkamp (and others) dislocation seems to posit the possibility of *finding* place: to bring the alien back home. Such tension, I would propose, is at the heart of *Transformations* and other related recorded works, and further, functions as the potential of environmental recording itself: that is, to offer up difference. A prime example is Annea Lockwood's *A Sound Map of the Hudson River*, from 1982. The work is an "aural journey" from the source of the river to the Atlantic Ocean over the course of sixty-seven minutes.[28] Existing entirely as an audio recording (originally as an installation and now as a CD on Lovely Music Records [1989]), the journey is marked by a series of points, or "aural perspectives," on the river. Playing the CD at home brings the river far from its actual location. In this way, the "sound map" is, like all maps, a kind of abstraction of a given place. Yet through audio recording such abstraction plays with the actual a bit more dynamically. For recorded sound has the ability (which is at the heart of acoustic ecology) to deliver effective transformations to the very place of listening.

The work of Steve Peters, an artist based in New Mexico and working with field recording, issues of place-based sound, and environmental concerns, furthers this communicative belief. As he states, the *Hereings* project sets out to "document my experience of immersive listening, and of consciously forming an intimate relationship with Place over time."[29] Invited to participate in a group exhibition at The Land/an art site in Central New Mexico, Peters dedicated one year to making field recordings at different locations surrounding the site. The recordings were made so as to span the course of twenty-four hours, occurring throughout the seasons. Thus, the recordings take a listener through two cycles of time, running the course of a full day and a year.[30] In addition to the recordings, Peters wrote a series of poetic texts describing sounds heard during the recording process. For the final installation, these texts were inscribed onto stone benches placed at each of the recording locations. The benches acted as markers for the project, as well as points from which to engage the environment and its aural life, indexing the "actual" experience of Peters himself: that these points indicate where he stood during the recording process. Visitors were led to occupy the benches, as listening stations, relocating themselves back toward the original moment of the artist's listening. This was furthered by the fact that in listening, a participant could, in turn, read Peters's own experiences as inscribed on the benches, as in "a deep molecular emptiness/ hangs in the air/ time holding its breath," the entry for "11:00 pm (April 13, 2000)." Another, from 4:00 pm on September 6 reads: "late afternoon stillness/ several birds/ a sudden riffle of wind."[31]

The *Hereings* project is documented in a publication consisting of an audio CD, the texts, and further information and photographs from the site. Thus, the publication seems to slightly undermine and transgress the intention of the work, for any publication (and by extension, form of recording) on "the gradual process of becoming connected with Place" runs the risk of leaving place behind, for certainly books (and CDs) are mobile objects circulating through random environments, arriving at locations far different from what they aimed to document. Further, the desire to form an intimate relationship with environments seems to imply something quite personal, potentially sealed off from conversation, and Peters's own testimony to such intimacy hints at that interior sacredness articulated by Westerkamp that might elide forms of social participation. Thus, to listen and read *Hereings* is to eavesdrop on the poetic experience of the artist.

Such tendencies refer to an aesthetic legacy whereby artistic production is but a mirror of the artist's own image: mimesis depicting interior states, psychological anxieties, euphoric hopes, and ecstatic dreams. Art represents life at its most poignant, its most dramatic, and its most memorable. Peters, and soundscape composition in general, it seems, follows this track by conveying the original experiential moment, and by emphasizing the place of the artist: Lockwood's *Sound Map* brings the river, but also the artist's experience, to my ears, Westerkamp reveals the diversity of urban sounds by telling her story, and Peters positions

my presence onto the original points of his own recording/listening/experiential *gestalt*.

Yet against this mimetic approach, I want to follow Westerkamp's own observations about "interference" to embrace a counternarrative, the underside to soundscape composition: against mimesis and toward alterity. Westerkamp's "delight in … a car-horn, a siren, a bird-call, a train-horn, people's voices, or a single, passing motor-bike" as it reaches in, interferes with, and adds to a musical concert, within the space of a concert hall, opens up musical or cultural production to the environment: that in their intermixing new experience may occur.[32] In playing back Peters's *Hereings* CD, and the sites around New Mexico, is not so much to locate myself back there, toward the original moment, but to be placed *between* that and the given present. While New Mexico may remain, it exists as a catalyst for a sensitization of the ear so as to hear this place, my own location: listening to the *Hereings* CD track 20, 7 pm to 8 pm, with "(crickets out)/ falling rain/ nighthawk/ thunder/ juniper branches end/ storm intensifies/ (mourning doves)" stands in direct contrast to my own location, whether a rural town in Pennsylvania or the hubbub of London. Such contrast must be emphasized as operating through aurality in general, for sound stands out by enabling such intermixing: by bringing place out of place and toward another, embedding the original on media while accentuating the real. Sameness and difference intermingling, the dead and the living conversing, sound brackets off its place of occurrence, marking from beginning to end its durational event, as an acoustic space of convergence. Within the brackets, though, other spaces, other voices, other sounds may enter. Thus, sound is not a sealed container but intermingling, excessive phenomena, and the musical context a space for articulating such experience.

As David Dunn proposes, the musical context is "analogous to the compression of communications patterns … which optimize discrimination between signals and increase the diversity of potential interactions between the organism and its environment."[33] The "musical context" thus stands out as a potential communicative conduit for developing interactive opportunities between self and world, between cultural production and environmental presence by the very fact of operating through sound. Such interaction for Dunn is precisely a question of language, for the music "results … not only as description of an observed phenomenon but also description of the changes induced in both the observer and the observed."[34] Maybe here we may understand, and locate the value in, Westerkamp's transformation of environmental recordings—her Ursound of the real world, for what this (and acoustic ecology in general) may articulate is a "musical language" that describes the *effects* of listening to the world while delivering affective narratives: to narrate the journey into the ancient sound world and give shape to the transformative nature of musical interaction in and among species, to voice collective unconscious knowledge, and chart the dynamism of acoustic spaces inhabited by both real and mythological beings.

Making Friends with Strangers

Aural location comes to life by being foreign to one's own soundscape, contrasting the recorded found with the immediacy of locale. Place is captured through media and *re*-presented according to a virtual projection—I hear New Mexico only in its absence, in a time separate from my own. The time of listening is the time of attention, the time of deep listening to grow deeper, for place to come to the fore, as virtual presence, inside the listener's ear. It is also the time for space to become alien, dislocated, foreign, so as to become present, renewed, and alive.

What Westerkamp, Peters, and soundscape work in general inadvertently teaches us is that the inner journey and the noise of the world may in the end not be so separate after all: to listen is both to be inward, in the perceptual consideration that sound demands, as well as to *position* such listening in relation to an exterior. That acoustic ecology may pass judgment on noise as negative is to fall short of recognizing it as part of the sound world, if not potentially its most expressive moment, on a number of levels.

If noise operates on the level of information—as the "you" of "I," of the backside to harmonious mingling, as the stranger in every home—it would seem acoustic ecology and soundscape composition overlooks, or underhears, its own productions, for at the heart of its work is the alien presence of environmental ghosts. The distant, the foreign, the strange, the spooky, the haunting, and the mysterious all motivate soundscape composers and enthusiasts, for to track the untrackable delivers new delights to the ear. Westerkamp's own methods of bringing us to places beyond the here and now, to the beach or to a walk in the city, delivers the foreign into the home, furthered sonically by introducing, through a technological slip, the transformation of these sounds: the delight Westerkamp experiences in processing sound in the studio in the end *makes* noise out of the original sound. While Westerkamp aims for "its original contours and meanings," such meanings are only found through its abstraction, which is to make strange the original environmental sound: whether tonal or dissonant, quiet or loud, its transformation operates by adding strangeness into the equation. It seems important to insert such proposals back into Truax's original "communication model," and David Dunn's musical systems of interaction, which seems to presuppose that the "feedback loop" of self and world, of listening and making sound, if given a clear passage, results in harmony: in orientation, in feeling at home, in finding one's place, in speaking clearly, in new languages. Noise, as heard *through* soundscape composition, seems rather to posit a productive opportunity to get to know not so much the harmonious environment, the clear message, but the one that is unknown, unspeakable, in which we're disoriented, out of place, far from home, unable to find the language. In Truax's equation though it seems there is no room for strangers, and Westerkamp's inner journey to her Ursound, while compositionally wedding place with its transformation, avoids the possibility that the primal sound might also be a deafening scream.

Noise, while physically harmful, damaging, and deadening, as a physical aural presence, in turn, is at the heart of acoustic ecology's vocabulary, like an unwanted child. To put to use, through a more direct self-awareness, noise's productive dynamic already at the heart of someone like Westerkamp, could only benefit the project of soundscape work, in remaining sensitive to the acoustic environment and what drives acoustic communications: the confrontation with difference.

Universe of Noise

To follow sound on its relational course, from points of origin toward architecture in sound installation, and the developments of sound art, I've attempted to locate where sound finds its home—how it nestles in, tucks itself away, then departs again, resounding, out from buildings and now, with acoustic ecology, toward a return to its global, mythic soundscape. Acoustic ecology articulates sound's journey by recognizing the intensities of its inherently relational character: how it speaks through the ages, through acoustic spaces that require another vocabulary to describe, visualize, and lend definition to its difficult shape. What acoustic ecology reveals, and must contend with, is the full body of sound in all its beautiful and terrible dimensions, from the deafening to the hauntingly attractive. Noise comes into play because it is unavoidable: tracking sound into such global and ancient territories necessarily delivers up the strange, the grotesque, the horrific along with the magnificent. To follow acoustic ecology's own tussle with noise, I've been interested to understand in what way noise operates, and how it, in turn, situates us within an expanded spatiality: for the Ursound is necessarily in all things, and in all places, as a total interpenetrative mixing of boundaries, where we live inside dreams and hallucinations, where place is fixed and dislocated in one move, where the voices of animals generate reverie inside the listener's journey.

Notes

1. Paul Rodaway, *Sensuous Geographies* (London and New York: Routledge, 1994), pp. 86–87.

2. R. Murray Schafer, *The Soundscape* (Rochester, VT: Destiny Books, 1994), p. 33.

3. Paul Rodaway, *Sensuous Geographies*, p. 88.

4. R. Murray Schafer, *The Soundscape*, p. 271.

5. Barry Truax, *Acoustic Communication* (Norwood, NJ: Ablex Publishing Corporation, 1994), p. 20.

6. Throughout Truax's thoughtful book *Acoustic Commnunication*, he remains sensitive to identifying the problematic of discovering what sounds may be deemed harmful by attempting to veer away from using "noise" in the negative, yet this seems to persist, as in: "The relationship [between us and the environment] may be highly interactive, even therapeutic, but it may also become alienating and both physically and mentally oppressive

as in the case of noise." See *Acoustic Communication*, p. 11. It is my argument that such a paradoxical relationship to noise pervades acoustic ecology.

7. Alongside a small aspect of cinema and performance studies, various strands of musicology, and a fraction of psychoanalytic and medical studies related to auditory experience, acoustic ecology could be identified as the only sustained arena for in-depth analysis of sound in all its breadth, beyond strictly acoustic phenomena to sociological, psychological, aesthetical, and environmental effects.

8. Schafer uses the term "soundmarks" to refer to "a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people of that community." See the glossary in R. Murray Schafer, *The Soundscape*.

9. An updated recording project of the Vancouver area was undertaken in 1996 as part of *Soundscape Vancouver '96* by some of the original team, as well as others, such as Darren Coupland, Sabine Breitsameter, and Hans Ulrich Werner, forming an interesting contrast and comparison with the original.

10. Information gathered from the WFAE's own official website: www.wfae.net.

11. R. Murray Schafer, "Ursound," in *Musicworks* 29 (Fall 1985), p. 22.

12. R. Murray Schafer, *The Soundscape*, p. 144.

13. Many of the sounds were taken from the original recordings done by Howard Broomsfield as part of the *Vancouver Soundscape* project, as well as produced by Westerkamp herself.

14. Hildegard Westerkamp, from the liner notes to her CD *Transformations* (Montreal: Empreintes Digitales, 1996), p. 20.

15. Michel Chion, *Audio-Vision* (New York: Columbia University Press, 1994), p. 223.

16. For instance, I can imagine no soundscape composer would make a work on the subject of water using entirely existing recordings of water, without adding their own recording from various water environments.

17. Barry Truax, *Acoustic Communication*, p. 15.

18. Hildegard Westerkamp, from the liner notes to her CD *Transformations*, p. 23.

19. Hildegard Westerkamp, "Nada—An Experience in Sound," in *S:On: Sound in Contemporary Canadian Art* (Montréal: Éditions Arttextes, 2003), p. 121.

20. Arthur Schopenhauer, quoted in Michael Chanan, *Musica Practica* (London: Verso, 1994), p. 93.

21. Paul Hegarty, "Politics of Noise," in *Argosfestival 2003* (Brussels: Argos Editions, 2003), p. 79.

22. Ibid.

23. Hildegard Westerkamp, "Nada—An Experience in Sound," in *S:On: Sound in Contemporary Canadian Art*, p. 114.

24. Paul Hegarty, "Politics of Noise," in *Argosfestival 2003*, p. 83.

25. Ibid., p. 85.

26. Barry Truax. *Acoustic Communication*, p. 20.

27. Hildegard Westerkamp, "Say Something About Music," in *Site of Sound: Of Architecture and the Ear*, eds. Brandon LaBelle and Steve Roden (Los Angeles: Errant Bodies Press, 1999), pp. 17–25.

28. The work is part of a larger archive of recordings (The River Archive) Lockwood has developed since the late 1960s based solely on recordings of rivers. It is curious to note that the Sanskrit word "nada," meaning "sound," originally meant "river."

29. Steve Peters, artist statement on the project supplied by the artist. See Steve Peters, *Hereings (A Sonic Geohistory)* (Albuquerque, NM: La Alameda Press, 2002).

30. Such approach is indicative of much soundscape composition. As in Lockwood's *Sound Map*, Peters approaches the environment as a "sonic geography," and through methods of documentation, measurement, and mapping, the soundscape is detailed.

31. Steve Peters, *Hereings (A Sonic Geohistory)*, p. 50.

32. Hildegard Westerkamp, "Say Something About Music," in *Site of Sound: Of Architecture and the Ear*, p. 22.

33. David Dunn, "Music, Language and Environment," in *Musicworks* 33 (Winter 1985/86), p. 14.

34. Ibid., p. 15.

Chapter 14

Language Games: Yasunao Tone and the Mechanics of Information

Soundscape composition relies upon the belief that the "meaning"of sound must always lead to the truth: the primary soundscape tells no lies. Thus, soundscape speaks a universal language while remaining particular and specific; and soundscape work strives toward harmony by listening to the environment as a trace or embodiment of universal life. "The drive toward synchronicity and harmony is elemental and universal so it becomes comprehensible that the 'hidden' harmony without ourselves provides us with the strength to find the 'hidden' harmony in the cosmos and universe"[1]—inner, bodily space aligned with the inner, cosmic space through tonal sympathy.

Acoustic ecology raises the lingering issue around sound's ontological status, privileging sound's elusiveness to the particulars of language and the specifics of cultural meaning. By seeking universal truths, acoustic ecology defines sound by its ability to "take us back to a world in which the barriers between self and objects are dissolved."[2] As music moves closer to sound, as can be seen in the developments of experimental music of the last forty years, and into sound art, we can witness this further—that sound is often understood to step aside from the denotative, banal, and quotidian tongue, finding its force in the connotative as often defined through sensation and the emotive, in the trembling of listening and the vibrations of physical matter.

Acoustic ecology epitomizes an acoustical epistemology that embraces sound as ephemeral, elusive to language, sensorial and primary, while at the same time searching to discursively categorize, analyze, and legislate sound: to locate its situatedness within a cultural time. This seems to take us back to Cage's own paradox: of liberating sound from the saddle of musical referentiality to hear sound as it is, while at the same time repressing the significations all sounds carry with them, as culturally determined. The paradox though is at the fore of an experimental practice that seeks to *discover* how sounds mean: Cage's problematic is

not so much contradictory but an experiment in pursuing sound, seeking out its definitions and where it may lead. In this regard, discursive tussles that attempt to resolve Cage's own paradox seem to fall short in identifying the paradox itself as part of his practice, and also, as part of a general engagement with auditory experience, which seems to unavoidably remain bound to speak toward essentialist and universal experience while navigating through cultural spheres in which such experience is given specific meaning. Does characterizing sound as essential ephemera afford us the chance to create refuge from the tensions within specified, cultural meanings? Do such sonorous leaps of faith aid in transcending the inherent difficulties of social morality? Following acoustic ecology, does sound offer a last exit on the highway of culture that falls short of delivering up the sought-after "zone of silence," the Ursound of our primordial orchestra? To follow the emanation of all sound back toward where it originates, as our own womb of sonorous beginning?

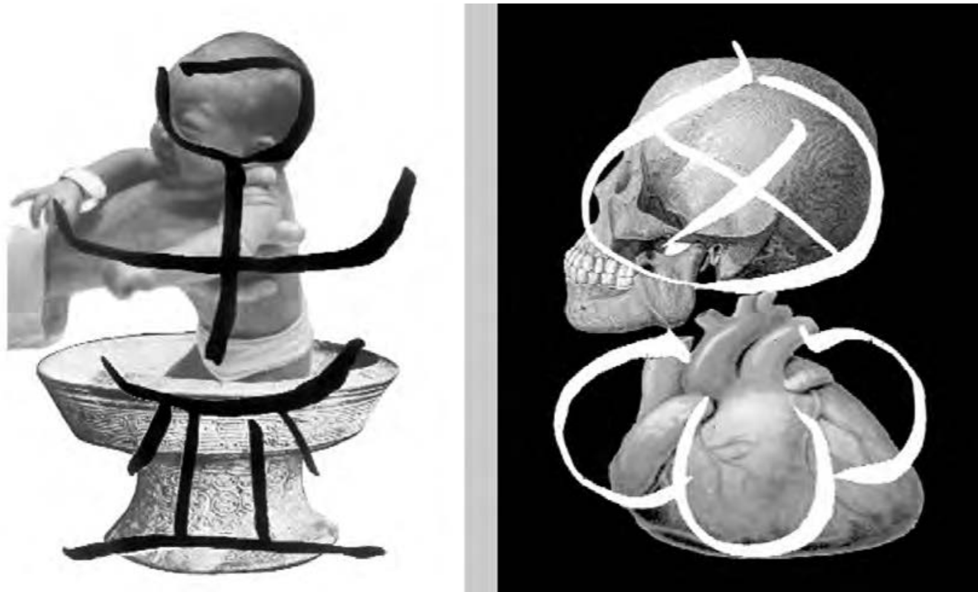
As James Lastra points out, sound is marked both by its presence *and* its absence, for "at an 'original' sound event we all recognize that each auditor gets a slightly different sense of the sound, depending on his or her location and the directedness of his or her hearing," which seems to imply that "there is no strictly definable 'original' event" and that "every hearing is in some way absent."[3] Therefore, to a certain degree it is impossible to define a sound outside of a particular manifestation as fully present. In this way, sound is always understood and experienced as being integrated and originating within the specifics of a given moment, from a particular condition, whether that sound is live or recorded, spoken or sung—for "the historical happening of the sound event, its spatio-temporal specificity, always appears to escape our apprehension."[4] For Lastra, the "fullness" of sound partially escapes being present to our listening, because it can never be fully grasped in all its completion. Instead, it remains bound to an unknowable plenitude, an unlocatable origin, while in the same move delivering up a sense of total presence. The absence of sound is at one and the same time its presence. As he summarizes, "we need not relinquish the original, the real, or the authentic, but we must recognize that these experiences and values, too, are products of historically defined conditions, and that their emergence, like the emergence of representations of those phenomena, follows certain rules."[5] For acoustic ecology, we might ask: why is it necessary at this historical stage to create the very possibility of an authentic listening predicated on the Ursound of its original birth? It is obvious that Schafer and soundscape work seek an escape route from the noise of the world to replenish perception with the fullness of sound's harmonious potential. That it strives against sound's haunting absence by reclaiming an imaginary fullness of presence uncovers a pervasive need to locate lost meaning: the primary voice of an imaginary song. What must be emphasized is that the seemingly contradictory and paradoxical move across sound's essential and cultural meanings occur precisely through a cultural opening or possibility that supplies the very language of the essential: that is to say, sound's categorization as ephemeral, replenishing,

and primary phenomena coming to us from a cosmic, mythological origin occurs *through* the cultural production of things like musical composition and its discourse, however academic or esoteric.

Peripheries

Soundscape work, as I've argued, makes available the intensities and complexities of location and its sounds by accentuating difference, displacement, alien relation; that is, by surprising the ear with sounds from afar, or from too close. Thus, it emphasizes sound by being true to the found: the integrity of soundscape work is that it attempts to tell the truth, to locate origin, capturing, harnessing, finding, and researching the environment, its inhabitants, and delivering up its ecological reality. Soundscape work tries to be honest to a given location and what is found there, to reveal the path toward an inner journey, without labyrinths or tricks. In doing so, though, it may in the end overlook its own contradictions and their productive potential: that is to say, the alien relation, the displacement, and the difference may be utilized as operative terms in making work, as labyrinthine journeys that immerse a listener not so much within a plenitude of poetics but within a system of confrontation: where sound's absence may speak. The artist Yasunao Tone explores such strategies by implementing difference and discrepancy, noise and its features, as makers of meaning. Tone's work charts the peripheries of meaning by introducing noise into the equation. Whereas soundscape work aims to minimize "translation" so as to get at the real, Tone embraces translation as an overall strategy. Such interest appears throughout his career, from early projects and compositions employing graphic notation that lend to stimulating an array of interpretive results, as in his work *Anagram for Strings* (1962), to later works, such as *Molecular Music* (1983), based on translating or transmuting live projected images into sonic events. For Tone, forms of mutating one piece of information or material into another articulates a greater impulse or imperative to transgress the hierarchical structures by which meaning operates. Converting image or text or code into a systematic progression of noise, Tone undermines the ability for meaning to arrest the very material output of his own work, to piece back together the shattered form. Tone's "interest is not in disclosing, but in exhausting"[6] the residual outcome by continually countering the move toward recuperated meaning.

With his more recent work, translation is cultivated so as to arrive at increasingly diverse forms of noise. Like many of his works, his recent project *Man'yoshu* begins with text, here with the artist inputting eighth-century Japanese poems (from the *Man'yoshu* anthology) into the computer. Working with these, a library of 2,400 sounds is created by using computer software (C-programming)[7] whose combinations and permutations correspond to the 4,516 poems of the anthology itself. This aural translation of the Chinese characters rewrites the visuality of language into a sonic equivalent. Working with translation systems



Yasunao Tone, *Musica Iconologos*, 1993. Coding of images, Chinese characters superimposed on images, from which the characters are derived. left: a Chinese character "meng" (meanings: the first month of the year, first born boy) right: a Chinese character "si" (meanings: to think, thought). Photos courtesy of the artist.

that use language to create sound, the *Man'yoshu* audio work[8] follows from his previous *Musica Iconologos* (1993). This project was based on using the words from an ancient Chinese text and translating them also into sound. To achieve this though, Tone converted the characters of the text first into pictures found from various sources, such as a baby eating and a man holding his arms out. Each image mirrors the original characters, which in themselves are ideogrammatic rather than strictly phonetic. He then scanned the images into the computer, transforming them into digital code: 0's and 1's that were then further transformed into sound waves. The work thus creates a sound file out of the original text. As Tone proposes, the text is now no longer about delivering a message but about producing an addition, for "when you play the CD what you receive is not images as message, but sound which is simply an excess."[9] This excess functions to strip away the original referent (text) so as to arrive at pure noise, for there is no longer any message, any original host to which the parasite of sound may play: the CD is parasite without host.

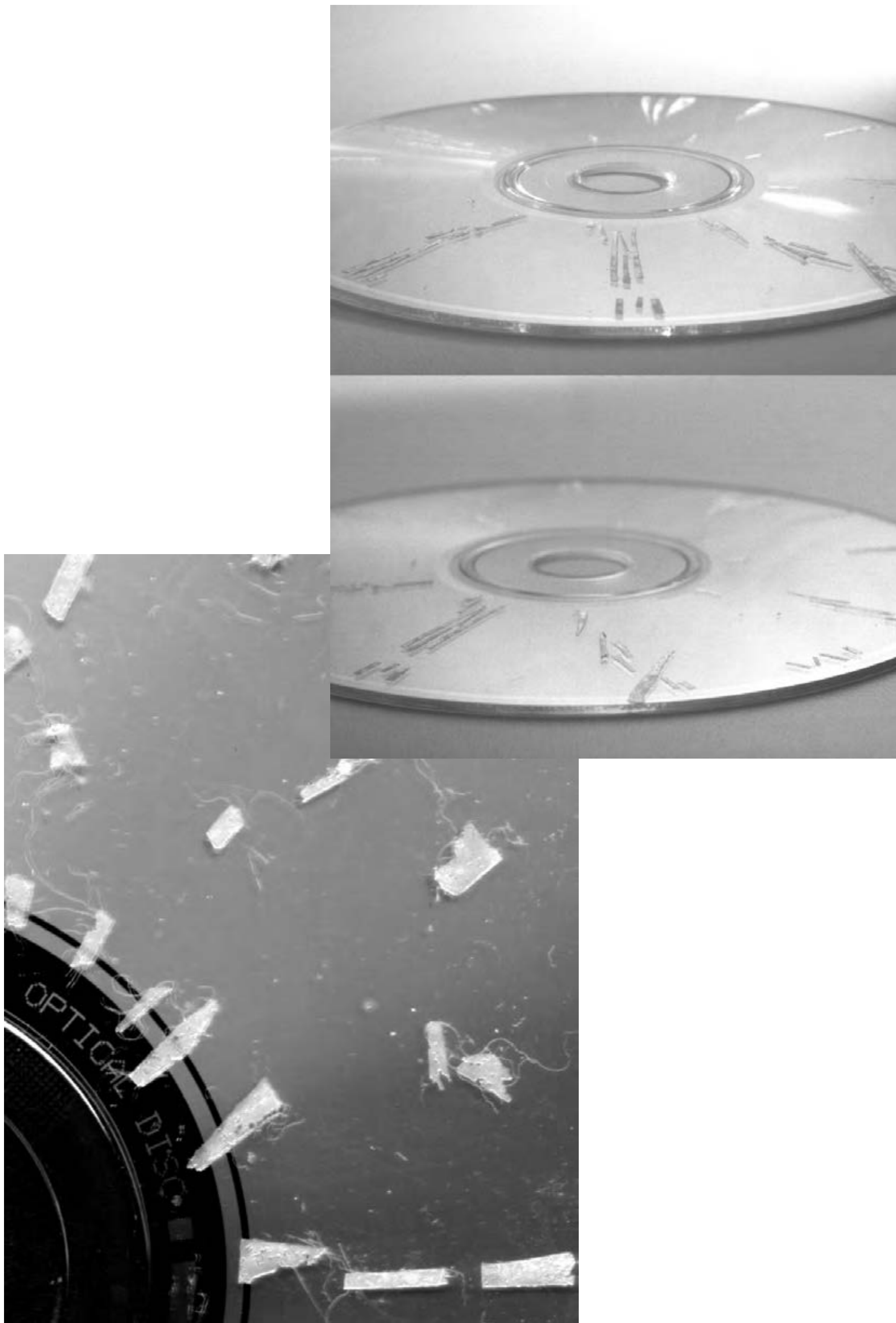
For live performances, Tone has used this CD, and the sound library from the *Man'yoshu* project, by treating, abusing, or "wounding" CDs: by puncturing holes, scratching the surfaces, covering the CD laser with Scotch tape, the CDs are manipulated like a primary matter, performed as brut technology furthered by his use of the CD player as an instrument: speeding up, slowing down, skipping across CD tracks, spitting out fragmented and frenetic noise that not so much destroys as

adds a further layer to the original sounds. What is left is another form of articulation, a highly brutal orchestration of textual material, of code and its translation, technologized as a unit of data fed across the flickering electronics of the CD eye that grabs hold of cut-up information—where the functionality of text meets the disfunctionality of broken machines.

The play with pure noise for Tone is always in relation to information, messages, codes, and meaning—in essence, to the hierarchy of language that values message over material, communication over noise, meaning over code. Tone's *Parasite/Noise*, presented at the Yokohama Triennial in 2001, further staged language *as* noise by situating it within an exhibition context. Functioning as an altered audio guide to the exhibition, *Parasite/Noise* consisted of headsets that "play a text [passages from Walter Benjamin's *Arcades* project] read aloud which has nothing to do with the exhibited works themselves,"[10] thereby creating disjunction between what is seen and what is heard, between the "meaning" of the art work witnessed and the meaning of the words heard. As Tone posits, the work is a "pseudo audio guide" that uncovers such guides as interfaces between audience and art, and further, between sound and its referent. For Tone, this interface offers the chance not so much to convey the appropriate message but to redirect meaning by sabotaging the one-to-one equation—of what the Museum says and what the artwork does, of what the voice states and what one sees. Here, the official language of the art exhibition is short-circuited through what Tone terms "paramedia"—a kind of parasitic technology altering existing languages to lead to altogether different significations. For the work functions as excess, as secret static inside the exhibition experience, amplified through a visitor's journey in and around the space and its informational discrepancies. The work introduces unpredictability, or rather, forms of mistake that generate new meaning. As in the *Musica Iconologos* CD and his *Solo for Wounded CD*, from 1997, the Yokohama project looks for routes out of the idea of an original work, or more so, from the point of origin: the primary source, the original meaning, the grand referent to which all meaning revolves is indefinitely deferred and made perpetually unavailable.

Noise Aesthetics

Tone's *dis*informing projects harness noise as potential for other forms of communication, not of messages but of pure drive, not of content but of form. Such methods, though, inadvertently fall back upon how one might approach acts of communication, inserting the glitch into information theory. Recalling Tone's involvement with Group Ongaku in the late 1950s and 1960s, along with his Surrealistic leanings, noise may be paralleled with methods of collage, which break conventional readings of images, words, and objects. Here, techniques of "making strange" the familiar leads to rupturing the seemingly natural world of signs. The language of noise inserts into the field of musicality signifying



Yasunao Tone, *Solo for Wounded CD*, 1997. Treatment of CD surfaces. Photos by Gary McCraw. Courtesy of the artist.

ruptures—as witnessed in groups like P16.D4, Hafler Trio, PGR, The Haters, Throbbing Gristle, Einsterzende Neubauten, and Nurse with Wound, whose sonic forays not only define a cultural moment but new musical possibilities. All coming to the fore from the late 1970s through the 1980s, and generally aligned within the Industrial music context, these groups intensify the sonic palette by combining punk sensibilities, art theory, agit-prop tactics, and new technologies. Appropriating and sampling existing audio, and building lo-fi electronics, home-built percussion, and other instruments, such groups, while operating along different trajectories, point toward noise as a new musical language for expressing antagonism and hostility toward the status quo. Yet, the very content of much of this work rides on its very texture, supplying lyrical content with the promise of disruption delivered by the sheer deployment of noise: noise serves to literally embody musical intent.

The production of noise finds its pure objectification in the works of Aube, a Japanese artist working throughout the 1980s and 1990s, and aligned with the general wave of Japanese Noise Music begun in the 1980s. His work is directed by a strict appropriation of a single object: water fan, plastic material, fish bowls, fluorescent lamps. Applying various electronics, originally with consumer guitar pedal effects and other small electronics, the single object is used to pull out, produce, and extract all possible noises. Aube abstracts the found object, turning the domestic landscape into a volumetric and controlled noise machine.

As in Tone's technological, paramedia methods, what such work produces is not only a shock to the musical ear but a shock to the operations of information by recasting objects, instruments, and musical materiality into other forms, usages, and meanings—and ultimately, mobilizes the potential of noise to communicate the uncommunicable, summarized by Paul Lemos from the group Controlled Bleeding: "I have no interest whatsoever in physical violence—my attempt is to channel mental and emotional violence into a creative medium. It reflects the frustration that comes in realizing one's own inability to affect a political system, and one's own insignificance in the scope of the masses—there are no complaints or solutions suggested."[11] In this regard, there is no message *per se*, no meaning relying upon an existing system of code, but a sidestepping to such systems through the mechanics of noise and their machines. In this regard, noise seems to veer off the path of cause and effect, for it does not so much signal change, or announce the new, but rather occupies the space between: following Tone, it is a parasite on the field of language, working on the territory defined by code, but producing an entirely different result than meaning, one of noise. While Jacques Attali develops a reading to noise as one heralding the coming of transformations, revolutions, and alterations in the symbolic system—of musical languages, economic structures, societal relations—what Tone, and others, propose is noise as a meta-operation: it directs a certain understanding onto the field of the symbolic, onto the territory of code, without putting into practice that very code. It directs the ear not to escape routes or alternatives, to "complaints or

suggestions," but to the mechanics at work in the system. Here, a theory of noise is defined by its ability to remain an operation rather than a sign, to always remain a pure drive away from heralding anything. In listening to Tone's informational parasitic manipulations, noise does not seem so much to function as a "simulacrum of murder," enacting on the terrain of the symbolic, a battle with meaning, but rather to skirt the arresting systems of signification that require and rely upon meaning.

Out-of-Sync

Tone's pseudo audio guide relies upon our own tendency to match what we see with what we hear—to complete the picture by synchronizing our senses into a total perceptual truth, and further, to believe our senses. Through methods of translation, intervention, and the dysfunctional, excess is inserted into the equation, disrupting through a kind of overwriting the communicational promise of listening. Incorporating Benjamin's *Arcades* project into the work seems to further Tone's usurping of the one-to-one equation of textual information. Structured as an investigative probing of the contemporary urban condition as found in the motif and reality of the Parisian Arcades of the 1930s, Benjamin's unfinished work is a kind of kaleidoscopic transversal of the city itself: fragmentary, simultaneous, multiple, full of detail and yet radically incomplete, immersive and labyrinthine, the writing lends a dizzying effect to a reader's experience.

On another level, the Yokohama project gains in effect by employing the use of headphones, for headphones define a very different acoustic reality to that of our physical position. They intervene by imposing a given soundtrack across one's sense of place. Headphones play a crucial part in *Parasite/Noise*, for they aid in the transposition of one reality onto another, and the fostering of an alteration of truth. They situate listeners inside the actual *and* the virtual, the live and the recorded, thereby leading them through a labyrinth of information and its ultimate lack of cohesion. One walks through the exhibition, approaching artworks, unaware that what one is hearing—in the form of Benjamin's labyrinthine cataloging of the urban environment, itself a maze without a center—is totally unconnected to the exhibition. One looks for connections, and most likely finds them, by believing in the mechanism, in the mechanics of information and its control: that what I hear provides me with insight into what I see.

The use of headphones, and the making of what we might call a "soundscape of the mind," is used most poignantly and repeatedly in the work of Janet Cardiff. Her project *The Missing Voice (Case Study B)* (1999) brings to the fore headphonic space as catalyst for the mixing of realities by situating the body in a complicated time and space. Indicative of her soundwalks, *The Missing Voice* consists of a prepared audio recording that participants listen to while walking. The recordings operate by directing them on a walk, in this case, around the East End of London. Listening to a woman's voice telling you which way to turn, what to look for, and

referring to sights and sounds of the city unsettles one's sense of awareness: we hear the city (recording) but sounds do not link up to what we are actually seeing (real). Staging such a jag in time and space, our sense of self is unsettled, for the instability of reference leads to an uncertain reality, where the body literally falls out of time: as a participant, one has no sense of destination, no sense of ultimate aim; instead, listening, we surrender to the voice, encountering the uncertainties and fluctuations of meaning. Such uncertainties are extended through the voice we hear, which stages a "murder mystery" in which fragments of clues are given that never completely add up. This is compounded by the multiplication of voices and narrators, all of which contribute to a schizophrenic rupture, for each voice breaks apart the singularity of perspective and understanding. "One speaks a clipped voice and guides you through the city, another narrates in a confessional mode. Still another speaks in the detached third person and yet another sounds highly mediated as she talks into a portable recorder."[12] In this way, the walk is both an auditory experience and a language game in which a listener becomes entangled in an uncertain reality.

Cardiff transposes one acoustical space onto another—I hear location through its past recording, while confronting its current state or condition: a car zooms by but I hear something else on the headphones. Place is displaced and then, through an acoustical sleight-of-hand, replaced, made concrete through temporal encounters. Here, interaction is not so much brought to the fore through my making something happen—rather, I am inserted into an active situation in which my own movements, my own listening, my own encountering of overlapping narratives falls in and out of synchronization. Out of sync is spatial, temporal, and information-based: I'm on a street that is no longer confined to a visual referent; time is agitated through the overlapping and intersecting of different presences; and my understanding of where I am, what I'm doing and where I'm going is given a jolt, making uneasy my sense of location—and, more important, as to what or whom to trust.

Cardiff's play relies upon the headphonic, as a psychological opportunity to literally split the listening body: to create an envelope in which to unhinge time and place, dislocate one's bearings. The artist Christina Kubisch, in turn, often puts to use headphones and their locational potential to arrive at forms of more intimate listening. Working as a musician and artist since the late 1970s, Kubisch's sound installation work is often concerned with positioning a listener within a nexus of acoustical elements. Using electromagnetic cables and special induction headphones, the artist creates environments in which sound is channelled through networks of cables wrapped around trees or climbing up walls and around pillars, forming a loose sculptural presence through which a visitor walks. Sound is transmitted from the cables and to a person's headphones, creating a sensitive space of listening, for volume changes quite dramatically as one is either near or far from a cable, mixing sounds by one's movements through and among the cables, each of which may contain variations on a sound source.

Christina Kubisch, *Oasis*, 2000, Hayward Gallery, London. Photo courtesy of the artist.

Orchestrating sound and space, Kubisch invites a listener into a seemingly private world of sound, where headphones and a multiplicity of sound sources seem to magically invade a space without leaving a trace: invisible, delicate, intimate, sounds come from all around, trickling into one's ear, fading in and out as one discovers all the points of possible listening, all the gathered compositions that continually shift. Here, headphones surprise a listener; as with Cardiff, Kubisch harnesses the total intimacy of headphones to create juxtaposed splits: where the sounds of animals in a forest appear on the terrace of the Hayward Gallery in London, or within a basement gallery in Pittsburgh. Such dichotomies startle the ear by figuring imaginary events that appear only within the private domain of the individual ear, operating by what Kubisch calls "creative listening," in which "the structure of the composition is combined with sequences of tone and movement . . ." where "the audience is able to move freely between various acoustic fields . . . enabling them to discover ever new and individual sound combinations."[13]

Informational Splits

For Tone, information is of paramount concern. The transposition of one reality onto another at the core of soundscape composition, for Tone, does not so much inaugurate a journey into the Ursound, the primary origin where truth resides,

but positions one on the surface of an uncertain reality. This is spatial, as far as noise and headphonic space force us out of sync, and informative, where the message is always free from referent, as an oscillation between presence and absence. As discussed, recorded place mingles with actual place to spark a rich production of the imagination. One is aware of the distant while recognizing its disjunction with the immediate. Tone's *dis*informing system marks this transposition as potentially subversive, because what one hears may not actually be as innocent as it sounds, where the production of noise may cast light onto the governing modes by which information is channelled, given access, and deemed accurate. Tone's *Parasite/Noise* is just that: a production of noise that feeds off the channels of information, creating a view onto meanings at work. This difference could be stated as noise's potential. Whereas Bernhard Leitner's *Headscapes* is a physiognomic and neurological space for creating spatial articulations through the movement of a purely sonic figure, Tone's Headscapes is one of critical agitation: a noisy figure that plays havoc with meaning.

Fiction or Fact?

Tone's audio work cracks open sound's production to reveal the inherent confusions, where its absence produces not so much repressed trauma but positive glimpses onto multiplicity, difference, pure static. His work feeds off text and language in order to reveal, to pull back another layer of meaning as a sonic rewriting, accentuating that sound and its referent may not always be aligned, that sound and its origin may not always be as present and benevolent as one imagines.

What Tone reminds acoustic ecology, and the work of soundscape composition, is that to tell the truth about a place does not necessarily occur through opening the gateways of recording, relying on the magic mimesis of microphones and digital memory, for recording by nature is always already a form of mediation, writing, and production: it is information determined by the mechanism of technology, the displacement and placement of one location onto another, the making strange of sound's origin by alienating it, all of which could be heard as forms of noise, which may in the end only highlight the power of forms of fiction to deliver truth. Tone's use of technology, mediation, and code and its messages fixes itself on the moment where simulation becomes its own reality, code its own message, noise the origin of sound's essence. His productions of noise, of pure glitch, which Torben Sangild defines as "the beauty of malfunction … focus[ing] on … irrationality, inefficacy and absurdity in digital technology,"[14] echoes Achim Szepanski when he defines digital noise as "clicks and cuts … [which] are omnipresent and non-referential … point[ing] to something else.… Here, one hears the in-between, the leaps that connect loops and transitions."[15] Technological noise does not so much signal cause and effect, but operates as a metasignal, of connectivity, of transition, of interface: and the music of noise, a parasite spinning its own network.

Notes

1. Joachim-Ernst Berendt, *The Third Ear*, trans. Tim Nevill (New York: Owl Books, 1992), p. 127.

2. John Shepherd and Peter Wicke, *Music and Cultural Theory* (Cambridge, UK: Polity Press, 1997), p. 60.

3. James Lastra, "Reading, Writing, and Representing Sound," in *Sound Theory, Sound Practice*, ed. Rick Altman, p. 84.

4. Ibid., p. 85.

5. Ibid.

6. Federico Marulanda, "From Logogram to Noise," a soon-to-be-published essay on Yasunao Tone, 2005.

7. C-programming is a programming language for creating computer programs. In Tone's case, the manipulation of sound involves the creation of a specific program that will allow the translation of text into sound. Rather than use an existing software, such as SoundHack, Tone's project requires developing a unique program.

8. Tone has been working on this project since the mid-1990s. The final project will be presented as a CD-ROM.

9. Yasunao Tone, from an unpublished interview with Hans Ulrich Oblist, 2002.

10. Yasunao Tone, in conversation with the author, 2002.

11. Paul Lemos, in Chris Twomey, "Developments from Industrial Music: Noise and Appropriation," in *Sound by Artists*, eds. Dan Lander and Micah Lexier (Toronto and Banff: Art Metropole and Walter Phillips Gallery, 1990), p. 272.

12. Kitty Scott, "I Want You to Walk with Me," in *Janet Cardiff: The Missing Voice (Case Study B)* (London: Artangel, 1999), p. 14.

13. Christina Kubisch, "About My Installations," in *Sound by Artists*, p. 72.

14. Torben Sangild, "Glitch—The Beauty of Malfunction," in *Bad Music: The Music We Love to Hate* (London and New York: Routledge), p. 269.

15. Achim Szepanksi, "Digital Music and Media Theory," in *Parachute* 107 (2001), p. 26.

Chapter 15

Complicating Place: Bill Fontana and Networking the Soundscape

What is in front of me and what is behind? Where are the sensory coordinates of my corporeal reality? And how do I understand what my eyes see and my ears hear, as a synchronized totality in which I am immersed and situated? Given that the eye apprehends, through frontal perception, the world and its objects as sights to be registered within a total field of vision that is always out there, outside my own body, and the ear experiences, through an immersive "all around" perception, the world and its temporal aural movements as sounds to be understood within a total field of hearing that is immediately here and there, out and in my own body, the sensory differences and tensions are rich for exploration. As Cardiff and Tone's work demonstrates through the use of the headphonic, playing with these tensions, discrepancies, and perceptual antitheses can lead to evocative and compelling experiences, in which sights and sounds disjoin. The incomplete and the disjunctive, the out of sync sound picture fosters a heightened relation to perception, narrative, and the sense of being somewhere. Following similar strategies, the artist Bill Fontana has been developing sound works that straddle the environmental attentiveness indicative of soundscape work alongside perceptual and informational dramas. In this regard, his sound projects elaborate the dialogue of the ecological and the mediated.

Working almost exclusively with sound installation, over the past twenty-five years Fontana has sought to engage the senses by creating what he calls "musical information networks":

> It is my belief that the world at any given moment contains unimaginable acoustic complexity. My methodology has been to express this wide horizon of possibilities as a spatial grid of simultaneous listening points that relay real time acoustic data to a common listening zone.[1]

Fontana's musical networks generally consist of identifying a given acoustic phenomenon found within an environment and amplifying this in real-time to a listening point situated at times well beyond the original site. To further such methods, Fontana links multiple sites and their inherent acoustic events, bringing an array of locations into a single focal point. The spatiality of the work thus occurs on two levels: by appropriating given locations and their sound events as geographic coordinates, and then relocating these beyond their respective cartographic fixity. Such moves mix multiple sites and their sounds, expanding out through broadcast and contracting back in technological maneuvers, creating an aural network of environmental information.

Sound Island, from 1994, is exemplary of Fontana's work. Presented in Paris, the work is based on technologically relaying the sounds found at locations along the Normandy coast to forty-eight speakers mounted across the façade of the Arc de Triomphe in the center of the city. Through real-time broadcast developed by using wireless communication systems, sites around the coast were captured and transposed onto the Arc, delivered to listeners who, while peering across the skyline of the city, heard an altogether different soundtrack, that of waves splashing against the beaches. What stands out in Fontana's installation is the continuation of the transposition of realities indicative of soundscape composition, while adding to this the mixing of visual experience with acoustic phenomena in real-time. Fontana broadcasts the sonority of environments so as to contradict or supplement what one sees locally, in this case, the city around the Arc de Triomphe. The sounds of beaches of the Normandy coastline replaced the sounds of car traffic that steadily circled the Arc, "creating the illusion that the cars were silent" for the "sound of the sea … has the psychological ability to mask other sounds, not by virtue of being louder, but because of the sheer harmonic complexity of the sea sound."[2]

The work harnesses the disjunctive procedures of broadcast media in general, that of the disembodied and faceless transmission. With radio, the "body is prone to disappearance … for the body will not, cannot, travel with its signifier, the voice."[3] In *Sound Island*, sound is divorced from its corporeal referent, extracted from its visual context, made strange by dislocating its inherent features and repositioning them within a radically different context—transmission as phenomenal slippage, broadcast as geographic noise, "a language of disjunction."[4] Underscoring the discrepancy or difference that exists between sound and its visual coordinate, *Sound Island* may, in turn, reveal aspects of the Normandy coast through repositioning it outside its indigenous environment. By isolating its sonorous conditions, we may hear it with a sense of curiosity, tuning into its sonorous undulations and recognizing an aural life highlighted through its divorce from geographic particulars. Sea sound and car traffic form an uncanny collision, each interrupting the other's spatio-temporal reality.

The mixing of certain sounds with certain locations occurs as a sensorial delight, akin to the experience of wearing a Walkman while walking through

Bill Fontana, *Sound Island*, location in Normandy, 1994. Photo courtesy of the artist.

the city, whereby musical or radio soundtrack interweaves with the visual excess of passing sites and the profusion of immediate information—sonic narrative mixes with visual journey to tease the mind with spatio-temporal poetics. To move the home stereo out onto the street and directly into the ear mobilizes sound, puts it on the run, as an acoustical partner in the personalized trajectory of physical itinerary. Fontana's own mobilized sounds rely upon their real-time delivery, marveling us by extending our own bodies way beyond their physical limits, and further, by inverting the idea that sight can travel greater distances than hearing. Here, transmission's moment of reception could be said to enact

an additional form of displacement by dislodging not only sound from its location but by incorporating the listener into the mix. That is, transmission creates a double disembodiment, a double take of presence: broadcast swaps here and there in a move that unsettles, without resolution or recuperation both the transmitting and receiving body. Both are pulled into a dance, which, through transmitted momentum is reconstituted as a body, a shared body, for transmission and reception interlock to occupy a space that is radically other. Through a complex agility of perception, one finds place within the total intermixing of here and there, resolving the disjunctive overlay to form a new plateau of perception. The disembodied sound of transmission finds its corporeal partner in the listener, vampiring upon his or her sonic imagination, "joining source and listener in the instant of sound."[5]

Compiling sounds captured live from around Normandy and superimposing them onto the city, Fontana's work enfolds a listener within a sonic network that integrates the geographical with the sonorous, place with tonality; it introduces an additional soundtrack, dislodging us from a given visual referent and creating a jag in the perceptual hierarchy of the senses. Listeners live in two places at once, while geographic site is defined through audible information, a sonority that introduces a mix of messages in which one finds meaning.

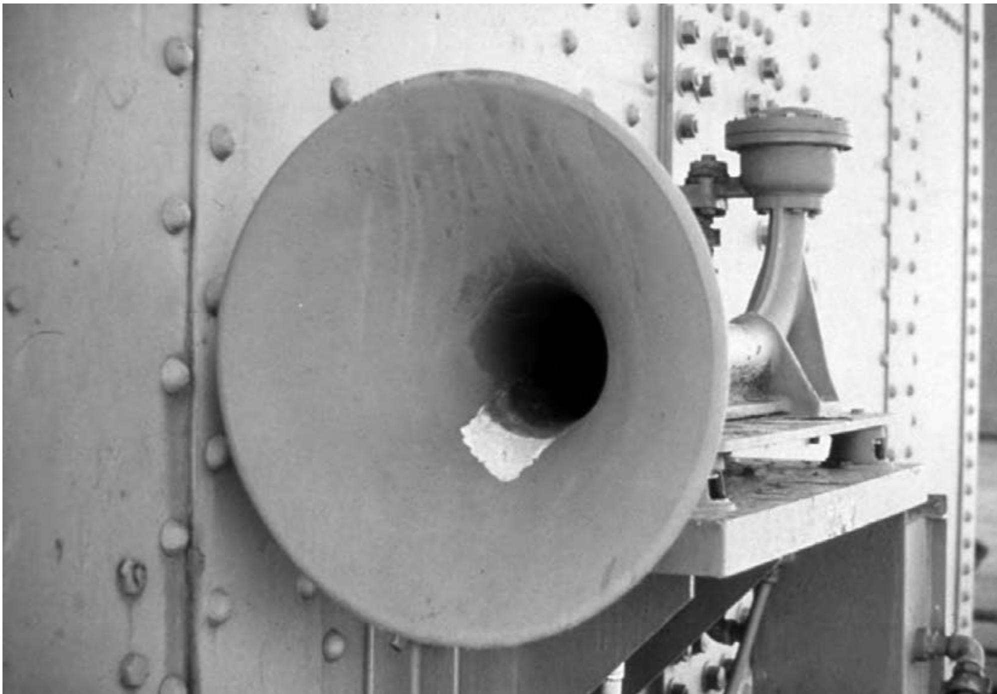
Fontana's interests are summarized through his own recollection of an experience he had while making environmental recordings in Australia in 1976:

> The total eclipse recording documented a unique moment that was a once in a lifetime experience in this environment. During the minutes just before the moment of totality (having a duration of 2 minutes), the acoustic protocol between birds, determining who sang at the different times of the day became mixed up. All available species were singing at the same time during the minutes immediately preceding totality, as the normal temporal clues given by light were obliterated by a rainforest suddenly filled with sparkling shadows. When totality suddenly brought total darkness, there was a deep silence. This recording was seminal for my work because a total eclipse is always conceived of as being a visual experience, and such a compelling sonic result was indicative of how ignored the acoustic sensibility is in our normal experience of the world. From this moment on, my artistic mission consciously became the transformation and deconstruction of the visual with the aural.[6]

To transform and deconstruct the visual with the aural has led Fontana to expand this new form of listening to global proportions. His *Cologne San Francisco Sound Bridge* reveals his artistic ambition to link multiple sites from around the globe into an interlocking musical network. Realized in 1987, *Sound Bridge* consisted of creating simultaneous installations in the cities of San Francisco and Cologne. In each of the cities, complex links between local points created "sound portraits" of the city: in Cologne, sixteen locations were linked through live transmission and amplified through speakers mounted on the façade of the Cologne Cathedral, along with additional rooftops surrounding the Roncalliplatz.

Simultaneously, in San Francisco, the Golden Gate Bridge was linked to the Farallon Islands National Wildlife Refuge (approximately thirty nautical miles west of the Bridge) and heard through an amplification system at the San Francisco Museum of Modern Art. The two complex sound installations, forming elaborate sonic portraits of each city, either as urban center or as seaport, were further linked by broadcasting via satellite each installation live across Europe, the United States, and Canada on radio with the collaboration of fifty stations. Supported by the WDR in Germany, under the guidance of Klaus Schöning, for one hour these individual and simultaneous installations were linked, creating a further intensification of juxtaposed, overlapped auditory ecologies. The medium of radio, which exists as a decontextualizing and transformative mechanism, made complete Fontana's mission by mixing beyond recuperation the details of particular global points onto an unknowable number of additional sites. One can imagine someone driving in the countryside in Alberta tuning in to the sixteen locations around Cologne in themselves mixed with the surrounding environment of the Cologne Cathedral, then further mixed with the Golden Gate Bridge and Wildlife Refuge soundscape, all heard in relation to Canada's landscape and the individual's own journey through it. Listening to the produced CD of the one-hour broadcast, the extraordinary instance of the bells of Cologne's Cathedral mixed with foghorns just off the San Francisco coast delivers a radically rich aural event leading to a "musical" pleasure totally infused with geographic astonishment. Yet Fontana's networks seem to operate more as noise machines than musical instruments, for the transposition of realities is brought to the power of X, raised to a multiplicity of inputs that go well beyond Westerkamp's and Lockwood's singular perspective, of one site at a time.

Adopting a relation to found phenomena, such as wind, light, or water, sound installation in public spaces often seeks to further harmonious unifying of self and surroundings through creating an audible cradle by which new forms of attention, perception, and care may be generated. Projects by Westerkamp, as well as the English artist Max Eastley and the Danish artist William Louis Sørensen, lend to this potential by allowing the sensitivities of the ear to find its place. Leading listeners through a sonic portrait of Vancouver, Westerkamp's soundwalks (initially produced in relation to her involvement with Vancouver Co-Operative Radio in the 1970s) exemplify the artist's desire to make apparent the life of environments: compositionally, field recordings taken around the city are interwoven with fragments of narrative about certain locations, so as to lead the ear in and out of levels of perception and appreciation. Here the microphone and recording device probe and uncover the life of the city in sonic detail, navigating a listener through levels of orientation, dialogue, and composition.[7] Her more recent *Nada* installation, researched and presented in Delhi with Savinder Anand, Mona Madan, and Veena Sharma, comes to physically spatialize the soundwalk by structuring the listening journey through a series of rooms and environments: incorporating sounds, textual information, spatial features, and ambient details, the installation



Bill Fontana, *Cologne San Francisco Sound Bridge*, 1987. Fog horns located on the Golden Gate Bridge. Photo courtesy of the artist.

seeks to question our relation to the environment by provoking reflection on the auditory. How does sound make an impression on our inner life, and how does it come to occupy the borders between health and hazard, balance and its antithesis? Whereas Westerkamp gains most of her sound materials from audio recording, the artist Max Eastley, who has been working since the late 1960s, has strove to draw upon the direct movements of natural environments. From his Aeolian harp and flute sculptures (which respond to wind) to his kinetic sculptures of stone, wood bars, and motors, sound occurs through a relation to immediate surroundings, as a live unfolding. His outdoor project for Sutton Edge in Yorkshire (1991) consisted of bowlike wooden sculptures planted in the ground with string stretched taut, forming a diamond shape suspended against the wind. The extremely sensitive sculptures vibrated and flexed in response to the wind, creating rhythmic oscillations that carried across the hills. To listen then is to appreciate and follow sound as a residue of a natural event, where object and phenomena intertwine to give voice to an acoustical presence. The Danish artist William Louis Sørensen furthers such conversations. His *Landing Ground for Waders* (1983), installed in West Jylland (Denmark), consists of a series of structures built from basic materials: wine bottles arranged in rows and tilted to face the wind, or wood structures draped in thick plastic that billows out in response to the wind, flapping and rippling with sound. The environment functions as a

player whose instruments reveal a buried music, a soundscape always just out of reach, yet ever-present.

These examples of outdoor, public sound installation projects build a reciprocal relation to the real: materials are aligned with found phenomena, objects are constructed as instruments played by the natural environment, and recordings hinting at overcoming any sharp discrepancy between the natural and the constructed, and between clarity and noise. Such works lend to a greater sonic interweave by surprising perception with these new relations and conversations. Whether previously unheard or distant, protocosmic or geological, sound is culled from the environment and pulled into the center of attention, attracting the ear by being all too "out of place."

For Fontana, being "out of place" is compounded and exploited: the artist's works are intentionally simultaneous, multiple, real-time, broadcast, and received to innumerable sites, ears, and cities. He adds fuel to the radiophonic journey by increasing the volume on dislocation—what we hear on the other end seems far from a musical language, from that "joining together of source and listener" in an instant of sonoric coupling. Instead, we eavesdrop on a transmitted universe of locational signifiers brimming from a world of voices, and in doing so get swept along in the cacophony always ready to surface. Cologne's bells and San Francisco's foghorns juxtapose to splinter musical composition with an excess of

William Louis Sørensen, *Landing Ground for Waders*, 1983. The flapping sound-instruments placed on the dike facing southwest in the direction of the wind. Photo courtesy of the artist.

information that overrides the attentiveness of listening, for place disjoins structures of composition in all its real-time presence.

Dislocating Location

The dislocation of ambient sound from a given location and its reproduction (recorded or live) within the space of another location fuels a provocative experience, for such dislocations transform not only our spatial context and awareness of location but our perceptual and cognitive map. In the case of Westerkamp, Peters, and other soundscape composers, such operations wield their effect by making place strange, introducing difference and discrepancy into our perceptual frame: to emphasize the particular details of a given environment, recording allows sensitivity by creating a locational contrast between the immediate and the displaced site—to lead the ear into a listening of place, place itself is made alien. Fontana's work furthers such strategies, though, by adding an extra layer of extended real-time broadcast: environmental sound is displaced through musical information networks that deliver the other place and its inherent difference *to* the here and now, as a live intersection and sonorous overlap. The accentuation of global aurality Fontana seeks requires the mixing of acoustic meaning: in decontextualizing sounds and recontextualizing them, their unique qualities and features are multiplied, culminating in what Fontana identifies as the primary meaning of his work: to maximize "all the possible ways there are to hear it."[8] All the possible ways to hear is also, though, all the possible ways to mishear, for the two are potentially one and the same: the message remains open, the viewpoint broad, the sound world an outpouring of excess, of always being there and there and there. Through this, sound's relational particulars, of voices and their communicable messages, or sounds and their sources, are intentionally confused, expanded beyond recoverable framework: context may, in the end, never reappear.

Micro-disturbances: WrK

The macroview of Fontana's expansive networks of sonic information beguiles the ear, multiplying acoustic frames and supplying musical potentials with unimpeded source material. To surprise the ear takes a radically alternative step with WrK (Minoru Sato [m/s], Toshiya Tsunoda, and Jio Shimizu, and formerly also with Atsushi Tominaga and Hiroyuki Iida). A collective of artists working in Japan since the mid-1990s, WrK approach sound as material containing buried secrets, as a multitude of minute strata composed of vibratory phenomena, acoustic alluvia, social glances, technological slippages, and natural processes. The group's highly refined experiments seek out existing events, conducted by isolating the acoustic frame, suspending it so as to take stock of all the fleeting and temporal detail.

Minoru Sato's installation project *Observation of Thermal States*, presented at Beyond Baroque Literary/Arts Center in Los Angeles in 2000, sets the scene for

an investigative approach by finding the audible discrepancy of temperate oscillation. Working with a single glass tube measuring approximately one meter long and ten centimeters in diameter, Sato placed a halogen flood light directed at one end of the tube, leaving the other end exposed to the natural environment. By listening to each end of the tube, a surprising difference occurs: the steady hum of sound found in the tube is distinctly higher at the lit side, while the other remains lower. Such a gentle alteration reveals natural conditions as elements within perceptual understanding that are in themselves variable. Difference occurs through minute changes, judgment affected by subtle movements, of temperature, of air pressure, of modulations in physics and sense perception, in fluctuations of radio energy. Thus, questions of sound and listening are placed within a distinctly physical framework that seeks the microscopic, the quantum, and the miniscule, as site of acoustic research.

WrK, while mapping out a new palette of sonicity, poignantly counters currents within contemporary sound art by questioning the presumed given of technologies and environments. They reveal further layers of phenomenal information by pointing toward the as yet uncovered sound source, the overlooked perceptual fragment, the molecular dimensions to spatiality, and the conditioning each element contributes to the coming into being of sound. Atsushi Tominaga's *013* audio work turns an audio speaker into a microphone, pouring water on its paper cone to record its very own disintegration; or Jio Shimizu's *20-minutes tape (one side)*, where the artist attaches a magnet to the combination head of an ordinary tape player/recorder, to play the very process of tape playing, turning the rudimentary mechanism of cassette recorders into an electromagnetic discovery. Such systems provide a kind of shadow to Fontana's musical information networks by remaining tied to a form of questioning that does not solely seek the natural mixing of audible events but provides an inquisitive framework for probing how the natural is always more than what is possible to hear, that technologies delivering sound are in themselves sounds, volatile mechanisms and devices susceptible to the movements of air pressure, and that any given acoustic ecology consists of so many persistent variables.

Toshiya Tsunoda's ongoing field recording projects remain steadfastly set on locating the unlocatable sound, defining the undefinable sonic event, harnessing vibration as the earth's very own heartbeat. From the Yokohama seaport to the Kawasaki City Museum, from roadways to fences, Tsunoda taps into the structure-borne soundscape. For his installation project *Monitor Unit for Solid Vibration*, as part of the "Sound as Media" exhibition at ICC in Tokyo, 2000 (curated by Minoru Hatanaka), Tsunoda occupied various hallways, corners, and passageways of the galleries, attaching highly sensitive contact microphones to points on the walls, floors, and ceilings. From each microphone a small single earphone was left dangling for visitors to utilize. Listening in, the work connected a visitor to an absolutely surprising sonorous focus. Low droning beds of sound, oscillations of deep frequencies with occasional taps and ticks punctuating and piercing the

steady flow. Such a sound world wields its power by directing a listener not only to a tonal surprise, but also to an altered understanding of surrounding space— that walls are not strictly surfaces defining space through material and visual perspective, but they, in turn, contain a plethora of acoustical events: vibrations from ventilation systems, electrical infrastructures, conduits, and ducts, each also making contact with other systems and infrastructures, from sewage to power lines, telephone and data circuits to plumbing, elevator shafts, and refrigerator units. Each system, unit, object, and infrastructure relies upon and further activates and controls forms of power, thereby contributing to the ongoing transmutation and transduction of vibration.

What Tsunoda's subtle invasions reveal is vibration as material itself and how its modulations and fluctuations contribute to the articulation of the built environment, in ever-present plenitude. Thus, we may understand walls as certain conditions of vibration phenomena, air ducts as conductors of various frequencies,

Toshiya Tsunoda, *Monitor Unit for Solid Vibration*, 2000, ICC, Tokyo. Photo courtesy of the artist.

floors as beds of sustained frequency, forcing a view of space as inherently unsettled and orchestral.

Tsunoda's practice (and WrK in general) may contribute to the ongoing spatial debates on the nature of architectural experience. For if we rely upon the discourse of the experiential—buildings as embodied networks, cities as "event-spaces" determined by flows and ruptures, the notion of the "event" takes on further meaning when housed within the acoustical vocabulary of WrK. Here, phenomenology no longer remains on the surface, and the "rhetorics of use" described by Jane Rendell, which function as "strategies of resistance,"[9] may invade space a bit further, beyond the fashioning of surfaces. The harnessing of vibration phenomena leads to an awareness that space is a form of network: singularity no longer remains, for events beyond the walls of a room or the foundations of building, affect their interior life, and the movements of various systems determine the material presence of design. Thus, the definition of rooms must take into consideration the elaborate network in which they participate.

In his introduction to the exhibition catalog for "Amplitude of Chance," Minoru Sato poses the question as to the existence of the world: how does such existence manifest itself? And how do we judge how the world is actualized? By what criteria and through what process of assessment does the world come to us? For "this world, where steadfast existence is confirmed, still leaves us with a mass of unresolved questions about the way in which it exists."[10] Such far-reaching questions are at the heart of Sato's work, and the project of WrK. Their investigations confront the perennial assessment of experience, as the perpetuation of conventions of understanding—to bring into question just how these conventions are put into place, WrK engages the very link between cause and effect to locate other avenues for experience and understanding. In doing so, it uncovers sound as more than just passing events, as information, or as material for joining sources and listeners, contributing to a paradigmatic alteration instigated by sound.

Expanded Terrain

The project of acoustic ecology and soundscape work situates sound experience toward the full range of possibilities: from every point on the globe to every receptive ear, acoustic ecology seeks the total sound world, as external geography and as internal journey. To achieve this, it sets out to document, archive, record, and compose so as to awaken us to the extraordinary potential of sound to shape the world and our relationship to it. With this comes a radical spatial proposal, for the ear extends itself to the auditory space of the natural world and its cosmic origin, unfettered. It also sets the ear the task of designing, controlling, shaping, and altering the given sound environment, to make clean the ear experience so as to keep clear the body of ecological life. To move this into sound art and other forms of audio production delivers up a listening that must hear beyond the confines of the room, beyond the location or vicinity of one's place, to engage the breadth

of the world out there, as the source of sound and as the home of listening, that primal original home where the ear may find itself again. In developing a unique vocabulary and research on the auditory, acoustic ecology heightens awareness of sound's looming presence within the environment, its dynamic impact on health and interaction, and its potential to create relationships. Acoustic ecology, and the subsequent works by artists such as Hildegard Westerkamp and Steve Peters, reminds us of the ongoing orchestra always already occurring and the potential for recognizing that one is always already a participant. What I have tried to introduce, as a kind of supplement, is the hidden cavity within such an optimistic project. Through the works of Tone and Fontana, sound and its location may not always match up, or deliver up that plenitude of assured listening. To misinform, to make noise, to locate the parasitic sound, down under and inside machines, is also a means of articulating environmental sound and our place within a larger house of the aural, for such houses are often built upon ecologies that, in turn, destroy others. Such work complicates the relational character of sound, adding too much input, too much place, and too much message.

The Minimalist's project of situating a body in relation to an object, a sound, or a space is radically split open in soundscape studies and the use of environmental sound. For in following sound across the globe, into every corner of every city, it necessarily contends with noise, as the excess of sound and its informative nature: Westerkamp's longing for home, Peter's alien sounds, Tsunoda's microvibrational discoveries. It unlocks the door onto sound's own universe while at the same time repressing it in the form of noise abatement. Whereas sound installation registers a bounded geography, of this space with that sound, this room with that voice, soundscape work takes on all sounds and all places. Yet in doing so it shrinks back from its own discoveries, for the Ursound as primary soundscape must in the end be *pure* noise, as the sound of the universe exploding into being, its signals still traveling, as white noise from dying stars. Its work thus can be heard as reports, descriptions, analyses, and negotiations from the journey through and among all such input, as inward and outward geographies, bringing home the dreams and revelations found there.

Notes

1. Bill Fontana, "Musical Information Networks," in *Soundscape: Journal of Acoustic Ecology*, Vol. 3, No. 1 (July 2002), p. 18.

2. Bill Fontana, from an unpublished article, "Resoundings," found on his website, 2004.

3. Dan Lander, "Radiocasting: Musings on Radio and Art," in *Radio Rethink: Art, Sound and Transmission* (Banff, Canada: Walter Phillips Gallery,1994), p. 21.

4. Ibid., pp. 21–22.

5. Jody Berland, "Toward a Creative Anachronism: Radio, the State and Sound Government," in *Radio Rethink*, p. 35.

6. Ibid.

7. For more on Westerkamp's soundwalks, see Andra McCartney, "Soundscape Works, Listening, and the Touch of Sound," in *Aural Cultures*, ed. Jim Drobnick (Toronto: YYZ Books and Banff: Walter Phillips Gallery, 2004).

8. Bill Fontana, from an unpublished article, "The Relocation of Ambient Sound: Urban Sound Sculpture" found on his website, 2004.

9. Jane Rendell, "doing it, (un)doing it, (over)doing it: rhetorics of architectural abuse," in *Occupying Architecture: Between the Architect and the User*, ed. Jonathan Hill (London: Routledge, 1998), p. 234.

10. Minoru Sato, introduction to exhibition catalog, in *Amplitude of Chance* (Kawasaki, Japan: Kawasaki City Museum, 2002), p. 36.

Global Strings: Interpersonal and Network Space

My hypothesis is that interactive art helps to establish a change of attitude, which will in the future be of importance for all artistic pragmatics.[1]

—Achim Wollscheid

As information-systems rather than physical settings, a society's set of social situations can be modified without building or removing walls and corridors and without changing customs and laws concerning access to places. The introduction and widespread use of new mediums of communication may restructure a broad range of situations and require new sets of social performances.[2]

—Joshua Meyrowitz

Introduction to Part 6

Global Strings: Interpersonal and Network Space

Theories of listening are often based on the notion of diffused subjectivity: through listening, an individual is extended beyond the boundaries of singularity and toward a broader space necessarily multiple, for "as soon as you begin to pay attention, the borders between things become less clear."[3] Such a dynamic positions individuality as porous and volatile imbued with surrounding space and situated inside an ecology of acoustical events. Listening breaks apart the shell of the subject, eases the borders of identity, and initiates an interdependence whereby one is constituted by the whole environmental horizon. To listen attentively then is to become a part of things and to lessen the human agency of will, for listening is about receiving through an intense passivity all that is surrounding—the subtle sounds, the far and the near, the voices of persons and insects alike, the shifting wind. Thus, listening predisposes one to be attentive to the greater context, as a lateral becoming, rather than through linear determinations of one's own will.

Such understanding of listening extends to the domain of music exemplified most poignantly, and most uncontrollably, in the dance club. The excess of beats and rhythms, the rumbling of bass frequencies, the throb and the vibe, volume and more volume, impels one into dance and the euphoric expenditures of collective movement. "Listening and dancing to music can offer an experience of the body which either stabilizes and reconfirms or disrupts and alters our previous experience of it."[4] As a space of rhythmic excess, auditory pleasures, and corporeal gyrations, the dance club bristles with music so as to break apart the individual body into a series of parts—limbs that flail about, brush against their partners, tangle in the mesh of molecular agitation, that move to the vibrations under the floor.

Dancing brings up a larger question related to bodily constitution, and how music and the aural environment creates structures onto which the body may latch, align rhythm to rhythm, achieve security, experience excitement, as well as

fear and loss. For the body, in drawing from and acting upon the environment, creates its own architectonic structure based on patterns of behavior, production and consumption, entertainment, and pleasure. Such patterns write themselves onto the environment by establishing points of contact, stable fixtures, pleasure zones from which the body creates its own signature, unique and yet repeatable. Music may operate as a highly dynamic medium for bodily constitution, creating actively flexible and charged means for developing and modulating individual agency. As Tia DeNora proposes, "Music is a referent … for clarifying the otherwise potentially polysemic character of non-musical phenomena" such as "social circumstances, identities, moods" and relationships to the environment.[5] It temporally and spatially fuels subjective drives while at the same time operating to *embody* those drives, as rhythmic intensity, melodic mood, tonal dreaming. In this regard, listening nurtures a mode of identification that supports inclusivity as well as discernibility, for the ear, while remaining open, actively selects, as a kind of internal mixing console, environmental sound, music, and other noises, creating one's own soundtrack that is just as much auditory matter as geographic place— "sound/track" as acoustical positioning, bodily constitution, choreography *par excellence.*

From the dance floor to the garden, listening softens the edges of individuality by dispersing oneself into a larger field of experience. It is here that I want to introduce theories of media, so as to stage a meeting point, an intersection. The beginnings of media theory as found in the works of Marshall McLuhan are predicated on the recognition of "total situations"—electric circuitry, as the networked energy grid of data and technological relay, repositions the single individual into a greater contextual environment. As McLuhan describes, we become deeply involved in each other's lives through the intensification of communication technologies. Suddenly, information from the other side of the globe is made accessible, almost immediately, in the rush of telecommunicative dissemination. Such a condition, as McLuhan suggests, has consequences on human organization, perception, and interaction, for one is placed inside a greater field of experience, within an environment determined increasingly by the energy flows of electrical signal and electromagnetic transmission. For McLuhan, the developments of electronic technologies reverse the fragmentation of early industrial advancements (based locally on the specialization of human labor) by "connecting" society, collapsing distance in the relay of electrical signal, and forging connections in instantaneous communications. Such developments "implode" rather than "explode" society, "retribalizing" modern man in such a way as to make us inextricably involved in each other's lives. "In the electric age, when our central nervous system is technologically extended to involve us in the whole of mankind and to incorporate the whole of mankind in us, we necessarily participate, in depth, in the consequences of our every action. It is no longer possible to adopt the aloof and dissociated role of the literate Westerner."[6] Such transformations instigate a psychological shift whereby the private and the public interweave in complex patterns that rupture their traditional separation or distinction.

Electronic circuitry delivers not so much a message to be deciphered, but information contributing to a field of meaning, literate and other. "More and more we turn from the content of messages to study total effect. Concern with effect rather than meaning is a basic change of our electric time, for effect involves the *total situation*, and not a single level of information movement"[7] (my emphasis). Content is thus understood *in relation* to the cultural matrices from which it stems, and to which it refers. And, in turn, that it disturbs, for in the "total view" of the imploded society the very oppositional, binary terms of the "aloof and literate Westerner" fray to reveal a complicated and rich multiplicity. If it is no longer a "single level of information movement" through which meaning is conveyed or causes effect, but through the "total situation," the very causal relation of language (signifier and signified) must be seen to multiply, or become unstable, thrown and mixed in the instantaneous flicker of electrical signal.

As Cage describes:

> [McLuhan] has given a dramatic cause (the effect of electronics as opposed to the effect on print on sense perceptions) for the present social change. Art and now music in this century serve to open people's eyes and ears to the enjoyment of their daily environment. We are now, McLuhan tells us, no longer separate from this environment. New art and music do not communicate an individual's conceptions in ordered structures, but they implement processes which are, as are our daily lives, opportunities for perception (and observation and listening). McLuhan emphasizes this shift from life done for us to life that we do for ourselves.[8]

With the advent of digital technologies, McLuhan's formulations have poignantly been realized. Contemporary society is increasingly informed by a multiplication of voices, places, code, signal, and news: to live in today's world is to be tracked by mechanisms of digital media, while at the same time, using such media for personalized use, to form one's own tracking.

What I want to underscore is the parallel tendencies in thinking through listening and media, for both extend individual sensibilities, distributing experience into a broader understanding of collectivity whereby the self is always implicated within surrounding space, no longer proximate but extended to global proportions. Listening and media thus form an interesting couple in which one could be said to mirror the other through processes of intense passivity (for one receives the news as one receives acoustical events, as transmissions from around the body) and an active sense of being involved in many lives.

By highlighting this parallel, I want to suggest that listening, and by extension understandings of sound, can lend itself to recognizing the operations of digital media: that the operations of sound, as media and phenomena, may converse with questions of telecommunications, digital networks, and by extension, the contemporary condition of the digital age. Such an angle is founded on the belief that the digital age is markedly acoustical and immediate, rather than literate or

representational. Such a description inevitably hopes that what we may recognize, in the incoming and outgoing flux of emails, SMS messages, web-casting, satellite monitoring, hacking, and the like, a complex act of communications that we might call a "listening that inhabits," in contrast to Barthes's "listening that speaks."[9] For Barthes's listening operates as a psychological interaction within the isolation of psychoanalysis, whereas the listening I'm after is one that is active out there, as a process of finding home, making connections, creating space across digital networks—a listening that builds architectures out of interaction.

The total situation of McLuhan, then, is an acoustical suggestion, for sound is marked by an unbounded possibility: it looms, pierces, sets dreaming, makes connections, speaks from across rooms. It has been my interest to follow sound as it gets positioned in and against spaces, through the voice and the performing body, and the conduits of technology and networks—to mark sound as relational, public, and connective. In doing so, I want to suggest that the acoustical paradigm (as a theoretical body related to sound) may lend itself to understandings of language, social spaces, and the forms and actions of identity, as artist and audience, as psychologies and bodies, by supplying a rhetoric of mutuality and reciprocity. Following such acoustical potential is to pose that the study of sound and, by extension, forms of sound practice are intensely relevant to probing the contemporary condition and its recent history. For the dissolution of borders through listening, and the dispersed subjectivity of acoustical experience, echo with the networked globalization founded on telecommunications and its subsequent difficulties. The opportunities of expanded listening, and the intensifications of circuitry, make us increasingly and productively vulnerable.

To further engage the historical developments of sound as artistic medium and its relational dynamic, I'll look at the works of media artists Achim Wollscheid and Atau Tanaka, each for whom network technology and digital processing opens up new possibilities for musical and artistic work. Their practice can be aligned in general with the increased formation of media art, in so far as staging real-time actions incorporate and produce forms of participation. Nicolas Bourriaud's influential book *Relational Aesthetics*, while articulating a general trend or tendency within contemporary art, may point to a longer tradition within the practice of sound art. For Bourriaud, relational art is "no longer paintings, sculptures, or installations, all terms corresponding with categories of mastery and types of products, but simple *surfaces*, *volumes*, and *devices*, which are dovetailed within strategies of existence."[10] "Surfaces, volumes, and devices" have been actively sought and defined in much sound art through the immediate recognition of sound's inherent relational character. From actively corresponding with the power plays of acoustics and the *surfaces* of all spaces, to the intensifications of *volumetric* renderings that do not so much produce an object but intervene within given situations, and the utilization and fashioning of instrumental

devices that either extend through forms of broadcast and transmission or seek the audience as performer, the connective promise enacted with sound must be understood to already operate past and within what Bourriaud heralds as the "relational" by having at its core the operations of duration. "A definition that ideally applies to the practices of contemporary artists: by creating and staging devices of existence including working methods and ways of being, instead of concrete objects which hitherto bounded the realm of art, they use time as a material."[11] While insightfully recognizing current trends within contemporary art, it seems also important to supplement Bourriaud's relational viewpoint with the legacy of sound art, which seems sorely lacking in his perspective. For Bourriaud, the incorporation of time by contemporary artists to fashion relational work, as in the work of Rirkrit Tiravanija, Liam Gillick, and Vanessa Beecroft, finds bold manifestation in much sound work over the last thirty years, and finds deeper articulation in contemporary work informed by digital technologies. The work of Wollscheid and Tanaka necessarily presupposes time as an active ingredient, for real-time interactive work seeks the evolutionary progress of events and the continual addition and subtraction by participants. In conjunction with their work, I'll address the activities of the French artist-collective Apo33, which has developed a series of projects that extend information networks to link disparate physical sites.

The use and development of digitally network-based sound projects indicate a single trend within current sound art practices. This is not to overlook the intensified diversity of sound practices currently taking place, from installation and sculptural work to performance and recording, in turn supported by the activities of institutions, festivals, distribution networks, magazines, and record labels around the globe. By focusing on the work of Wollscheid, Tanaka, and Apo33, and the question of digital networks, it is my interest to follow where sound art has found an expanded geographic and relational coordinate.

In each instance, sound as an artistic medium is used to not only make "musical compositions," but more so, to create the conditions for different experiences of social space and social behavior. As McLuhan argued, electronic media extend man's senses beyond the proximity of the physical body so as to make each of us profoundly involved in each other's lives—electronic media act as an extended nervous system, making us sensitive on a global scale. Thus, forms of social space and interaction necessarily expand, bringing us in touch with a wider variety of communities, value systems, pools of information and data, and interactions. These conditions inspire a range of artistic initiatives based on utilizing the very features of network society: sound and its location, or point of origin, are broadcast through digital, network media, extending forms of sound installation and performance into global dimensions.

Notes

1. Achim Wollscheid, *Resolving Interactions* (Frankfurt: Selektion, 2003), p. 56.
2. Joshua Meyrowitz, *No Sense of Place* (New York and Oxford: Oxford University Press, 1986), p. 39.
3. David Rothenberg, *Sudden Music* (Athens, GA: The University of Georgia Press, 2002), p. 87.
4. Jeremy Gilbert and Ewan Pearson, *Discographies: Dance Music, Culture and the Politics of Sound* (London and New York: Routledge, 1999), p. 52.
5. Tia DeNora, *Music in Everyday Life* (Cambridge, UK: Cambridge University Press, 2000), p. 44.
6. Marshall McLuhan, *Understanding Media* (London and New York: Routledge, 2002), p. 5.
7. Ibid., p. 28.
8. John Cage, "McLuhan's Influence," in *John Cage*, ed. Richard Kostelanetz (New York: Da Capo Press, 1991), pp. 170–171.
9. Roland Barthes, "Listening," in *The Responsibility of Forms*, trans. Richard Howard (Berkeley and Los Angeles: University of California Press, 1991).
10. Nicolas Bourriaud, *Relational Aesthetics*, trans. Simon Pleasance and Fronza Woods (Dijon: les presses du reel, 2002), p. 100.
11. Ibid., p. 103.

Chapter 16

Interactions: Achim Wollscheid's Production of the Local

Sound by nature is never isolated; rather, it adds and subtracts within a multiplicity of existing sounds, refracting and deflecting within and against space and the acoustical events of place. In this way, sound is more public event than private affair.

The German artist Achim Wollscheid amplifies this relationship between an outside and an inside, public and private, by positioning the two in conversation, as an interface between art object and audience. His project for a specially constructed home in Gelnhausen, Germany, designed by the architects Gabi Seifert and Goetz Stoeckmann, exemplifies Wollscheid's ability to transform space and sound as terms in a complex, interactive relationship. Installed along the front wall and two sides of the house, the work consists of speakers and microphones mounted at the same points, one inside and the other outside. Connecting the exterior microphone to the interior speaker, and the interior microphone to the exterior speaker, the work amplifies outside sounds in the inside, and inside sounds outside. In addition, the sounds are digitally treated through a computer program that transforms the sounds as information into tones. Like a singing harmonica, environmental sounds turn into a musical melody. This sonic translation creates a relay between the street and the living room, between exterior passersby and interior user, frustrating the architectural imperative of an exterior/ interior divide, insisting instead on a permeable structure, and playing with the idea that "walls have ears."

In contrast to the sought-after harmony of phenomenal occurrence and cultural work, what Bernd Schulz refers to as the "phenomenological-esthetic approach,"[1] Wollscheid's project is an invitation to noise and its potential social narrative—here, the walls of a house welcome the interference of an exterior, while the private interior is amplified to an unexpected public. The work fosters

a conversation that necessarily incorporates people; it introduces the "user" (or audience) as an influencing and determining input. Structured like a stereo hi-fi system, sounds can be manipulated by individuals in the house by turning up volume, adjusting equalization, or turning it off altogether.

The notion of interaction and sensitive space has found much attention in contemporary architectural discourse and design. Making space interactive, receptive to users, conversational in an increasingly diverse dialogue, suggests that architectural design must take on a more indeterminate strategy so users may create and find their own meaning. This model finds its iteration in an increasing number of contemporary architectural forms that articulate an interest in setting up dialogue by inviting the individual into the programmatic construction of space. Here, in an architectural shift toward interactivity, the individual is asked to participate in the actualizing of space, to *use* it as a blank page. This can be seen in recent proposals such as Helmut Tichy's cyber-hotel, where visitors "carry along a card that has his or her preferences programmed into it—room color, temperature, lighting—so those preferences can be then plugged into the empty shell of a room to give it a character."[2] Bernard Tschumi's proposal for an Urban Glass House of the 21st Century further supports the contemporary interest. Describing the House, Tschumi writes: "The services and circulation are contained in an undulating 'sandwich' wall that also helps define the living spaces. The wall expands and folds back on itself, enclosing spaces for privacy, and opening to allow rooms and corridors to flow continuously into one another. It provides the 'subconscious' of the House, adjusting to the specific desires of the user. Separations can be made by sliding partitions and curtains out of the service wall, thus allowing for more privacy."[3]

What is significant about these and other proposals is that the recipient is made active in the actualization of space whereby the shifting gradations of personal feeling and need can be reflected in the spaces one inhabits. Architecture is thus envisioned not as a completed project but as an "empty shell" given character at the moment of interaction. Such interaction extends beyond the serving of particular programs and enters the realm of play, decoration, and entertainment, unraveling Adolf Loos's Modernist quip that "decoration is death."[4] Yet such postmodern moves hint at the possibility of an open form in which input is channelled so as to develop new methods for design. The hypo-surface project developed by DeCoi is but one example of an interactive device suggesting design potential. A wall of triangulated panels driven by pistons move and undulate according to environmental sound: sensors drive the pistons in response to acoustical input, giving way to random patterns that continually change throughout a given day. The hypo-surface is a kind of enlarged "acoustic mirror" reflecting back to the environment its own sonorous drama, yet in the form of tactile movement, as a formalistic shadow following quotidian dynamics. One may ask, "What does such a surface have to do with architecture?" and more, "how can such interactive devices serve architectural programs?" While straddling the line of sculptural effect, the

DeCoi project suggests possibilities for a more flexible relationship to program, in which space could be modulated as architectural use evolves and transforms. For instance, one could imagine a house that, over time, could be adjusted to suit given needs of the user: a two-bedroom family home can be changed when children finally leave home, allowing parents to adapt to their new needs; or a hospital could alter its proportions according to new technologies and the changes needed to accommodate different situations, and interactive devices could better serve the illnesses of patients, their recovery, and their comfort.

In this way, architecture is conceived as responsive to the given relational situation, not as a solid, determined object but as a flexible condition. The indeterminate nature of this approach situates the architect responsible to a larger notion of the "client": to provide not so much for the individual but for the multitude and its demands.

This can be seen in relation to an overall cultural and social shift toward global consciousness in which network telecommunications and technologies resituate the borders of nation states, occluding traditional institutional structures by a potent network of civic connectivity.[5] Here, "place" is dispersed across a broader field of locality, within a greater interaction dependent on multiple input and output. In this way, the process of locating oneself, through identification with, for example, statehood or neighborhood, is made complex in the ever-growing heterogeneity of locality. As an individual, one participates in a larger architecture of experience, in which one's presence contributes to its actualization.

Such interest in participation infiltrates every aspect of Wollscheid's work and brings to the fore notions of interaction, social networks, and artistic use. His performative installation works, developed over recent years, encapsulate overarching concerns for creating systems of interaction that respond to individual input while hinting at a kind of orchestration of multiple users. Presented in August 2002 at the Beyond Music Sound festival in Los Angeles, *Sound Grid* is structured around the live amplification and processing of found sound. Sounds from the environment are recorded and played back in real-time through computer processing and, additionally, transformed into light signals—like fireflies, small bulbs flicker on and off according to the intensity of sound.

Here, participants are presented with an "instrument" that responds to their voices, noises, complaints, and interactions. It does so by literally making visible their sonorous input, as well as orchestrating this into a loose form of musical melody: random acoustical noise turns into subtle tonal rhythms of shimmering points. In addition, the individual is brought into a heightened relation with those around him or herself, for one can easily recognize how such individual performance is part of a larger orchestra in which a single input affects and contributes to the others. Such work seems to recall earlier attempts to incite social influences into written musical composition. For example, Cornelius Cardew's Scratch Orchestra compositions often rely on creating group dynamic. His *The Great Learning* (1968–1971) asks untrained singers to work with sections of a text

Achim Wollscheid, *Sound Grid*, Beyond Music, Los Angeles, 2002. Photos courtesy of the artist.

by Confucius through a number of instructions, one of which asks a player to "choose a note that you can hear being sung by a colleague." In doing so, the composition incorporates into its structure, and eventual outcome, attention to collective work as a fluid and organizational directive through which individual choice is partially driven. Or with Toshi Ichiyanagi's *Sapporo* composition (1962), players are asked to listen to sounds produced by the other performers and to follow their accompanying movements. Scored for "attacked sounds, upward and downward sliding sounds, and long silences,"[6] gesture and movement create an extremely active presentation, fueling the generative unfolding of the work as we could imagine players mimicking or mirroring one another, exploring shared movements that would profoundly influence the sound content.

While Wollscheild's work maintains an open-ended structure, revealing its workings through microphones, computers placed alongside the installation, and a network of cables, bulbs, and speakers apparent to visitors, it suggests the possibility for art to transform not only found sound but the coming together of a social body.

Moving Toward the Crowd

As an artist, Wollscheid has worked since the early 1980s exploring the possibility of sound (along with light) as an interactive, social medium. As a student, his involvement with the Frankfurt School developed into a core of like-minded individuals informed by postmodern theory. Deconstruction, and the lessons of Jacques Derrida, in proposing intertextual relationships, encouraged the process of quotation: authored works were no longer sacred objects lodged in the sediment of history, but free-floating material to be engaged with. Early experiments with cassettes and vinyl records were developed by Wollscheid and his collaborators, Ralf Wehowsky, Stefan Schmidt, and Charly Steiger, through extended exchanges of sound material between artists from around Europe, the United States, and Australia. Cassettes containing various sound materials to be used, cut up, destroyed, and abused were mailed to be sent back for further manipulations. Such an approach framed sound practice in the form of social network—the postal system became a kind of relay mechanism aiding the transportation of sound and the coalescing of an artistic network.

Wollscheid and his colleagues formalized their collaborations under the name "Selektion" in the early 1980s, which continues to serve as an umbrella for publishing compact discs and books, as well as organizing events and generating projects. Their early cassette activities are echoed in "Xerox actions," which consisted of producing photocopies of various appropriated images, in such a way as to create different meanings, and then applying these photocopies onto public spaces, such as the town hall in Mainz, Germany. The works put to use the Xerox machine as a filmic device, harnessing the idea of the "copy" as aesthetic potential. Currently,

Selektion serves as a nexus of artists engaged in a practice that works contextually with electronic media whose general principles of extraction, manipulation, and remediation find further articulation in current usages of real-time media.

Wollscheid's current work, and his interest in interactivity, underscores social networks, shadowing his early cassette activities, which sought the crowd as input. Crowd *as* input situates his work inside an ethics of production, revealed in a responsibility not so much to the individual but to the multitude, beyond the singular, authored object and toward a networked production. Constructing artworks that stimulate exchanges, between work and audience, between individuals within a crowd, inspires, on a micro-level a form of sociality: the audience comes to recognize itself as a collective whose input is required to activate and complete the work. Like Tichy's cyber-hotel, Wollscheid's visitors plug in their requirements by putting to use the system. Yet, instead of completing a hotel room by selecting wallpaper, the visitors here participate in the orchestration of media. They become performers in a sudden orchestra.

> Music may influence how people compose their bodies, how they conduct themselves, how they experience the passage of time, how they feel—in terms of energy and emotion—about themselves, about others, and about situations. In this respect, music may imply and, in some cases, elicit associated modes of conduct. To be in control, then, of the soundtrack of social action is to provide a framework for the organization of social agency, a framework for how people perceive (consciously or subconsciously) potential avenues of conduct.[7]

In a further performance, given in 1999, at the Beyond Music Sound festival, Wollscheid handed out to the audience a series of speakers for them to hold, pass around, and interact with. The speakers were fitted with a small microphone that was, in turn, connected to a small computer processor within the speaker cabinet. Sounds were transformed live into small tonal blips, creating a kind of musical jingle in response to live input. Passing the speakers around, the audience discovered the instrument without any direction or instruction. Simply being handed a speaker cabinet, being given the object that is generally out there, across the room, or hung up high, in the ceiling, created a stimulating reversal: the audience was literally holding in their hands both an instrument, its malleability, and its ultimate output. People began to laugh, jingle keys, make cat sounds, clap hands, yell, and more, so as to activate the instrument. A whole symphony of immediate and quick actions occurred with the intention of hearing what could happen—what sounds would occur if a particular input was made? What kind of response would happen if one did this or that? The audience began to organize themselves, responding not only to the speaker-instrument but also to others in the room, as partners in the pursuit of sonic events. In short, dialogue was instigated based on exploring the range of noises one could make, and ultimately share.

Achim Wollscheid, Sound Boxes for interactive performance, Beyond Music, Los Angeles, 1999. Photos courtesy of the artist.

Sensitive Space

Sound art projects utilize the sound-space relation in a number of ways: by creating acoustical experiences, vibrating buildings through structure-borne sound, positioning sound and listener in complex dynamics by designing specific listening environments, by transmitting and composing the proximate along with the distant. What has been sought in the preceding chapters is sound's relationship to place, from its point of origin to its broadcast, and how it reveals conditions of space by activating walls and floors, the skin and the ear, situating a listener in a here and now, and the there and then: by making an object out of sound's fluid becoming. What becomes apparent, though, as we move toward digital technology and networks and Net-based art, is a rethinking of sound's fixity, its location and its specificity, as well as what or whom actually produces it.

Much attention has been given to the ontological, locational, and cultural shifts in the wake of digital technology that underscore the mobile, the immaterial, and the connective, where "computer networks become as fundamental to urban life as street systems" and "memory and screen space become valuable, sought-after sorts of real estate," shifting "much of the economic, social, political, and cultural action … into cyberspace."[8] The information age introduces communication as economic currency while wedding personal life to a multitude of points around the globe. Information is no longer necessarily found in material objects but in their code and ultimate dissemination through digital means. In this regard, our experience of place and its locational certainty is superimposed across other places: one lives in more than one place, crisscrossing through what has been called "transurbanism."[9] "Transurbanism" can be described as a shift away from the material city to the immaterial flow of information, from traditional views of location to the greater "flows" of globalization. "In a world of ubiquitous computation and telecommunication, electronically augmented bodies, postinfobahn architecture, and big-time bit business, the very idea of a city is challenged and must eventually be reconceived."[10]

Against these larger movements of corporate capital and communications we can also witness a shift in individual movement and experience, for such transformations open up an entire network of "connectivity" through which individuals fashion their own idiosyncratic itineraries, in and out of cyberspace. This manifests itself not only in the material opportunities of interactive technologies, such as the Internet, mobile communications, and "smart houses," but into a psychic imaginary: "connectivity" seeps into fantasies of relationships and identity. Michael Peter Smith defines this contemporary condition as:

> … a marker of the criss-crossing transnational circuits of communication and cross-cutting local, translocal, and transnational social practices that "come together" in particular places at particular times and enter into the contested politics of place-making, the social construction of power differentials, and the

> making of individual, group, national, and transnational identities, and their corresponding fields of difference.[11]

Such intersections of the local and the global seem to form a new situational vocabulary, and along with it, new understandings of spatial narrative and practice, beyond a recuperation of grand narrative, city center, or an intensification of the individual as autonomous body. In a recent publication, transurbanism is given further definition as "… a design strategy that allows cities to organize themselves as complex systems, where small local structures incorporate global flows."[12] For space is increasingly determined by the intervention of places outside and beyond singular models or definitions, determined by a multitude increasingly self-directed, challenging traditional views of environmental awareness, global politics, and city planning. The transurban disrupts locality (as singularity) while making possible its amplification (as communicable network) as a "design strategy." Arjun Appadurai suggests an understanding of the local as a "structure of feeling" rather than an actual spatial location, in which the imagination becomes a "collective tool for the transformation of the real"[13]—for "the local is as much a process and a project as anything else," informed by the collective inertia of social and cultural production.

To return to Wollscheid's work, I want to suggest that his practice is such a "production of the local" in which the work of the imagination coalesces into collective sensibility, engaging the intensification of presence in digital society. As Wollscheid proposes:

> At least structurally, individual works don't care whether they are looked at by a single person or a group because the multitude is just a multiplication of the single case. Social history proves how group-related participation became part of sports and the so-called individual reception or participation (as a result of the secularized hopes for salvation) leads into art. Be it a result of heritage or the outcome of product-design for the so-called "individual" postulated by marketing, it remains to be stated that art has not yet integrated the contemporary dominant state of social and structural complexity into its repertoire, which would mean to establish relations between multitudes (what is commonly called networks) and use this as an equal or even constituting part of artistic work.[14]

Relational Art

Given the radical multiplication of presence introduced by networked society, art needs to come to terms with the crowd, not as single consumer but as multiple users; in turn, notions of sociality seem to take a twist in the wake of digital technologies, for media becomes increasingly personalized—home systems and access to digital tools provide an individual with the means to produce, more than consume. Thus, a form of empowerment previously unavailable is at hand. In

conjunction with these notions of increased personalized agency, an intensification of social presence surfaces: digital networks link us to multiple social centers, beyond our immediate physical location, and outside our immediate social circle. Thus, it seems the information age leads us toward an intensification of difference and heterogeneity as well as a washing over of difference, as everyone drinks the same coffee, buys the same clothes, and reads the same news—social tension as well as potential for conversation intersects, infusing notions of the network—as utopia—with more pessimistic views.

As in the case of Wollscheid, the making of interactive systems, in which the imagination may work itself into collective locality, produces a situation in which difference may play itself out in the form of responsive media and subsequent patterns of behavior. Self-direction instigated on the part of an "art object" turns art into a specialized arena in which methods of surveillance—of monitoring, tracking, calculating, and responding—are turned into opportunities for collective usage. Such collective usage may retrospectively point back to the works of Kaprow and others in their blurring of art and life, accentuating a longer artistic history whereby art operates as interface, "transformed into an open structure in process that relies on a constant flux of information," engaging the public as participant for stimulating active and dynamic exchange.[15]

Wollscheild's recent project *Flexible Response*, installed in an office building in Hattersheim, Germany, reflects such attempts to remodel art through interactive means. Consisting of a system of lights developed by Wollscheid and mounted along the façade of the building, the work is activated by live processing of sound: the work listens for sounds occurring immediately on both sides of the façade, inside and outside, translating them, like *Sound Grid*, into a visible response. Each window panel across the front of the building lights up in response to sounds happening inside the front lobby, illuminating the façade and the immediate vicinity of the building. Forming cross-patterns or X formations, turning on and off in rapid succession, the building is played like a light orchestra. Situated outside any recognizable domain of art, the installation intervenes within a given architecture, supplanting the static light bulb with a dynamic system sensitive to the interior activities of workers and visitors alike, turning the building into what Rafael Lozano-Hemmer calls "relational architecture": "relational architecture can be defined as the technological actualization of buildings with alien memory."[16] Conceived in contrast to the monumental, relational architecture operates as temporal form developed through participation. For Lozano-Hemmer, architecture has the potential to activate the imagination, stimulate passersby into an interactive process that introduces difference, or "alien memory," which "refers to something that does not belong, that is out of place …"[17] infusing architecture with surprising and playful intrusions. What is important about Lozano-Hemmer's relational architecture is that interactive systems turn buildings into instruments performed by local inhabitants, and in the case of his own installations, web users, and global participants, referring notions of inhabitation toward

Achim Wollscheid, *Flexible Response*, 2003, Hattersheim, Germany (permanent). Photos courtesy of the artist.

a more theatrical narrative, for "what is specific [to relational building] are the new behaviours that might emerge during interaction."[18]

For Wollscheid's work, buildings also take on "relational" aspects—intervening through technological systems, introducing interactive possibilities that turn spaces into performative contexts, and encouraging multiple users to form a temporal orchestra in which the individual and the multitude negotiate and form extended narratives. In *Flexible Response*, the building is given over, partially, to uncertain input: for one could imagine that rather than work, individuals could slip out and entertain themselves by orchestrating, organizing, or setting off the lighting system. In turn, such interactive invitations open themselves up to the possibility of being totally ignored, as forms of boring entertainment, for the possibility that the workers would lose interest is just as feasible. This must be recognized as an aspect of interactive works and the general move toward sensitive systems indicative of today's cultural environment. Often, digital art and Net-based projects espouse extremely optimistic hopes that interaction leads to a more stimulating and edifying experience in which my presence is given partial authorship. Yet, such works run the risk of simply obeying the commands of a visitor, offering back to themselves, in narcissistic plenitude, their own image, body, or voice. In this regard, Tichy's "cyber-hotel" seems more of a one-way system, in which a guest's desires are fulfilled from a pre-existing catalog of options: one sleeps in one's own subjective fantasy of oneself. In turn, Tschumi's House for the 21st Century may fall short of living up to the ideal of a responsive environment, for the empty shell may fail to inspire an inhabitant's imagination, causing boredom rather than spatial *jouissance*.

For Wollscheid, questions of interaction are of pressing urgency, for art must no longer look toward either the author/artist as source of genius or the individual viewer/listener as sole recipient, for contemporary culture and society, as McLuhan and others have pointed out, is now more than ever a condition of participation whereby the multitude rather than the single individual is of importance.

The relational, the production of the local, interactive, and sensitive spaces, forge new platforms for changing notions of sociality by repositioning space and location and instigating new sets of behavior. What is this new sense of sociality? What are these new forms of behavior inspired by and conditioned through electronic media and interactive systems? Turning viewers or listeners into active participants, Wollscheid fosters a sociality of interaction in which buildings are responsive. Whereas the work of Max Neuhaus inserts a constructed sound object sensitively into an existing space, Wollscheid seeks to create a system whose outcome would be not only of individual listening but also collective decision-making. In doing so, the work produces an uncertain, vague, and procedural sociality, where the system at work invites a move toward mingling with the crowd yet with no prescribed result: audience becomes activator, activator becomes participant, participant becomes the art, replacing the individual input with collective inertia. Thus, the work does not specify, but rather it drives an encounter that makes one

accountable. Interactive work runs this ethical risk: on the one hand, ethics give over authorship in a generous move, while on the other hand, ethics demand, in forms of polite commands, that one *be* active, taking responsibility not only for the work and its activation but for one's own form of action: as user, one is asked to *do* something, as long as it doesn't destroy the system.

Making Connections

Such concerns have been taken up within media theory since the work of Marshall McLuhan in the early 1960s. Questions of media and its consequences on relationships to the real (Baudrillard), place and space (Virilio), and social patterns of behavior (Meyrowitz) feature throughout media theory. Meyrowitz's seminal book *No Sense of Place* in particular touches upon all these aspects and plays a crucial role in bringing together what is termed "medium theory," (of which McLuhan is exemplary) along with sociology, as found in the works of Erving Goffman and other dramaturgical theorists.[19] Engaging McLuhan's general analysis of media, which categorizes history in terms of oral, print, and electronic media, proposing that the electronic age supplants print culture by reintroducing tribal relation indicative of oral culture, yet on a global scale, Meyrowitz asks, "What are the effects such changes have on social behavior and how do we orient ourselves within such changes?" Meyrowitz recognizes media's radical alterations of sociality, for "electronic media have rearranged many social forums so that most people now find themselves in contact with others in new ways.... And unlike the merged situations of face-to-face interaction, the combined situations of electronic media are relatively lasting and inescapable, and they therefore have a much greater effect on social behavior."[20] Meyrowitz supports McLuhan's basic claim that electronic media inexplicably involves us more deeply in each other's lives by extending the threads of connectivity, mobility, and information systems to global proportions. Thus, the electronic age is understood to blur traditional hierarchies, transforming our embeddedness within local society, infusing consciousness with other fields of knowledge made more available through electronic broadcast, such as television, and supplanting hierarchies of authority: new media empowers many more people to control their own lives and relation to others. As Meyrowitz outlines:

> ... the traditionally perceived differences among people of different social "groups," different stages of socialization, and different levels of authority were supported by the division of people into very different experiential worlds. The separation of people into different situations fostered different world views, allowed for sharp distinctions between people's "onstage" and "backstage" behaviors, and permitted people to play complementary—rather than reciprocal—roles. Such distinctions in situations were supported by the diffusion of literacy and printed materials, which tended to divide people into very different informational worlds based on different levels of reading skill and on training and interest in different "literatures."

> These distinctions were also supported by the isolation of different people in different places, which led to different social identities based on specific and limited experiences available in given locations. By bringing many different types of people to the same "place," electronic media have fostered a blurring of many formerly distinct social roles. Electronic media affect us, not primarily through their content, but by changing our "situational geography" of social life.[21]

Altering our situational geography, electronic media deliver new forms of information, spatiality, and interaction by positioning us within an increasingly intensified sociality: whereas for Goffman in the 1950s, the social structure remained relatively stable, fixing individuals within recognizable social dramas in which "backstage" and "onstage" spaces swayed little, Meyrowitz's geographic view details a more nuanced stage in which private and public continually merge, adult and child distinctions collapse, masculine and feminine models become more hybrid, and authority figures are more questioned by others. This occurs, Meyrowitz argues, primarily by exposing more and more "backstage" situations to an "onstage" arena, for "electronic media make public a whole spectrum of information once confined to private interactions."[22] It does so by operating according to "expression, presentational, and analogic" means rather than through "communicative, discursive and digital" ones. Through the use of imagery (photography, television), sound (radio, storytelling), personal interview, and anecdote (TV talk shows), electronic media support more informal, personalized, and relational exchanges and interactions. It fosters what previously occurred in face-to-face, local, and immediate physical relationships but now occurs through electronic broadcast, sharing, and informational systems. By doing so, it overturns the idea that physical place and social situation define each other. One need not behave according to the social etiquette embedded in a given physical place, for one is involved in information systems that reach beyond the walls. "Electronic media bring information and experience to everyplace from everyplace. State funerals, wars, hostage crises, and space flights are dramas that can be played on the stage of anyone's living room. And the characters in these dramas are experienced almost as if they were sitting on the living room sofa."[23]

The electronic age thus unfixes not only our sense of place but also our sense of self. Such an effect may be cause for trauma or nostalgia; it may also produce utopian views that embrace the fluid and nomadic possibilities in which self and world reinvent themselves within the temporal details of each instance. For Meyrowitz, electronic media adds greatly to the list of situational definitions by creating additional forms of presence, interaction, and information.

To return to Achim Wollscheid, we can begin to recognize his work within a larger framework of electronic media and theory. His work functions as an "information-system," and following Meyrowitz, information systems define social situations, for they operate "as a given pattern of access to social information … and the behavior of other people."[24]

As seen in *Sound Grid*, or his performance from 1999, the interactive work of Wollscheid is based on the processing of sound information: the recording, processing, and transforming of acoustical data into other output generates a particular social situation. As audiences take on more of an active role, shifting from passive observers to performers, they also come to identify themselves in relation to others in the audience, for they too are actively involved in the production of the work, in the moment of transformation. Essentially, the audience moves from the "backstage" to the "onstage," reversing their behavior so as to participate in the sharing and creating of information: the transformation of sonic material transforms the behavior of those present, echoing Meyrowitz's proposition that "as information-systems rather than physical settings, a society's set of social situations can be modified without building or removing walls and corridors and without changing customs and laws concerning access to places."[25]

Notes

1. Bernd Schulz, introductory text to *Resonances: Aspects of Sound Art* (Heidelberg, Germany: Kehrer Verlag, 2002), p. 16. Schulz's argument epitomizes an aspect of sound art indicative of much work being done in Germany (e.g., Rolf Julius, Christina Kubisch, Andreas Oldropp, Robin Minard, Hans Peter Kuhn) in which a phenomenology of perception is taken as an overarching guiding principle for aesthetics.

2. Douglas Heingartner, "Mobile Homer," in *ArtByte* (April 2001), pp. 60–65. The cyberhotel finds parallel in Perry Hoberman's *Bar Code Hotel* (1994), a virtual project made of bar codes related to various characteristics that "guests" scan, creating their own self-styled room. See Christiane Paul, *Digital Art* (London: Thames and Hudson, 2003), p. 91.

3. As found on Bernard Tschumi's website: www.tschumi.com, 2004.

4. See Adolf Loos, *Ornament and Death: Selected Essays*, trans. Michael Mitchell (Riverside, CA: Ariadne Press, 1998).

5. For a compelling analysis of such "connectivity," see Derrick De Kerckhove, *Architecture of Intelligence* (Basel: Birkhauser, 2001), and for issues related to globalism and locality, see Michael Peter Smith, *Transnational Urbanism* (Oxford: Blackwell Publishers, 2001).

6. Michael Nyman, *Experimental Music: Cage and Beyond* (Cambridge, UK: Cambridge University Press, 1999), p. 112.

7. Tia DeNora, *Music in Everyday Life* (Cambridge, UK: Cambridge University Press, 2000), p. 17.

8. William J. Mitchell, *City of Bits: Space, Place and the Infobahn* (Cambridge, MA: The MIT Press, 1995), p. 107.

9. *Transurbanism*, ed. Arjen Mulder (Rotterdam, Holland: V_2 Publishing/NAi Publishers, 2002).

10. William J. Mitchell, *City of Bits: Space, Place and the Infobahn*, p. 107.

11. Michael Peter Smith, *Transnational Urbanism: Locating Globalization*, p. 5.

12. Editorial statement for *Transurbanism*, ed. Arjen Mulder. See Arjen Mulder's introduction, pp. 5–10.

13. Arjun Appadurai, "The Right to Participate in the Work of the Imagination," in *Transurbanism*, p. 34.

14. Achim Wollscheid, *Resolving Interactions* (Frankfurt: Selektion, 2003), p. 57.

15. Christiane Paul, *Digital Art*, p. 13.

16. Rafael Lozano-Hemmer, *Vectorial Elevation* (Mexico City: Conaculta, 2000), p. 55. It is worth noting that Lozano-Hemmer's own installation work *Body Movies*, installed in Rotterdam, encouraged the participation of people by creating an elaborate "shadow play" on the side of a cinema house. Bright lights cast the shadows of passersby, turning their bodies into enlarged or tiny caricatures. The result was an elaborate display of theatrical play, where shadows interacted and played out scenarios of violence, sexual mimicry, abuse, and playful gags. Thus, the "new forms of behaviour" are not always positive.

17. Ibid.

18. Ibid.

19. Goffman's dramaturgical approach is indicative of situationist theory, which seeks to analyze social situations as governing structures for behavior and its evolution.

20. Joshua Meyrowitz, *No Sense of Place* (New York and Oxford: Oxford University Press, 1986), p. 5.

21. Ibid., pp. 5–6.

22. Ibid., p. 95.

23. Ibid., p. 118.

24. Ibid., p. 37.

25. Ibid., p. 39.

Chapter 17

Global Events: Atau Tanaka and Network as Instrument

The intensification of place, from singular to transurban, from local to multiple, can be seen in what Saskia Sassen names the "Global City."[1] According to Sassen, the global city is the product of transnational and global economic flows exemplified by the multi-corporate accumulation and movement of capital, networked telecommunication systems, and the general reality of displaced borders, dual nationality, and migrant workers indicative of contemporary society. Such economic flows, to follow Michael Peter Smith's arguments, have at their base political processes that unfold inside specific localities, at particular moments, thus moving capital across the distinctions of local situations while making these situations open to their own fluidity. For as Sassen proposes, such shifts marked by the "global city" produce openings or "fissures" in the traditional hierarchies of national power, destabilizing borders and what it means to be a citizen—sovereignty slides across the transurban map of the "global soul."[2]

Following Sassen, citizenship is made more complex as it becomes less tied to a single nation, or caught in the fluctuations of statehood, migrations, and the conflicts of the reorganization of capital, repositioning the way in which we connect with, for example, place, territory, or home. Such repositioning is symptomatic of transurban disruption, for it suggests a network of interaction and agency existing on top of the map of traditional borders, of both territory and identity. This other network, as a kind of spatial terrain, weaves in and out of formal recognition: in other words, there is as yet no direct map that defines these localities and their inhabitants, these fissures and openings against the global economic structure. Rather, it can be understood as an "informal" space, where both multi-national companies and single individuals collide, in the fissures Sassen recognizes as resulting from transurban restructuring. For it seems we make connections across an increasingly dispersed and random map, personalized according to individual

trajectories that move across greater distances and that nonetheless confront transnational movements. As Smith reminds us, such dispersal does not eclipse the persistent reality of the individual body situated within locality, identity, and history (here we can recall that such trajectories are often forced migrations). What this suggests is that as place itself becomes dispersed, repositioned, and exploded across the transurban map, it gains significance on a micro-level the transurban as a global feature gives way to both large movements of capital, migration, and dispossession, and smaller movements of personal practice, informal connections, and illegal traffic.

The dispersal of place, as a locatable point, in turn, parallels the increased dispersal of the sound event: one no longer needs to go to the concert hall to hear a concert of obscure music, or actually buy CDs at records shops. Rather, such things are made accessible through the Internet and other electronic media: downloadable files, web-streaming radio, concerts and other sound events, mp3s, and iPods put sound on the move, extending both its physical propagation as well as its radiophonic circumference.

With the introduction of the Walkman by Sony in 1979, the transportation of the personal stereo granted individuals their personal soundtrack to the world. Joggers, roller skaters, dog walkers, and park strollers could now carry along their favorite music, creating their own Muzak network (one probably a lot more satisfying).[3] The Walkman extended musical culture into individualized trajectories and journeys, unconfined to the home, the workplace, or the automobile—the Beatles and bike rides, Mozart and mountain hikes, B. B. King and subways, each instant combining musical cultures with a diversity of places. A multitude of juxtapositions and disjunctions, suturing aural experience with geography, the textures of sound with the textures of place, the Walkman empowers us as embodied carriers of musical sound. In turn, it infuses the sonic with extra ingredients, joining and disjoining the particulars of place—cafés, shopping malls, parks, and leisure centers—with the particulars of sound, embedding the listener within a kaleidoscopic narrative.

Mobile sound takes on a greater dynamic with the introduction of digital technology. The idea of using communication systems to transport sound to multiple locations breaks apart the sound event by infusing it with geographic difference. This can be seen with the development and insertion of mobile phones. Mobile phones displace the borders of private and public by transposing private speech onto public space: it inaugurates a new kind of orality and audition by mobilizing both, beyond the strict spatiality of the local. It produces a new form of confrontation whereby a public overhears private conversation, beyond general conversation, such as in a restaurant or a park or even heard through the walls; mobile phones create public monologues, half-conversations announced and hidden in the technologized instant of connection whose process makes strange the voice inside the public domain—individuals seemingly speak to themselves, as zombies, displaced and yet placed in the same instant. Mobile speech initiates new forms

of empowerment, as Caroline Bassett proposes, by producing "an accelerated, intensified, sense of freedom of movement and of speed-up,"[4] enabling one to be reached and to reach out. Connections can be made without resorting to public and landline phones, as a civic and commercial infrastructure; conversations can occur inside spaces traditionally meant for other actions, and the privacy integral to individualized and intimate relationships is extended into a greater circumference, to a beyond that unsettles traditional zones of speech and conversation and the measurements of intimacy. This process throws the voice into greater orality, across the fixing and unfixing of spatiality, the centering and de-centering of self-hood, casting a new twist to what Steven Connor identifies as the essential paradox of the voice, for in so far as the voice "moves from me to the world, and to move me into the world,"[5] as an intimate trace of oneself, the mobile phone conducts new ways by which such movement may occur. Guided by the voice, and the visual-auditory blending of being here while speaking into a there, mobile phone use embodies the "dialectic of presence/absence" by nurturing our ability "to engage/dis-engage from particular stimuli, and from particular kinds of spaces ..." expanding "the times and places when we can perform these rapid switches."[6]

In contrast to the notion that social space is a physical location, mobile communications incite spatiality at that moment of use: mobile speech *forms* private space wherever it may be, while creating its own public space through connections to personalized phonebooks that are communities in themselves. In this way, the mobile phone brings together the spoken with the spatial in such a way as to suggest new perspectives on both, as productions of speech and space. For in the highly personalized trajectories taken in everyday life, one is always negotiating between the proximate and distant demands that bring one into the fold of language and the built environment.

Mobile speech throws the body into a network of orality that sustains relationships through always being available, ready to answer, across spatial coordinates. Such mobility has found its place within the work of Atau Tanaka. The Japanese-American artist has been working to use communication networks to rethink the idea of musical composition:

> Music is an art form that traditionally has tended to inhabit space. As an acoustic form, it depends on physical space for its manifestation. Yet with the advent of recorded media and audio data storage, music's relationship with space has shifted. The arrival of recorded media, Walkmans, and peer-to-peer music sharing networks, have transposed music out of physical space and public space and toward personal and inter-personal space.[7]

Working over the last fifteen years, Tanaka has consistently sought to implement interactive and network technologies in developing sound work, initially with the performance group Sensorband, whose performances used body movements to trigger audio banks of sound, to recent installation and radio projects. Working with infrared, ultrasound, and bioelectric sensors, Sensorband conducts

performances in which gesture, body movement, and technology mesh in forming musical dynamics with often intensely physical effects.

In collaboration with Zbigniew Karkowski and Edwin van der Heide, Tanaka became interested in the idea that music is based on a physical presence that may slip in and out of control, past the body through interface with other media, other forms of musical experience. Traditional notions of musical proficiency are grounded on physical relations to instruments: string, wind, and percussion instruments demand multiple levels of training, from harmony and composition to physical exercise and agility. Playing an instrument contorts the body into unusual positions. Like any form of mechanical labor, one must *grow* into the instrument, harmonize with it. The instrument is a form of interface through which sound is produced, a prosthetic to physical presence. Thus, it seems, musical instruments have always functioned as highly supple and dynamic interactive objects for the production of auditory experience, for choreographing and disciplining the body. The musical instrument presupposes the body—it waits for it—requiring the physical act to activate its buried potential. With the advent of early electronics, composers and inventors sought to extend such interface. Such instruments as the Theremin accentuate physical presence by dramatizing movement: a performer moves his or her hands through electromagnetic fields, controlling pitch and volume in gestures that hover in the air, never touching an actual material object. Since the Theremin, electronic instruments have brought the body into elaborate choreographies: moving through infrared beams, touching points of electronic material, breaking signals in the air, physical movement is brought away from string or mouthpiece to perform an array of sonic features.

Sensorband extends such tradition by amplifying physical presence through digital means: Tanaka's bioelectric sensors track neural signals, harnessing the body's electricity and translating it into digital data; Karkowski cuts infrared beams through the movement of his body—manipulating a sensitive field, sounds are heard as equivalents to gesture; and van der Heide plays the MIDIconductor, a machine he wears on his hands that responds to rotational positions, sending ultrasound signals in response.

Rethinking the relation between body and instrument, in turn, throws open the question as to what defines physical presence. With digital media, one can be present in multiple ways and in multiple formats. Amplifying physical gestures, Sensorband registers the body as always here *and* there, as made up of biological signal, nerve fluctuations, and muscular contractions that exist deep inside as well as way out there, in sonic volume, acoustic weight, and sonorous mass: minute detail magnified large-scale, made monster in the throes of a mutated dance, where self is not replaced by virtual projection but made more present because of it. Tanaka's electric interior is exposed in an altogether different sense of physicality—we hear his biosignals against our ears and across our skin.

Sensorband in concert at Paradiso, Amsterdam, 1994. Photo Peter Kers. Courtesy of the artist.

Telepresent Composition

Throwing the body beyond itself finds continual investigation and description through Tanaka's work. His *Global String* project furthers Sensorband's interest in multiplying physical presence. Developed in 1998 in collaboration with Kasper Toeplitz, *Global String* attempts to transcend the distance between physical spaces by incorporating the particularities of the virtual space of the Internet. The work consists of a metal cable (running fifteen meters in length) stretched from the floor to ceiling in a diagonal trajectory and fitted with vibration sensors. These sensors translate physical vibrations into digital data that are fed to the network. As Tanaka explains: "*Global String* is a monochord where the two endpoints are physical, and where the middle (or body) of the string is the network. Sensors detect vibration and pushing/pulling of each endpoint, transmitting [these signals] to the other end.... So hitting here makes it vibrate there."[8]

The physical string is thus woven through network-space and connected on the other end, to another physical string. The work acts to make a connection between physical sites by creating an extended musical instrument that collects and collates multiple inputs along the way, augmenting virtual and physical spaces. The string here though is more than a musical instrument; it is a catalyst for musical conversation whose consequence is both compositional and social, for the string draws

***Global String* at Ars Electronica Festival, 2002. Photo Otto-Berthold Saxinger. Courtesy of the artist.**

***Global String* at Ars Electronica Center, 2001. Photo Gerda Seebacher. Courtesy of the artist.**

users into collective conversation. Two users interact, perform, and dialogue by negotiating *through* sound. Such strategies offer up significant transformations for both musical creation and listening. By supplanting the musician's playing with that of an interactive user, *Global String* dislocates part of the physical instrument by locating it on the Net, allowing the chaotic nature of network traffic to act as resonating chamber for the string, and using the communications potential of the network to expand the engagement of the audience. Here, the musical instrument no longer operates as a private tool, but more as a shared platform for orchestrating multiple gestures by more than one body. In short, the instrument invites its own appropriation for investigative use, replacing skill with curiosity and technique with learning. "Where a framework needs to be filled by the interacting user, the process of appropriating and understanding of the artwork happens less through contemplation than through operation."[9] For Tanaka, the musical instrument, and the musical in general, functions as a "framework needing to be filled," in which meaning is not to be found in the musical message conveyed to a passive or "contemplative listener," but in the operations performed by the listener/user. As Sabine Breitsameter points out, such shifts have their effects on how one might listen to *Global String* and other interactive artworks. To move from contemplation to operation, in turn, moves one from receptive listening to a participatory mode whereby "listening means being part of the environment"[10]—a listening that is not so much reduced, or even relational, but a listening that inhabits.

Whereas Bernhard Leitner's installation work, and its architectural interventions, constructs space and potentials for inhabitation through aural and acoustical movement, with interactive, network-based projects such inhabitation must be seen to radically move from the phenomenal to the behavioral, from the grid to the connective. Even though Leitner's work, and much sound installation, engages a listener as participant in an enlarged auditory-spatial relation, it does so by relying on a phenomenal vocabulary in which perception and aesthetics fuse to heighten sensory experience: movements of sound activate architectural space to dramatize a sensual narrative of ear and acoustics, environments and their auditory presence. While such work does lead out to trigger potentials for inhabiting space according to sonority, it does so by characterizing people's interaction solely on the level of perception, rather than operation. With digitally interactive work, inhabitation equates with active response that, in turn, develops, mutates, and fuels the unfolding of spatial-auditory narratives. Thus, people's participation is not strictly perceptual or sensory, but behavioral and interpersonal, shifting the terms by which work is created and inserted into public life.

Such changes and effects find further realization in Tanaka's recent radio/web work *Prométhée Numérique/Frankenstein's Netz*. This work aims to create a far-reaching interactive process, wedding radio broadcast with computer-networked performance, and dramaturgy with interactive process. *Prométhée Numérique* was commissioned in 2002 by German Radio SWR2 and resulted in network installation, live performance, and radio broadcast. As Tanaka describes: "The challenge was to create a composition that made use of radio and Internet, mixing the two media while maintaining their distinguishing dynamics and characteristics.... My goal was to create a musical piece that would traverse these different infrastructures, a single work that would have a distinct identity and mode of listening in each."[11] Tanaka sought to engage radio, performance, and the Internet so as to realize their potential for broadcast as well as participation.

Prométhée Numérique exists firstly as a web-based installation. As a user, one logs onto the site and is confronted with a "moving text/image/sound mass onscreen, a lifelike creature to which [one is] invited to add to its evolution" by feeding the creature with visual information from one's computer or by uploading sounds. In turn, the creature may respond to the user by sending SMS messages to their mobile phone, thanking him or her for their contribution, or demanding more. The creature functions not only as an interface of the project but a live, developing entity whose evolution is dependent on the user. Such evolution parallels much interactive and web-based work in general, offering up investigation onto the nature of artificial intelligence and the cybernetic relations of man and machine. That Tanaka's interface is cast as a "living entity," or monster in need of nourishment, calls upon the user to take care of the work's evolutionary nature, which is based on uploading and selecting audio, images, and text (taken from Donna Haraway and others, whose theories of cyborg life express Tanaka's own concerns). As in Ken Goldberg and Joseph Santarromana's *Telegarden*, which

consists of a small garden of plant life digitally monitored and accessible through a website, and whose upkeep is dependent solely on users to command light and water sources, thereby forcing the growth of the garden onto a virtual audience, Tanaka's monster requires attention. Its evolution is necessary, not only for the growth of this cyber-spatial entity but for the project's performance, which integrates all the materials the creature has been fed.

The performance took place in March of 2003 and linked the cities of Ogaki, Japan; Karlsruhe, Germany; and Montréal, Canada. As Tanaka explains:

> Each performance site was equipped with multiple client/server systems for transmitting and receiving audio streams and live images with one another. The remote performance configuration is a critical investigation of the effects of the network on human communication. We are told that the modes of communication made possible by the Internet can collapse physical geographical distance. In attempting to carry out this promise, one quickly confronts the reality of time delays and quality loss.... Connecting three points in this way added a multi-dimensional complexity that created a different combination of time-of-arrival of sound sources at each performance site.... The result was a music exploiting time in a relative, and not absolute, manner [by making] one performance, one music that was simultaneously perceived differently depending on locale.[12]

As in *Global String*, the network adds its own influence. Whereas weaving a string through the Net registers audible vibrations, here, linking multiple sites for real-time performance adds time delays and subsequent discrepancies as to the compositional order—for one is always responding to a set of sounds different from those at the other sites.

Tanaka's performance replaces the concert stage with a system of interaction. Whereas the stage centers performers inside a special architectural container designed to spotlight the musical moment and conversation in and among those gathered, network-based performances locate the stage online, thus splintering physical location into points of entry and connection rather than centers of attention. As a participant/performer, one logs on and introduces sound while monitoring the ongoing effects as they mix (with other sounds and other geographies) and eventually return. Thus, the architectural container loses its aura, and the musical conversation contends with a greater sense of uncertainty, for the network, in connecting disparate places, introduces a greater number of variables. "If the stage is a closed system, networks are open."[13] The intensification of variables leads to immersive possibilities where the network both broadcasts and receives, fulfilling radio's potential as a conversational medium while introducing the particulars of what Tanaka refers to as the "acoustics of the network."[14] Tanaka's project continues his earlier Sensorband work, yet by reversing the conditions whereby physicality is no longer expressed on the part of the musician/artist but as a condition of participation and the details of Internet space. Here, musicality itself is a form of evolutionary life, whereby sounds interact, contaminate each other, and mix within an economy of noise.

Atau Tanaka, performance of *Prométhée Numérique*, Montreal performance site, 2003. Photos courtesy of the artist.

New Skins

Computer technologies, digital networks and interfaces, and mobile communications tend to intensify physical presence by paradoxically putting new emphasis on bodily knowing, communications, and tactile information. For in locating us in more places at once, within an intensified network of connections, on the go and on the move through mobile communications, as part of a greater contextual environment that collates more and more information and input, one is situated as if in face-to-face relations though within multiple and simultaneous instances. Derrick de Kerckhove proposes that such tactile knowledge is foregrounded by digital technologies. Even in the seemingly disembodied digital rush of communications—Virilio's "crisis in the conceptualization of dimension"[15]—the body as sensual being is made more present rather than vacated, for "with interactive systems we have been putting a new emphasis on tactility on the one hand and also on the physical interaction with the objects of our attention so that we're learning

a lot more about the very thing that we didn't know much about before, which was the tactile sense."[16] Such thoughts echo McLuhan's original proposal that "in the electric age, we wear all mankind as our skin."[17] For de Kerckhove, our skin is now a global phenomenon in which "point of view" is replaced by "point of being," and psychology is wed to technology, extending our interior to global proportions to create a heightened sense of sharing the world: "My point-of-being, instead of distancing me from reality like a point-of-view, becomes my point of entry into sharing the world."[18]

Following de Kerckhove, Tanaka's networked performance, in decentering the stage and positioning the musical exchange inside the nodal weave of the Net, creates a situation in which musical responsibility is shared. It is shared because it is intensely *between*; as an extension of the musical instrument and its physical activation by the body, the work is not the result of group effort whereby each body plays its own instrument that then intermingles within the architecture of a given space. Rather, the work stitches together each participating body into a collective whole, creating a "collective consciousness"[19] in which tactility and hearing are at the center.

Tanaka's generally optimistic work may be haunted by the notion that such new skins may produce new forms of pain, other modes of physical debilitation, paralysis, schizophrenia, intrusiveness, and general anxiety. For to share the world, to wear all mankind as a skin, is tantamount to intensified pressure. Such mingling terrifies while offering new pleasures. The artist Stelarc embodies technology's paradox by literally fashioning himself a new skin, along with limbs and heads. His Third Hand, Virtual Head, and Amplified Body brings the virtual projection back onto his corporeal self, wiring the phenomenology of sense perception with global nerves. Technology troubles and re-creates physical experience, individual presence, and the ability to contort, manipulate, and direct forms of exchange, while problematizing certain fundamental values, of life and death, of desire and its expression, the self and its existential position. Yet, the technologically generated hybrid is an ambivalent desire, for now "death does not 'authenticate' existence"[20] and technology replaces birth with the production of the foetus outside the womb, making the modified body a blessing and a curse. For as Stelarc reflects, how does the self affirm its defined limits, its name as single being, its story from beginning to end, in the face of virtual presence? Stelarc turns interaction into confrontations with the hybrid, in all its ambivalent, possible, and resplendent uncertainty: he poses problems, inserts dynamic tools for probing the hybrid, manifesting Frankenstein while leaving him behind to the dustbin of history. Tanaka's own virtual creature, as embodiment of global bodies, inputs, and connections, thrives on the hybridity of information/digital code/data files/etc., giving voice to the terrors and pleasures wearing a new skin presents.

The geographic and corporeal repercussions of mobile music find intensification by threading the "extended nervous system" articulated by McLuhan into an extended performative network, exposing the degree to which the transurban

refashions presence and what it means to share. Whereas the work of Achim Wollscheid turns buildings into interactive systems for orchestrating collective input, Tanaka uses the Internet as a form of architecture in which interface turns into musical instrument. Thus, his online Frankenstein is somewhat like Stelarc's virtual body, a monster directed not through self-control but by the attitudes, assaults, curiosities, and discoveries of others, fulfilling the claim that "bodies are both Zombies and Cyborgs" for "we have never had a mind of our own and we often perform involuntarily—conditioned and externally prompted.... We have always been prosthetic bodies...."[21]

Notes

1. See Saskia Sassen, *The Global City* (Princeton: Princeton University Press, 2001).

2. Saskia Sassen, from a lecture given at the London School of Economics in December 2001 in which Sassen outlined her general arguments regarding the "global city," emphasizing that corporate capital, while enlarging globally a vast mechanism of control in which the particulars of given locations become homogenized, in turn, opens the way for informal cracks or "fissures" through which new forms of self-empowerment, communications, and sharing may take place that might counter larger corporate movements.

3. For more in depth analysis of the Walkman and its social effects, see Michael Bull, *Sounding Out the City: Personal Stereos and the Management of Everyday Life* (Oxford: Berg Publishers, 2000).

4. Caroline Bassett, "How Many Movements?" in *The Auditory Culture Reader*, eds. Michael Bull and Les Back (Oxford: Berg, 2003), p. 350.

5. Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), p. 7.

6. Caroline Bassett, "How Many Movements?" in *The Auditory Culture Reader*, pp. 346–347.

7. Atau Tanaka, "Composing as a Function of Infrastructure," in *Surface Tension: Problematics of Site*, eds. Ken Ehrlich and Brandon LaBelle (Los Angeles: Errant Bodies Press, 2003), p. 207.

8. Atau Tanaka and Bert Bongers, "Global String: A Musical Instrument for Hybrid Space," in *Proceedings: Cast01 // Living in Mixed Realities*, eds. M. Fleischmann and W. Strauss (St. Augustin: MARS Exploratory Media Lab FhG - Institut Medienkommunikation. 2001).

9. Sabine Breitsameter, "Acoustic Ecology and the New Electroacoustic Space of Digital Networks," in *Soundscape: Journal of Acoustic Ecology*, Vol. 4, No. 2 (Fall/Winter 2003), p. 29.

10. Ibid., p. 30.

11. Atau Tanaka, "Composing as a Function of Infrastructure," in *Surface Tension: Problematics of Site*, p. 207.

12. Ibid., p. 209.

13. Atau Tanaka, "Seeking Interactions, Changing Space." Originally published in the proceedings of the 6th International Art + Communication festival, 2003, Riga Latvia.

14. Atau Tanaka, "Von Telepräsenz zu Co-Erfahrung: Ein Jahrzehnt Netzwerkmusik" (from "Telepresence to Co-experience: A Decade of Network Music"), in *Neue Zeitschrift für Musik*, ed. G. Föllmer (Mainz: Schott Musik International, 2004), p. 18.

15. Paul Virilio, *Lost Dimension*, trans. Daniel Moshenberg (New York: Semiotext(e), 1991), p. 25.

16. Derrick De Kerckhove, from an interview with Tim Wilson, in *Soundscape: Journal of Acoustic Ecology*, Vol. 3, No. 1 (July 2002), p. 15.

17. Marshall McLuhan, *Understanding Media* (London and New York: Routledge, 2002), p. 52.

18. Derrick de Kerckhove, *The Skin of Culture* (Toronto: Somerville House Publishing, 1995), p. 178.

19. De Kerckhove further defines the current digital age by underscoring the psychological results. In wearing all mankind as our skin, we enter a global situation based on "transparency, instantaneity, and intelligent environments," each of which contributes, for de Kerckhove, to the condition of a "global, collective consciousness." See *The Skin of Culture.*

20. Stelarc, "Event for Amplified Body, Laser Eyes, and Third Hand," in *Sound by Artists*, eds. Dan Lander and Micah Lexier (Toronto and Banff: Art Metropole and Walter Phillips Gallery, 1990), p. 286.

21. Quoted from the official website of the artist Stelarc, www.stelarc.va.com.au.

Chapter 18

Live Streams: Apo33 and Multiplying Place

Current technologies make possible the streaming of live sound, expanding sonic broadcast into a radically pervasive circumference. Sound technologies, of production and consumption, of making and using, are increasingly available, mobilizing its reach and intensifying its malleability. Many recent projects and practitioners have sought to develop projects that use sound's locational flexibility and ultimate streaming, appropriating the Internet (as Tanaka does) as a networking device for musical or sonic events. Such work must, in turn, be heard to expand on an existing history of artists seeking to network distant locations through transmitting and receiving signals. As radio theorist and producer Heidi Grundmann has continually sought to articulate, the ongoing investigation of bandwidth historically has been one of the more adventurous of artistic practices. Her own work in establishing Kunstradio within Austrian National Radio (ORF) in 1987 was the culmination of a larger trajectory beginning in 1977 at which point Grundmann began broadcasting "Kunst zum Hören" ("Art to listen to"), dedicated to new forms of radio art, as part of her weekly program. Subsequently, a number of early projects were developed in collaboration with artists from Vancouver, such as Hank Bull and Bill Bartlett, and with Robert Adrian in Vienna, setting up live exchanges via fax machines, slow-scan video, and mail art relays between various cities, simultaneously. As Grundmann explains:

> 1979 saw yet another event in Vienna that, in hindsight, was a first signal for what would turn out to be an important influence on radio art production in the early 90s and afterwards. This was the project "Interplay," the first global telecommunication project to include the participation of artists from Europe. Initiated by Bill Bartlett from Victoria, B.C., as part of the "Computer Culture" symposium in Toronto, "Interplay" was a computer conference (or "chat") on the I.P.Sharp world-wide timesharing network. The Vienna contribution to the

> project was split between the I.P.Sharp office, where artists Robert Adrian and Richard Kriesche were working, and a radio studio in the ORF Broadcasting house, from where my visual arts program "Kunst heute" was broadcast live. I was joined in the studio by Gottfried Bach, local manager of I.P.Sharp with his portable computer terminal. What the listeners to this live edition of "Kunst heute" heard was the noise of Gottfried Bach's terminal-printer, the beeping of the modem and his voice explaining the project and reading out messages that he received from—or sent to—artists in different corners of the world.[1]

Expanding into creative usages of relay, network-based art may be understood to take sound from its previously locatable origin, as primary site of auditory presence, so as to put it to use for the formation of audible exchange. Whereas works by such artists as Bill Fontana expand sound installation into geographical proportions, the networking of sites aims to create telematic routes for sonic sharing. Leaving behind any semblance of an artistic object, or the one-to-one formation of artist and audience, the history of telematic art seems to culminate in what Achim Szepanski identifies as the primary question of contemporary work, that of "streaming," for "the decisive thing will no longer be downloading and copying but the question of technological access options."[2] Musical work and its ultimate dissemination thus turn back on each other, making the very means of distribution a necessary part of the creative formation of sounds. Whereas musique concrète turns the loudspeaker, as the means of sonic distribution, into the instrument of production, computer-generated music, according to the understanding that computers are not only computational machines but also networking devices, leads to sound work as sonic stream, and any compositional strategy partially one of how to make connections. In doing so, the very "meaning" of a work must be found partially in the inherent properties of what it means to make connection. To quote from Grundmann again:

> In an e-mail interview in 2004, Bertrand Gauguet asked Robert Adrian, what the thinking behind early telecommunication projects (such as "The World in 24 Hours") had been like.
>
> Robert Adrian answered:
>
> "*. . . the basic theoretical concept was:*
>
> 1) *To demonstrate the global nature of electronic networks – and also the fact that most of the globe is missing from the network (all of Africa and South America and most of Eastern Europe and Asia),*
>
> 2) *To challenge the hegemony of the one-to-many broadcast media by using the telephone system for one-to-one multi-media interaction,*
>
> 3) *To make a statement about a new role for the artist in the age of electronic media as a creator of the space for art rather than as a mere producer of objects.*"[3]

Echoing Adrian's thoughts, we might understand today's intensified sonic networking as a statement as to the new role of the artist in the digital age, in which "form can only emerge on the horizon where it crosses paths with other forms."[4]

The French group Apo33 (Julien Ottavi, Emmanuel Leduc, Jean-François Rolez, and Sophie Gosselin) has developed a number of projects that attempt to network together multiple sites for performative and live sound events, and in doing so make manifest Szepanski's claims. Its *Raccorps* project, for example, operates as a system in which artists expand their practice toward a greater spatial understanding. Through such work, Apo33 dramatically shifted its focus from organizing concerts and events toward constructing frameworks for reimagining the very structure of musical presentation. As in Tanaka's experiments, *Raccorps* demands that a musician relate to spaces beyond local presence in which bodily gesture, instrumentation, sound production, and spatial materiality contend with telepresent interactions. For instance, in 2003, the group le Doigt de Galilée was invited to give a performance incorporating the spatial framework presented by Apo33. This took the form of a live performance occurring in one space (an apartment) then being transmitted through the Internet to the Apo33 studio then again sent to another space, this time a large bunker in the city (Nantes) that operates as a music venue, then farther, to another private apartment, and, finally, to arrive back at the musicians. Inviting the public to visit the various sites over the course of the performance, each space developed specific spatial inflections: the apartment spaces presented the sounds through small home stereos, creating a more intimate listening experience, while in the bunker a large sound system was used, creating a radically different acoustical and social environment. Each node along the network thus added its particular local quality, while feeding and influencing the sonic creation.

As in Tanaka's networked performances that surprisingly accentuate the tactile presence of the body as opposed to obfuscating it, the Apo33 work accentuates the contextual boundaries of a given sound event while broadcasting and transposing it onto a greater space of sound. Such strategies enact Meyrowitz's further observations on electronic media's effects on physical place, for while "print media preserve the sanctity of place and the clear separation of different strains of behaviour ..." electronic media "play with place in a strange way" by "violating its boundaries and changing its social significance."[5] Mixing architecture, mixing music, Apo33 use the musical organization of a given band or artist to organize multiple spaces, shifting spatial meaning into a form of *musical significanc*e. Such work ultimately fosters a rethinking of contemporary art practice by developing an "exploratory construction of tools for sound creation" so as "to develop ... forms of representation that can transform the current practice of art creation and the way this practice is transcribed in society."[6]

Such interest is found in its web-radio work. Developed out of an interest to use the web as a system for not only making connections but for establishing a

network of audio creation, the webradio is based on extending the musical gesture toward a greater sense of input. Housed on the group's website, the radio is an interactive audio bank developed with Pure Data software[7] (and driven by Linux) continually streamed over the Net. Users can log on, upload their own audio onto the site, manipulate the software to change existing settings, or transform the entire structure, eliminating existing sounds or overriding parameters. One can also log on and simply tune into the existing audio-stream, witnessing its evolution. Thus, the project functions as a kind of hub for the production of a sound event that aims to remain live, interactive, as a growing manifestation of input and collective use.

The interaction of musicians here operates as a model for digital participation, for the musical band is, by nature, based on dialogue, interaction, a sensitivity to others, and a sense of musical organization or communication: to participate in a musical group dynamic is to enter a territory of continual negotiation made manifest not in written law or articulated words but in the flow of sound, its growing organization through empirical directness, intuition, and a kind of sonic energy passing between members and the audience. The band is formed *through* music, writing itself and its internal language through the experience and exchange of musical ideas, its styles, intuitions, responses, and intensities. The form of a band can itself be extended to incorporate those who simply log on and contribute. By participating, they may also occupy a given space, as in the Silophone project in Montréal. Developed by [The User], Silophone is housed in an old grain silo in the port of the city and is based on utilizing the unique architectural space for sonic activation. It acts as a remote site accessed by participants through a web-based interface, or by telephone: one can phone in, entering the site, or log on, and contribute sound files, or select existing files. There is also an off-site observatory accessible to visitors. In this way, one never enters the silo, but rather listens from afar to the unique sound event going on inside.

Tentacles

What surfaces from such network-oriented framework is a kind of "ephemeral architecture," for each project or event forms a temporary structure that acts to conduct sound, participation, and performative gestures: sound is streamed live from a given site, heard in multiple other sites, then further streamed to additional locations, along the way picking up additional sounds, instrumentations, spatial acoustics, and, at times, public interaction, as with Olivier Toulemonde's performance. Working at the Apo33 studio, the artist created a performance using one space in the building that was transmitted to another space and heard through a series of speakers. This space was then amplified back to the artist through the use of live microphones, which had the effect of incorporating all additional live sounds happening in the space. Visitors were thus invited to contribute, feeding

back to the artist whatever sound they wished to make, which returned back to the audience after circulating through the artist's electronic transformations.

Such work has led Apo33 to enact increasingly elaborate projects in which networks form the basis for a transformation of space and its acoustical partner. Taking its discoveries learned through collaborating with various artists, the group has been working over the course of 2005 on a number of performative installation projects enabled through the digital device they call "Poulpe" (octopus): "the digital device of the *Poulpe* is a technical prosthesis acting on a multifarious reality . . . [enabling artists] to imagine methods of sound composition that would take into account the complexity of the various sound situations perceived within the sound environment [and] artificially reconstructed for broadcasting."[8] "Poulpe" networks not only individuals, in a "musical" context, but locations, by extending tentacles of transmission and broadcast inside and through urban space. Thus, each node along the network informs the event with its particular locality: rather than washing over difference by overlooking spatial materiality, which much "virtual architecture" does, its projects aim to augment local presence with the intrinsic features of an expanded digital network, teleporting one site to another, thereby building up an architecture consisting of multiple sites. This occurs by compiling sound events and the inflections inherent to acoustical presence, expanding on Truax's locational observation that "the sound arriving at the ear is the analogue of the current state of the physical environment, because as the [sound] wave travels, it is charged by each interaction with the environment."[9]

Apo33's first installation working in this way took place in 2004 at a castle in Blain, just outside Nantes. The work consisted of an exposed series of physical "nets" or webs interconnected throughout the space, consisting of thin metal cable, which was made sensitive by attaching contact microphones throughout. In addition, speaker cabling and computer network cabling were incorporated as additional nets, creating multiple levels. The nets thus forced visitors to move through and inadvertently come into contact with the cabling, which brushed against them and thereby sent sounds into the network of computers and loudspeakers. Each instant of contact sent an input into a main computer, which then further sent the signal to additional computers, each of which transformed the sound through Pure Data software and finally amplified it through a variety of loudspeakers, from broken and found units to guitar amplifiers, each of which was positioned in particular locations in the space. The installation thus functioned as a living organism that operated infrastructurally to generate the unfolding of input and output, contact and its subsequent acoustical event. For Apo33, this network, in turn, symbolizes urban experience and the various structures that govern its flows and rhythms. Two operations further articulate this relationship: the use of only concrete sounds found in the space, and the sound's transformation through relay and delay. This functions to emphasize the given present moment while, in turn, rupturing the spatiotemporal continuity of that moment. Such operation seems to suggest that infrastructures and networks allow direct

access while creating disjunctive slippages, whereby notions of the original event are transmuted through labyrinths of information and processing. The work delivers a kind of acoustical print of the site, rendering its features through a network of live feeds and networked amplifications.

Network Significance

Apo33's projects manifest the possibility that the Internet can organize people, across disparate locations, through musical means. The overall development of network-based music and performance must be understood to infect the ongoing debate around "musical meaning," for its significance here must gain in social volume while at the same time employing a totally different sense of musical structure.

The spectrum of propositions on sound's significance straddles the divide between reason (mathematics, physics, semiotics)—housed under the umbrella of language—and the emotive—sound as quintessentially corporeal whose meaning derives according to levels of emotional sensitivity and experience. Such duality appears through musicological interpretations that generally view musical meaning as deriving from intrinsic aspects of its sound. As John Shepherd and Peter Wicke summarize: "A central problem in understanding the significance in music has been that, in their 'abstract' manifestations, the sounds of music do not obviously refer outside themselves to the world of objects, events and linguistically encodable ideas" creating a "difficulty [that] has served to perpetuate and entrench within musicology the assumption that, if music can be accepted as in some way having meaning, then this meaning must be intrinsic or *immanent* to music's sounds."[10] In contrast to the musicological viewpoint, the sociological has "tended to conceive of music's sounds as phenomena extrinsic to social and cultural forces and the affects and meanings they generate."[11] The legacy of cultural studies exemplifies this move in its application of semiotic theory to understanding cultural forms, such as music, exemplified in the writings of Stuart Hall, Dick Hebdige, John Fiske, and Lawrence Grossberg, thus locating music's significance in the social bonds, groups, and styles that are generally "read" as linguistically legible. Thus, music's meaning is understood as either inherently rational, based on systems of sonic analysis, historical referent, and compositional tradition, or directed by emotional intensities that should remain outside the linguistic arena of interpretation, veering into a psychology of sound. In conjunction with this musicological spectrum, the sociological mode of analysis promotes a "reading" of music based on understanding its appropriation within social circles, from teenagers to Diasporic communities—here, music finds its meaning only in its circulation *through* society, a viewpoint that tends to leave behind the intensities of music's sounds, locating them solely within the signs it produces. Here, we can witness a general field of sonic understanding that oscillates from the musicologically rational and the musically emotional to the sociologically discursive.

Such debates seem to demand a rethinking when considering the increasingly dynamic field of network-generated music. It seems that Net-based music demands that the sociological viewpoint learn to "read" the signs embedded within and made explicit by the network itself: its architecture as not only a "scaffolding" upon which sounds are hung and organized but as an inhabitable space through which social groups are formed, which often leave behind the particulars of musical organization in favor of musical processes—and, in doing so, gather into dynamic exchanges often without the usual social appearance. As Tanaka proposes: "Rather than controlling time and space with sound, I now create architectures for collective musical processes."[12] In turn, the musicological needs to take stock of the new musical compositional methods and techniques, in which the meaning of musical sounds immanent to a work's internal operations cannot avoid the structuring enacted by the Net, and the digital apparatus working to organize and carry the composition. Immanence here is unavoidably networked.

In contrast to the medium of radio transmission, Apo33's webradio never enters the air. It exists entirely through digital networks and nodes that stream sound across broadband. The live stream of sound is thus always present: it is present though in a different way then radio, for it is a kind of living creature, added to and subtracted from according to participatory infiltration. Radio here is an organizing hub, not for the dissemination of messages from above to those out there, but for the transmutation of code. It is quite simply a computer program that produces sound, generating a continual flow of sonic distortions: one user adds a certain set of parameters that shift frequencies over the course of thirty-second intervals, while another adds further layers of abrasive texture, changing the character of the material. To log on, tap into the stream, one hears the full weight of its history flooding in, all the decisions, samples, interventions, and personalities that have fed into its development.

The developments of technology must be underscored in articulating sound's current spatial ever-presence, for certainly the fact that laptops function as sound studios fuels the possibility of sound being everywhere, produced, plugged in, streamed, and disseminated from innumerable geographic points, cast out through software programs that stimulate continual auditory manipulation, creation, manufacturing, and sharing—laptops as portable sound arsenals, Internet access as dissemination and sharing consoles, software as flexible, virtual machinery for imaginary design.

Generative

Extended beyond a single point or event, the live sound stream is a total composite or palimpsest of *x* number of sounds raised to the *n*th degree, for in listening in, one has the sense of an onslaught of sound that will proceed indefinitely, without measure, without origin, incorporating all forms of information. In this regard, the sound stream is without context: what it announces simply is that it is there,

yet a "there" that is in no single place and arriving at no allocated destination. It is potentially without geography. Thus, spatially speaking, one might suggest that it truly occupies and inhabits network space.[13] The live sound stream generates its own musical form, as a kind of evolutionary mutant. Such digital nuances find their parallel in the development of "generative music." Defined by Brian Eno in the early 1970s, with his works *Discreet Music* and the Ambient Music records, generative music is based on the idea of setting up a system with various parameters that will, through a partial removal of authorial decisions, play itself indefinitely. Initially developed by using sound loops with tape machines, then with synthesizers, that combine a set number of sounds through random patterns and cycles, thus producing seemingly infinite number of juxtapositions, Eno's generative music sets out to forever surprise the listener with a combination of tones, notes, textures, and voices. Generative music, though, finds its fuller articulation in the 1990s. With the advent of the personal computer and advances in music software, the actual sound composition overlaps more overtly with computer programming to the point where one often replaces the other. What is often made then is not so much a final sound composition but a system that will build a certain sound production—algorithm over music, system over composition, machine over man.

The evolution of Eno's generative idea finds its completion in his own design for a system that will generate sound, replacing the marketing of the latest record with the marketing of the system itself. *Generative Music I*, from 1996, is a series of twelve "self-generating" compositions (developed with Koan software) for IBM-compatible PCs equipped with high-end soundcards. Such work articulates Eno's, and others', interest in developing cultural works "that are evolutionary" and "which somehow pay attention to your [listener/user] interests and modify themselves accordingly."[14] Markus Popp, working under the name Oval, in turn, designed his own software for similar means. His *Ovalprocess* is a piece of software that reveals the process behind much of Popp's work and is intended to provide the user "with one possible way to reconsider his or her expectations about working in sound or in software."[15] In turn, Achim Wollscheid has also been at work on similar projects in developing software for the generation of sonic events.

Such projects mirror, and suggest, a kind of ultimate completion of sound's journey from point of origin (as in the work of John Cage) to its relational proximity (in Minimalism) onward to performative voices (with Alvin Lucier and Vito Acconci) to sound installation (Max Neuhaus) and body-related events with architecture (Bernhard Leitner and Maryanne Amacher) and toward environmental and geographic, locational work (Hildegard Westerkamp and Bill Fontana), to arrive at network, interpersonal space and generative streams that locate sound in its actual generation and distribution rather than in objectness and immediate experience. Presence is thrown, beyond its source, and even beyond the radiophonic transmission, and brought back by the telematic momentum of compressed, networked reality. Like society itself, sound no longer *explodes* through its

propagation, its performance, or its radiophonic broadcast, but *implodes* by being everywhere at once. Sound no longer needs to appear here, as a particular event with specific locatable details, but rather it disappears in its own system of production that may in the end complete its journey, from the here and now to a virtual projection of future manifestations in which it is always already everywhere.

Many bemoan the loss of public space as more of the population gains access and inhabits electronic spaces of the Internet and network technologies, which are assumed partly to take one out of the physical needs and expectations of democracy, social participation, and into a privatized isolationism governed by apathy.[16] These arguments raise pertinent questions regarding the establishment of communities in cyberspace and their consequence on social processes. At the base of these inquiries, the question of how individuality can in fact participate in the social is raised, for the social is conceived of as a "place" to which we can refer, and thus a stable referent in the lexicon of interaction and belonging. What mobile communications, and related interactive technologies, inadvertently initiate is a shift in such lexicon, for the social as a site is on the move, increasingly affected by conversations that extend beyond its localized borders.

The use of sound in interactive and network-based art seems poignant as it reveals, or points out, sound's inherent temporal and relational nature: such work requires a sensitive system through which effects can be registered, interactions created to foster immediate change, and dialogue cultivated. The fact that sound as a material retains a direct relationship to live experience, occurring as a temporal and immediate event, between objects and bodies, makes it an optimal medium to put to use in developing interactive work. As D.C.D. Pocock articulates, sound "is dynamic: something is happening for sound to exist. It is therefore temporal, continually and perhaps unpredictably coming and going, but it is also powerful, for it signifies existence, generates a sense of life, and is a special sensory key to interiority...."[17]

Pocock's description, in highlighting aspects of sound, seems to also highlight aspects of interactive art: that it generate a sense of life through dynamic exchange, continually and perhaps unpredictably. Yet, at the same time, what such work partially forces in is sound without time or space: with the live sound stream, and the interactive telepresent performance, sound is always there, always somewhere, always happening. Even while associating one city with another, or one location with several, in doing so it hints at the absence of location: location is rather in between such points. Therefore, it seems to have no "real" time and no "real" place, and, by extension, no "real" content. As Tanaka proposes, "Driven by participation, [interactive music work] is an empty shell ... a *contentless* composition."[18] A contentless composition so as to generate modes of conduct, potential exchanges stimulated through musical agency, for "while language can denote and assist in

the manipulation of the isolatable and isolated elements of the material world, and thereby establish one of the conditions fundamental to the creation of human and thereby symbolic worlds, there is no evidence that language, in and of itself, can supply the principle of structuring necessary for the symbolic maintenance of the structures of human worlds. That is why music is so important and, in its own way, itself so fundamental to the constitutive features of human societies."[19] In this way, music provides "the facility for structuring in 'independence' of the material world"[20] because of its interpersonal character.

Interaction is built on the belief that to remove the hand of the artist is to invite unexpected results. As Cage initially proposed, chance operations and indeterminacy allowed decisions to be made in such a way as to experience things in themselves, as unfolding through a sociality of input and output: that randomness was appropriate because life is random. The contemporary interest in interaction, and sensitive systems, seems to echo Cage's work and notions of open form, elaborating the potential of chance operations and indeterminate outcomes with the idea that what may come will in fact lead us toward better ends. Such randomness for much interactive work, in turn, moves away from formal aesthetics and aims for social consequences—to build an "architecture" for inhabitation: Wollscheid's work uses sound and light to not only create an optical or sonic effect but to encourage consciousness in which singularity recognizes its place within the crowd; further, Tanaka's network performances suggest models for an interpersonal spatial dynamic, suggesting that architecture, as sites of inhabitation and program, may exist in unlikely places; and Apo33's broadcasting strategies, while using sound and music as input and structure, highlights local conditions, identity, and temporal detail by transposing, multiplying, and raising the volume on local detail—the sonic event in this neighborhood infiltrates the soundscape of another, absorbing it into its musical envelope. In each example, sound and performative, interactive strategies are employed to make the crowd an audience to its own actions. Connecting places, intervening in public spaces, and creating noise systems, interactive sound practice may in the end tell us something about how new forms of not only musical and sonic events may take shape, but how such shapes may conduct and generate unexpected relations. Such work seems to return us to the beginning, that of Cage's liberation of sound, his move toward everyday life, as source of sound, in a giving up of authoring control, so as to frame the social event as inherently aesthetic, and his general interest in *all sounds*. This finds culmination in works like *Variations III* (1962–1963), which is scored for "one or any number of people performing any actions." Employing forty-two transparencies, each marked with a circle, the work essentially motivates people to build their own score, for any kind of action.[21] The work further articulates Cage's project, to build an open form through which instances of organization, musical and other, may occur. "When you get right down to it, a composer is simply someone who tells other people what to do. I'd like our activities to be more social—and anarchically so."[22]

Networked society activates one's sense of place by introducing more and more place into our lives, where "linear processes are replaced by dynamic systems" and "life is less about answers and more about one's position and behaviour within the surrounding environment."[23] Interactive artworks support such realizations, for in initiating modes of participation and operation, such works heighten contextual awareness. As Meyrowitz observes, "Communication over electronic media, therefore, is similar to live interaction to the extent that it binds both people and their messages to the originating environment."[24] It does so by bringing the particulars of certain places across unknown miles directly into our lives. Thus, ways of interpreting interactive artworks draw upon an altogether different mode of reception. As Breitsameter suggests, "It is not so much a decoding of signs and signifiers which must take place here, but a way to conceive these interactive offers as environments, or … as buildings, which need to be inhabited rather than 'read.'"[25] In following such thinking, it seems the live sound stream partially demands that we be everywhere at once, inhabiting, through a provocative notion of self, the environments contained within each particle of sound. In expanding out, and then finally contracting in, sound's networked propagation may be defining means for how to be attentive to the intensified details of too much place.

Notes

1. Heidi Grundmann, "Digital Poetics and Politics: The Work of the Local in the Age of Globalization" (unpublished, provided by the author, 2005). The use of computer networks in musical work is itself worthy of detailed attention. To mention but one source, see the work of The League of Automatic Music Composers (1978–1983) and the Hub (1986–1997), the world's first computer network bands, documented by John Bischoff and Chris Brown in their project for "Crossfades," a web-based archive organized by SFMoMA, ZKM, and the Walker Center.

2. Achim Szepanksi, "Digital Music and Media Theory," in *Parachute* 107 (2001), p. 26.

3. Heidi Grundmann, "Digital Poetics and Politics."

4. Achim Szepanksi, "Digital Music and Media Theory," in *Parachute*, p. 27.

5. Joshua Meyrowitz, *No Sense of Place* (New York and Oxford: Oxford University Press, 1986), p. 123.

6. Statement on the project from an informal interview with the author, 2004.

7. PD (Pure Data) is a real-time graphical programming environment for audio, video, and graphical processing. A freeware version of the highly influential programming languages known as Max, originally developed by Miller Puckette at IRCAM in the mid-1980s, PD allows data (such as audio) to be manipulated in real-time with great flexibility.

8. Statement on the project from an informal interview with the author, 2004.

9. Barry Truax, *Acoustic Communication* (Norwood, NJ: Ablex Publishing Corporation, 1994), p. 15.

10. John Shepherd and Peter Wicke, *Music and Cultural Theory* (Cambridge, UK: Polity Press, 1997), pp. 10–11.

11. Ibid., pp. 15–16.

12. Atau Tanaka, from an unpublished statement by the artist, 2004.

13. There are a number of recent projects that utilize Internet radio, as well as radio in general, in a similar fashion, such as the sites rand.org and aura.siba.fi/aaniradio/, a radio project organized as part of the ISEA conference in Helsinki, in 2004, that seeks to use radio as a means for sound creation.

14. Brian Eno, in Andy Oldfield, "Brian Eno's Generation Game," in *The Independent*, (Monday 29 July 1996). Found on the official website of Eno: music.hyperreal.org/ artists/ brian_eno.

15. Markus Popp, in Sam Inglis, "Oval, Markus Popp: Music as Software," *Sound on Sound*, (October 2002).

16. For an informative essay on this subject, see Michael Heim, "The Cyberspace Dialectic," in *The Digital Dialectic: New Essays on New Media*, ed. Peter Lunenfeld (Cambridge, MA: The MIT Press, 1999) and Howard Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier* (Cambridge, MA: The MIT Press, 1993).

17. D.C.D. Pocock, in Paul Rodaway, *Sensuous Geographies* (London: Routledge, 1994), p. 96.

18. Atau Tanaka, from an unpublished statement on his work, 2004, provided by the artist.

19. John Shepherd and Peter Wicke, *Music and Cultural Theory*, p. 196.

20. Ibid., p. 200.

21. The score does not specify that sound should be produced at all.

22. John Cage, in Christopher Cox, "The Jerrybuilt Future," in *Undercurrents: The Hidden Wiring of Modern Music*, ed. Rob Young (London: Continuum, 2003), p. 37.

23. Maia Engeli, *Digital Stories* (Basel: Birkhäuser, 2000), p. 50.

24. Joshua Meyrowitz, *No Sense of Place*, p. 122.

25. Sabine Breitsameter, "Acoustic Ecology and the New Electroacoustic Space of Digital Networks," in *Soundscape: Journal of Acoustic Ecology*, Vol. 4, No. 2 (Fall/Winter 2003), p. 30.

Fade Out

Harvard Square, Boston, 1972: a piano is placed in the Square, and with stopwatch in hand John Cage enacts his silent piece to a gathering crowd of passersby. This repositioning, or replaying of *4′33″*, from its initial debut in Woodstock in 1952 to the city streets of Boston, reinforces Cage's interest in and practice of daily life. Yet here we might return to Douglas Kahn's claim that Cage's silent piece "silences the social," for it seems while setting the stage for a dialectical integration of music and daily life, to stage *4′33″* in Harvard Square has built into it a problematic, for does the silence of the work actually liberate or confine? Does the suppression of the ego—the composer's or the audience's— lead to a practice of daily life that undermines representational codes and opens out to the full noise of the everyday? Or does *4′33″*, in its reenactment, only reinforce itself as a conceptual framework, a symbolic system in its own right, that overdetermines how sound may be anarchic? For if my earlier claim that *4′33″* is essentially a site-specific work written to be presented inside the confines of a concert hall, in such a way as to interrogate its determinants, it would seem such a project would become diluted through its removal and reenactment in altogether different contexts, particularly outside an overtly musical space. For certainly it seems to function differently than in its original setting, in 1952, inside a concert hall—there, as a listener, one would immediately be conscious of music as the object of interest, and such display of silence might trigger a series of questions leading out across music and listening; whereas in Harvard Square, would such silence lead to its imagined self-conscious questioning, or would it only sabotage itself by requiring the full force of daily life to be quiet in the face of art?

The terms of spatiality at play in the work seem to, in a sense, run past Cage's own work, silencing, in turn, the rhetoric of conceptual music by offering too much sociality. While Cage's reenactment in Harvard Square seems to naïvely address "the public," the move toward the street reinforces the buried intention to get at *being public* with sound. Not only are the lines of spatiality drawn within compositional structures, which Tudor alludes to when he comments—"In Boulez the space seems to be in front of one, in one's line of aural vision, as it were; in your [Cage's] piece [*Music of Changes*] space is around one, that is, present in a new dimension"[1]—space also appears in the occupation of city streets with the musical

object *par excellence*. Recalling Gillian Wearing's more recent *Dancing in Peckham* video (talked about in the Introduction), which also performs sound through an act of silence, leads me to wonder if the necessity to conjure sound through the presence of a musical instrument has shifted to recognizing that sound is always already there. The silent, dancing body of Wearing is propelled by an imaginary music that seems to articulate the spatiality of sound as more an enveloping mass from which there is no escape.

Following such forms of silence enacted within public space seems to echo what sound artist Robin Minard has continually sought: to "create refuges of stillness in the midst of the fullness of acoustic stimulation, to make spaces acoustically more pleasant, and to direct attention to the aural qualities of architecture as well as the reverse, the architectonic or spatial qualities of sound."[2] Minard's subsequent "functional music" aims for public space so as to counter tendencies in public design. For Minard, the increasingly unavoidable noise of the world requires an acoustical response whereby the lines between composer and urban designer, sound artist and architect, must blur. While inserting acoustical work, sound installations, and audible environments into the realm of public art, Minard paradoxically aims to silence the random excess of audible stimuli, replenishing a notion of being in the world through the construction of "sound spaces." As we've seen in the works of Neuhaus and others, such as Leitner, sound spaces intentionally align themselves with a given environment with a view toward creating a heightened dialogue between the found and the constructed. Sound spaces thus construct themselves through partial incorporation of the uncontrollable excess every environment potentially presents. The silent acts of Cage and Wearing thus inadvertently seem to presuppose their own failing, for in positioning themselves on the street or in the mall, the ability to activate the given situation through an artistic gesture brings forward the fact that the street or the mall will always dominate, pushing back silence either in the form of a public's bewilderment or in the hysterical expressions of a single dancing artistic body. To witness their works seems to incorporate a witnessing of all the elements that force themselves upon the work.

Notes

1. David Tudor, quoted in John Holzaepfel, "Cage and Tudor," in *The Cambridge Companion to John Cage*, p. 174 (from an unpublished letter to John Cage, July 1951).

2. Barbara Barthelmes, "Between Acoustic Design and Environmental Art," in *Robin Minard: Silent Music*, ed. Bernd Schulz (Heidelberg: Kehrer Verlag Heidelberg, 1999), p. 53.

Conclusion: Auditive Pivot

Through seeking to locate the practice of sound art from the early 1950s to the present, it has been my additional aim to articulate what is at stake in working with sound. From questions of orality and audition, and aesthetics based on technologies of interaction, to soundscapes, social habits of listening, and the musicality found in urban environments, sound art promotes consciousness of the often overlooked and underheard. In pursuing the practice, I have also attempted to historically and theoretically position sound art in relation to developments within the visual and musical arts of the last fifty years. Such an undertaking aims to partially remedy the often-underconsidered exchange and mutual influence transpiring between the two fields, which sound art seems to uniquely nurture. Ultimately, such historical tracing lends support to deeper consideration of sound art's place within contemporary culture. The current surfacing of a prominent auditory culture, as witnessed in the recent plethora of art exhibitions on sound art, in conjunction with academic programs dedicated to aural culture, sonic art, and auditory issues now emerging, reveals the degree to which sound art (and related auditory studies) is lending definition to the twenty-first century. Ironically, sound art still lacks related literature to complement and expand the realm of practice. From this vantage point, it has been my intent to set out an historical overview, while at the same time shape that history according to what sound art reveals—the dynamics of art to operate spatially, through media of reproduction and broadcast, and in relation to the intensities of communication and its contextual framework.

What has marked my own journey here is to locate sound's point of origin, as a spatial and historical coordinate, while registering its status as aesthetic category, following this through sound's own propagation and emanation in and among the crowd and toward an imploded (and no less expansive) future. Such an artistic journey finds its parallel articulation in technological advances, from computer-based productions and distributions of auditory data to laboratories for building acoustic spaces. Such technologies may be said to always lurk just underneath (or on top of) cultural form, and distinctly lend great influence upon sound art, due to a tendency toward electronic amplification, manipulation, and general construction. As an example, the IRCAM studio in Paris was one of the first to fuse sonic

research, musical composition, and acoustics, elaborating upon the French acousmatic tradition. Opened in 1978, IRCAM contains the Espace de Projection for investigating in detail the spatialization of sound. Espace is a laboratory for scoring musical works that include the space's acoustical positioning, thereby fixing compositional strategy and structure with spatial coordinates. With its motorized and highly adjustable surfaces, flexible from all six sides, producing dynamic alterations of reverberation time and volume, Espace functions as a "musical instrument in itself,"[1] finding its contemporary parallel in the newly opened SARC, at Queen's University in Belfast. Like IRCAM, SARC allows for creative and scientific sound manipulation through its sonic laboratory containing movable acoustic wall panels, flexible ceiling panels that position overhead speaker systems at various heights, and the transmission of audio from below the floor. These laboratories actively use sound as a highly tangible, malleable, and forceful medium, flexible and yet controllable.

Another recent acoustic project is Arup's SoundLab, which allows detailed acoustic testing for architectural projects, enabling a client to actually listen to a space before it's been built. Through computer modeling and sound distribution, and the use of a twelve-speaker system, a series of "sound scenarios" can be presented in the Lab, from cocktail parties to concerts, thus enabling adjustments to be made prior to construction.[2] These advanced technologies lend greatly to refining our ability to set precise definitions to acoustic spaces.

The ability to localize sound with accuracy is further enhanced by Woody Norris's HyperSonic Sound (HSS) technology, which directs sound like a laser beam.[3] HSS has the ability to locate sound a few hundred yards away at pinpoint accuracy by housing a sound's frequency within the ultra-sonic range (i.e., above audibility), which carries the sound to its designated distance by simply being pointed in the appropriate direction. The technology in effect *plays* air pressure and changes caused by sound frequencies. Such technology reveals a radical potential in terms of sound distribution within public space (audio advertisements, noise abatement, acoustic demarcation, warning signals), as well as for aesthetic purposes and the building of acoustic environments.

Against this intensified specificity of sound, the development of globalized networks sends sound everywhere, without distinction. The live stream of sound is echoed in Max Neuhaus's *Audium*, a contemporary proposal for a twenty-four hour global installation for real-time interaction, which would act as a "radio installation" utilizing speech inflection to generate a musical dialogue that, for Neuhaus, "is always there," where "you can call in at any time, and … stay in as long as you want," occupying it as "a virtual place."[4] Neuhaus's interactive, global work generates endless evolution, returning people's vernacular speech as musical composition, or database of global tongues. In tandem, Jem Finer's *Longplayer* project aims to be a "global entity." Started in January 2000, *Longplayer* is essentially a musical composition to run for 1,000 years without repetition, echoing Brian Eno's "generative music" concepts by "simultaneously playing 6 sections [of

the composition] each at a slightly different position and each at a different pitch."[5] Currently streamed live over the Internet, the ultimate goal is for the work to exist on its own radio frequency on a global scale, sending its Tibetan singing bowls and gongs resounding around the planet. Such global and generative work may be, in turn, a catalyst for a longing for silent spaces as witnessed in such phenomena as "Quiet Zone" train wagons, as found on the Heathrow Express in London. Free of intercom messages, television entertainment, and, supposedly, mobile phone conversations, the Quiet Zone signals a possible reaction to the auditory presence now everywhere.

While on the one hand, sound is globalized through live streams and webcasts thrown into every computer speaker and now into every shop window—the recently developed "whispering window" technology turns shop windows into loudspeakers for sending out messages to potential customers as they walk by—on the other, the ability to specify, locate, direct, and shape sound is becoming increasingly feasible, accentuating the architectonic potential for using sound as building material.

Alongside such intensifications of sound technology, the recent interest in sound art—as indicated by the Whitney Museum's 2002 Biennial, and preceding "Bitstreams" exhibition (which presented a special "sound corridor") to the Pompidou's "Sonic Process" (originally presented at MACBA, Barcelona, in 2002), the Hayward Gallery's "Sonic Boom" and "Bed of Sound" at P.S. 1 in New York, both presented in 2000, the recent "Treble" exhibition at the Sculpture Center in New York, along with "Sounding Spaces" at ICC in Tokyo, preceded by its "Sound as Media" from 2000 (to name just a handful of examples)—brings with it a plethora of sonic materials that seem to, in turn, draw into relief the absence of categorical distinction, which may in the end only lend to sound's ability to infuse art with a level of charged ambiguity while also remaining impartial to any form of fashionable aesthetics or rhetoric.

In listening to such auditive magnifications and expansions, it seems that the "auditory turn" may define the present by pointing toward the future. What this future may bring we might detect in sound's own current dynamic, which seems to both intensify sound's specificity while widening its ephemeral circumference, making it ever-more concrete while expanding its immaterial flow. Such a situation echoes acoustic ecology's paradoxical characterizing of sound as essential and universal while also culturally specific; as well as Cage's *all sounds* philosophy, which seeks to escape sound's messages while aiming for social transformation; and partially furthered in contemporary interactive work that flirts with leaving behind an actual referent and specific message for an open-ended form where *any* sound is needed to cause effect: sound is both all over *and* particular, global *and* geographically specific at one and the same time.

In this regard, sound as media *and* as idea may provide an appropriate paradigm for negotiating the intensifications of nonhierarchical and interpenetrating structures of our digitized age, in turn lending definition to our modern

history so determined and shaped by broadcast media that demand involvement. Speculatively, the sonic journey of the physical sound wave, vocal conversation, and acoustical exchange finds its stages in a history of the modern period in which we contend with local noise of difference, channeled through phone lines and radio broadcasts, of machinery and its reproductive productions, and into spatial circuitry, which distributes messages as pure data, to arrive at the negotiations of always being overheard, where the intensification of proximity and locality as heterogeneous presence exists alongside globalized movements that make difference the same everywhere. Such acoustical thinking may highlight possible definitions in articulating a history of sound in the arts, whereby its ultimate contribution may be found in being contextual and relational, while in turn providing a medium for the intensely informational and virtual future in which presence is always already unfixed. For the relational as exhibited and enacted through sound operates by always being personal, in so far as sound calls for one's attention, while remaining beyond private possession: even in its absolute broadcast, sound seems directed at intimate listening, which may open out onto new routes for the intensely public and telepresent self located within the global crowd.

Notes

1. Michael Forsyth, *Buildings for Music* (Cambridge, UK: Cambridge University Press, 1985), p. 243.
2. See Andrew Blum, "Building a Better Soundtrap," in *The New York Times* (29 August 2004).
3. See Marshall Sella, "The Sound of Things to Come," in *The New York Times Magazine* (23 March 2003), pp. 34–39.
4. Max Neuhaus, from a talk given at Zeitgleich, a symposium sponsored by Kunstradio, Vienna, 1994. Found on the official website: www.kunstradio.at/ZEITGLEICH/
5. Statement on the project from the official website: www.longplayer.org.

Appendix: Peripheries—Subnature, Phantom Memory, and Dirty Listening

The theme of relationality has been central to mapping the historical and theoretical developments of sound art throughout *Background Noise.* I've been particularly concerned to underscore sound art as a practice (or field of practices) whose strategies are often focused on *relating* sound to additional materials, places, and persons; to expand our perspective onto the world through a deepening of the listening sense. The medium of sound seems to inspire such relational approaches and concerns; as if sound is already unfolding a broader horizon, leading us to heighten our attention to the proximate as well as the distant, to what is present as well as the shimmering trace of what is no longer there. The propagating, vibrating, and resonating movements of sound draw us toward this greater view, and importantly, put us into dialogue with all that surrounds. A dialogue that is not necessarily spoken, but rather embodied, *sensed.* This understanding has further led to exploring sound art according to spatial thinking, recognizing that such dialogical intensities are also spatial inquiries and propositions, and even spatial constructions. As the resulting force of a particular friction or contact, sound propagates and travels to become a spatial figure, linking the materiality of its source with the acoustical dimensionality of space; as such, it immediately activates our surroundings, passing *through* and *against* it to create an extended spatial and animate event. In this regard, acoustic spatiality is a temporary formation of auditory events and their interaction, giving way to modes and instances of inhabitation and cohabitation. Of gathering and of participation, as well as drift or disruption.

Following these relational and spatial trajectories, I'd like to turn toward the sheer expansiveness of that horizon opened up by sound and sound art by focusing on the subnatural and the subarchitectural, the energetic and the molecular. While my attention has been consistently drawn toward sound art as an overarching practice of sociality, of the dialogic and the relational—which I would characterize as producing radical forms of "association"—this has also been charged by a concern for the *humanness* of the auditory: how sound art addresses myself as a sensing body full of culture, a body pressed and shaped by those agents of language and

lawfulness, and involved with others. Yet in following these issues, I've also been brought closer to a mode of relationality that connects across subjects and objects, and even species, conversations that lean toward the hidden, the invisible, or the quantum; a sound art that relates us to the non-human, as well as the *all too real.* Such additional topics appear dramatically within expressions of sound art, often leading to a concern for animals and insects, the overlooked and the underheard, the haunted and the imaginary, as well as supporting strategies of secrecy, intervention, quiet reverie, and radical dreaming. Sound, in other words, is harnessed as a medium for extending precisely what may constitute a body, a *singular form*, or an "actant," and what or who might take up residence within acoustical spaces. I would suggest that sound art fundamentally puts into question the singularity of any bodily presence through such profound relationality: as a listening subject, one is prone to fragmentation, amplification or dissolution when brought into the *presencing* sound seems to enable and hearing supports.

Subsequently, it is my interest to draw out a number of additional perspectives by way of this appendix, to literally tack on an extra spatial coordinate to understanding all that is at stake, urged, or proffered within sound art. I'm interested to consider the works of a number of artists whose attention rests precisely on the terrain of the peripheral, where energy waves, weather conditions, detritus, and the abandoned incite aesthetical productions. What these topics share, from my view, is a relation to what David Gissen terms "subnature," or those elements, forces, and bodies that surround, through a type of informal and somewhat repressed presence, the environments we come to occupy. Subsequently, subnature can be understood to unsettle the conventional boundaries that define place, the centralizing and formalizing configurations and constructions that secure particular orientations, while also contributing an extremely important element, that of ambient presence and the temporal fluctuations so vital to sensing and relating.

Taking cue from Gissen, I want to consider sound art as it leads us into the peripheries of architecture, forcing us into contact with all that appears rather marginal to the built environment; and by doing so, to sink deeper in, toward the energetic patterns, molecular forces, and phantom memories that impart so much influence onto the animate (and inanimate). By exploring and paying attention to such hidden or obfuscated elements, artists bring forward an expanded understanding precisely onto the field of the relational; they unsettle notions of agency and presence, as grounded in human expression, to critically realign the hierarchies of the senses and the sensible. What constitutes a body and its powers to enact types of intervention? What or who has been marginalized in favor of others, and what power structures perform to hold them in place? How to locate oneself in relation to the foreign, or what appears beyond myself? Is not *this body* always already more than how it appears?

Focusing on the works of Sabrina Raaf, Tao G. Vrhovec Sambolec, John Grzinich, Juan Downey, the collective The House of Natural Fiber, and Leif

Elggren, among others, these questions are used as vehicles for considering agency as not only centered around the human subject, but equally found in forces and forms of subnature. In doing so, I'm interested to elaborate a critical view onto sound art, explicitly in support of its diversifying project.

As a medium, sound is often put to use to give registration to what is below or above, under or inside, forgotten or ineffable; it is precisely a trigger for bringing into acoustical relief what is steadily marginalized, or located within the more peripheral zones of presence—the left-over, the abandoned, the haunted, and the unseen—through an array of vibrational, resonant, interventionist, contaminating, and compositional tactics. By moving through and occupying all types of spaces, disregarding borders while fueling powerful territorializations, and enabling articulations of what is often below the line of the represented, I'm led to consider sound as a dirty (and dirtying) force. Sound affords a radical relationality precisely with what may be found in the gaps of appearance, alongside the object of a particular desire or economy—it is the continual emergence of alterity; like a vapor passing in and out of so many bodies, hovering in the cracks to suddenly interrupt the scene, sound continually disorganizes, reconfigures, and supplements the fixity of form.

These sonic qualities greatly enable artistic expressions aimed at the extremes of perception, giving way to a vocabulary of affect, transmission, interference as well as assurance, alien energy, enchantment, and deep resonance. Yet I would emphasize that it not only leads us to hear such hidden or marginal forces, but also constructs a plane of presence fully marked by agents foreign to "my body." An opening where such peripheral and immaterial forces may ultimately *capture* us. In this regard, I want to posit a notion of "dirty listening," as a listening contoured by the radically heterogeneous force of sound.[1]

The notion of dirty listening is emphasized here as a means to harness what I understand as sound's potentiality to connect and integrate precisely those things or bodies that *intrude* upon the scene, that *interrupt* and lead me away from what I know, and that bring us into relations not only with each other, but importantly with what might exist under my skin, in the water, or within buildings. Sound art is an occult project seeking out all the intense and feverish life-forces that surround us, and that live within us; in doing so, it draws into question assumptions as to what qualifies or constitutes a life-force in general.

Timothy Morton gives a wonderful evocation of dirty listening in his book *Realist Magic*; as the author sits by an open window writing, he is suddenly caught by the croaking of frogs:

> A wall of croaking filled the night air. Hanging on either side of a human head, a pair of ears heard the sound drifting over the pond towards darkened suburbia. A discursive thought process subdivided the wall of sound, visualizing thousands of

> frogs. A more or less vivid, accurate image of a frog flashed through the imagination. The soft darkness invited the senses to probe expectantly further into the warm night. On the breeze came the wall of sound, uncompromising, trilling like the sound of frozen peas rattling around inside a clean milk bottle multiplied tens of thousands of times. While the author was writing the preceding sentence, a whimsical taste for metaphor enjoyed linking the sound of the frogs with the sound of frozen vegetables.[2]

Morton's descriptions spiral from one point of reference to the next, linking the sound of frogs in the pond to the warm night breeze, further to his own imagination, and finally to frozen peas; the itinerary of this particular sound unfurls a radical connecting thread, which captures Morton's thoughts and writing—he continues:

> A single sound wave of a certain amplitude and frequency rode the air molecules inside the frog's mouth. The wave was inaudible to a mosquito flying right past the frog's lips, but sensed instead as a fluctuation in the air. The wave carried information about the size and elasticity of the frog's mouth, the size of his lungs, his youth and vigor. The wave spread out like a ripple, becoming fainter and fainter as it delivered its message further and further into the surrounding air.[3]

The ever-expanding, propagating wave of sound Morton attends to is generative of an elaborate web of associations and contacts; by following this single event of sound an entire world of life-forms, energetic fluctuations, observations, and imaginings are triggered, leading the author into meditations on the unseen, the felt, and the intuited—captured in the writing itself, as a description that ultimately veers into suggestive imagery: "The wall of croaking caused the grasses in the pavement next to the pond to vibrate slightly."[4]

The potential reach of sound is vast; as Morton highlights, the ability to catalogue the event of sound is endless—his descriptions continue, across pages that attempt to follow the sound wave as it pulls into its movement any number of things and bodies. It is precisely this movement, and this ambulatory itinerary of sound that fills our listening with too much: as listeners we become *excessive subjects*—we are immediately more and less of ourselves—transgressed by the invasive and voluptuous messiness of sound.[5]

Weather Conditions, Energetic Architectures, and the Senses

David Gissen outlines in his book, *Subnature: Architecture's Other Environments*, how the primary elements, such as air or water, are dynamically supplemented by secondary forces: "I argue that, forms of nature become subnatural when they are envisioned as threatening to inhabitants or to the material formations and ideas that constitute architecture. Subnatures are those forms of nature deemed primitive (mud and dankness), filthy (smoke, dust, and exhaust), fearsome (gas or debris), or uncontrollable (weeds, insects, and pigeons)."[6] Gissen is interested to

consider these secondary, more "denigrated" elements not solely as negative effects onto our environments, but rather as forming a level of spatial, experiential, and conceptual input. Put forward then is a certain challenge to the architectural and environmental imagination, and related practices, to utilize "subnature as a form of agitation or intellectual provocation."[7]

Gissen aims to shift our understanding of the built environment from that of forms of enclosure that shelter us from contact with the elemental, toward that of the subnatural. Mud, debris, gas or dust—and to which I would add vibrations, noises, and other ambient energies—these may intrude upon architecture, yet they do so by also reminding of the intensities of our environments. Such engagement may give way to an expanded view onto our spatial habitats; by integrating ambient energies, the fluctuation of weather conditions, as well as the more peripheral movements of life around us, subnatures do more to impart meaningful substance to our spatial habitats than architectural conventions tend to demonstrate. In this regard, subnatures contribute an important platform for experiencing the often "unwanted" and yet ever-present forces and forms to which we are deeply bound.

The urban researcher and theorist Jean-Paul Thibaud equally considers this dimension of space, by way of the themes of "atmosphere" and "ambience." Through theoretical and practical work developed at the research institute Cresson, Thibaud poses that the ambience of a place functions as an energetic flux that greatly influences spatial and situational conditions, while also encouraging our feelings for being somewhere. As Thibaud states:

> An ambience can be defined as a time–space qualified from a sensory point of view. It relates to the sensing and feeling of a place. Each ambience involves a specific mood expressed in the material presence of things and embodied in the way of being of city dwellers. Thus, ambience is both subjective and objective: it involves the lived experience of people as well as the built environment of the place.[8]

As I've been interested to show, sound participates in the ambience of place by lending an extremely dynamic, temporal, and impressionable force. We can understand sound as a vital form of movement—a primary and elemental event of animation whose stirrings move us together. Sound occupies the *in-between*—between a source and a listener, between a space and another, between a body here and another there (and which are not always human or even visible)—and thereby brings into *contact* so many objects, bodies, and places. Sound is an intensity that links the body to others, disrupting and enlivening singularity with the force of listening. Importantly, this underscores particular socio-political effects and opportunities, whereby the emanations of sound afford a radical connectedness, a *poetics of relations*.[9] It is my view that the primary animations and phenomenological stirrings of auditory events contribute to delivering forceful content, empowering and enabling the articulation of agency from not only subjects and bodies, as *singularities*, but also from matters and things, and collectivities, precisely from within

the *in-between*. Importantly, experiences of listening uncover pathways for *joining together*, often with what is ungraspable by sight or even recognizable as "a body." In this regard, I'm interested in how sound art occupies an uncertain zone between the elemental experience of sensing *and* the demarcations placed on the sensible—and how it may fuel articulations of subjectivity precisely through extending and problematizing its singularity, and its appearance within the social field.

To return to the subnature of Gissen, and the ambience of Thibaud, sound imparts such intense atmospheric presence by often dropping below the line of audibility. Sound is, in essence, a form of *pressure*: it is a stirring of the molecular figuration of air, a force of oscillation that travels through a given medium, such as air or water, and also, *through* bodies and buildings. These pressures of the acoustical are certainly recognizable when turning to the topic of vibration. Vibrations traverse buildings, passing through walls and floors, along columns and infrastructures, and in doing so, often create "connections" that can be understood to displace the visual logic of an architectural space. Vibrations literally *rearticulate* a given architecture according to certain energy patterns. Ventilation systems, electrical boxes, internet servers, external elements, the movements of bodies, all may introduce vibrational energies that journey through the structures of a building. Such vibrational presence can be aligned with the question of subnature by specifically undercutting the formal material and ocular arrangements of an architecture. Vibration, in *displacing* the independence and stability of the built forms around us, also unsettles the boundaries between space and people, between this room and this body; in contrast, one is located as an object within a greater field of sensation: these vibrations, these energy waves, passing around and through me, force me into greater contact with surrounding materiality. In doing so, vibration creates a rather invisible yet palpable process of affective transmissions that conditions, and mostly disturbs, the operations of architecture and our place within it.

The artist Mark Bain has often worked with vibration, particularly as a means for unpacking this alternative view onto buildings. Bain's interest, or obsession with vibration as a phenomenon found within buildings and cities has led the artist to produce works that often aim to capture the embedded resonance of architectural structures—how buildings themselves contain an inherent acoustical identity whose properties can be harnessed or activated (we can refer back to Alvin Lucier's *I am sitting in a room* as a primary example (see chapter 8)). A permanent work by Bain, titled *Bug* (2009), presents an extremely rich articulation of this approach. *Bug* is an installed work located within an office building in the city of Berlin.[10] By fixing a series of geodata and seismic sensors directly into the infrastructure and concrete foundation during construction, the work captures "micro-sensations" occurring throughout the building. Vibrations that pass through the building's structure, or picked up along the exterior come to form an expanded auditory perspective onto the architecture. To access these sonic energies a visitor may connect headphones directly into a mini-plug permanently fitted to the façade of the building. Passersby are literally invited to tap into the building and listen to the noises therein.

Bain's work leads us to recognize buildings less in terms of visual boundaries or cubic volumes, and more as vibrational networks; rooms no longer end at their visual threshold, rather they extend deeper in, through and down, or up and above, linking any single material form or structure to a range of events and spaces. (This view onto vibration is also found in the work of Toshiya Tsunoda examined in chapter 15.) I think of his work as forming an auditory geometry, rendering a complex spatiality according to the energetic intensities of contact and friction, vibration and tactility. In this regard, his work poses a dynamic elaboration of Barry Truax's theories of environmental listening, whereby a sound wave not only brings forward but also multiplies our understanding of the current state of a place *beyond* that of audibility: the sonic pressures and energies envelope us equally within a tactile web of events. The acoustics of an environment are precisely a territorial layer that often brings into contact things and bodies, events and voices, and from which alliances and resonances, as well as ruptures and agitations, are experienced and produced. Such productions radically shift attention from sightlines, and even audible soundings, to a deeper, vital materiality that enliven as well as disturb our bodies.[11]

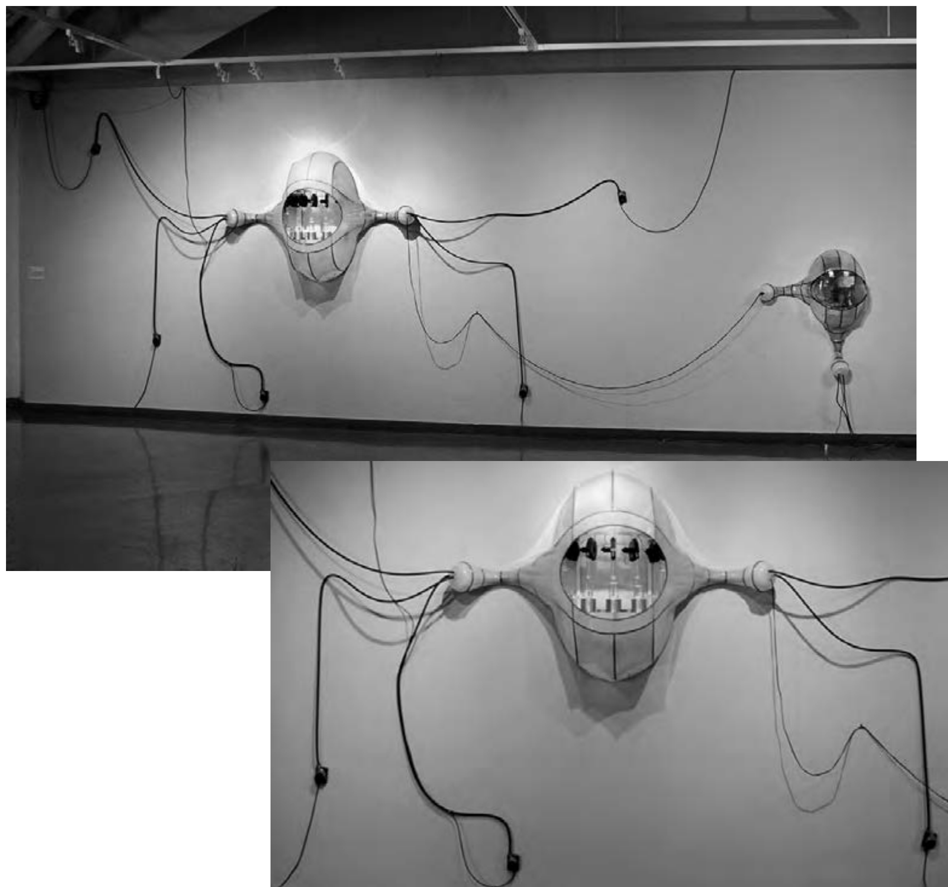
As Shelley Trower outlines in her book *Senses of Vibration*, the energetic force of vibration can raise questions about the stability of forms, the health of the body, and even the certainty of thought.[12] Yet it may also, in doing so, locate us within greater environmental sensitivity, highlighting how audition is a process of energetic exchange and relational contact, a hearing that extends to that of tactile sensing. The forceful and connective qualities instantiated through vibration are suggestive of how bodies may come into contact within environments, to form collectivities and initiatives. In this regard, vibration and the vibratory provide a material pathway for realizing radical forms of togetherness.

In considering the built environment through the lens of this expanded auditory and tactile presence, sound appears on the level of an energetic force, an atmospheric pressure, a vibrational friction, and a wave occupying and setting into relief the *in-between*—across architectures, and within the arenas of meeting. Accordingly, I'm interested to add this onto understandings of subnature, highlighting how the practices of sound art lead us to peripheral and often-unseen elements. Of course, as Gissen asserts, by paying attention to the marginal elements that continually surround us, it is clear that what is understood as peripheral—the energetic fluxes and subnatural elements—are, in fact, central to experiences of place. Sound, for instance, draws us into attunement with this ambient order, readily traversing the demarcations between center and periphery, above and below, to construct forms of subarchitecture: an aesthetics of pressure that invites or pushes us toward greater assembly and cohabitation.

The work of artist Sabrina Raaf draws us into these more peripheral forces, bringing focus onto ambient elements, such as background humming. Her elaborate sculptural work, *Unstoppable Hum* (2000), considers the common experience and phenomenon of background humming produced by an array of electrical and mechanical infrastructures, such as heating and ventilation systems, elevator

and escalator units, refrigerator systems, computers and servers, etc., all of which introduce a continual hum to our architectural environments. *Unstoppable Hum* appears as an extended sculpture designed to monitor a particular space; through a set of contact microphones applied to specific points in the space, such as computer workstations, automated doors, ventilation ducts, etc., the sculpture gathers sonic information pertaining to the space and applies this to generating its own humming produced through a set of "fans" that blow air into corresponding glass jars filled partially with water. Raaf 's interest is to counter the rather monotonous background hum of rooms with a "musical" addition, shifting from banal intrusion to that of articulated sonority.

Unstoppable Hum operates through a type of inversion; by appropriating background elements and manifesting them through a foregrounded sonority, the artist tries to unsettle the spatial features common to the environment in which a background often intrudes with a somewhat subliminal, droning pattern. The background hum, in other words, may actually be something to listen to. Yet this



Sabrina Raaf, *Unstoppable Hum* (2000), Betty Rymer Gallery, Chicago. Photos courtesy of the artist.

inversion is further developed by a second sculpture that is placed alongside the first. This other object focuses instead on the presence of human bodies. Fitted with a small video camera, which registers the movements of people, and a geophone that detects footsteps, the sculpture produces a sniffing, gurgling water sound when confronted with visitors. Such a response, for Raaf, aims to turn the architecture into an animate form: the space itself amplifies our own presence so as to make us wonder, *is it alive?*

What I appreciate about Raaf 's work is its sensitivity and real-time performativity that draws out this topic of the subnatural; in other words, Raaf creates a spatial and sonorous articulation constructed precisely from the "detritus" of electro-mechanical systems, most of which trail behind walls, across ceilings, in corridors and tracts hidden and buried within architecture. As the artist states, her interest lies in challenging the background-foreground dichotomy, while also playing with what we understand as animate and inanimate presence.[13]

Questions of architecture and the energetic are also central to the work of Tao G. Vrhovec Sambolec. Sambolec's *Virtual Mirror* and *Virtual Hole* projects, in particular, are developed through an overall interest aimed at destabilizing the relation between interiors and exteriors. The series of works attempt to create a heightened sense for the temporal and the transitory, the flux of pressures and energies that come to effectively condition space. His strategy, in bridging and blurring the lines between outside and inside, might be said to *fray* the edges of architectural space, expanding the senses to that which is always already present as an influencing and effective factor and yet often remains beyond spatial consideration. Whether through acts of mirroring external phenomena, or by "cutting" a virtual hole into a building, Sambolec occupies this territory of the subarchitectural.

His performance project held at a public library in Oslo in 2009, *Virtual Mirror – Sound*, is a poignant example (and echoes some of the key elements investigated in the works of Achim Wollscheid, Atau Tanaka, and Apo33). The project functions as a sited, performative action located within the library's main rooms and focuses upon the ambient conditions of the space over the course of a single day. Two performers move through the library, concentrating on the ebb and flow of sounds as they trickle in from the street, or appear from within, as people search the shelves or spend time reading at various tables. The performers wear small wireless microphones and attempt to vocalize in response to the sounds they hear; they move through the library, seeking out small resonances, new perspectives from which to tune themselves to the space, and the situation. Yet their vocalizations remain subsumed within the greater ambient volume; they do not break the sound environment, rather their vocalizations integrate themselves, attempting to mirror back the ambient, unintentional sounds occurring, such as doors opening and closing, the buzz of neon lights, the turning of pages, etc. In this way, the performers occupy this zone of background sound, following the ambient patterns and fluctuations of the existing soundscape—they intermix with what is there. As in the work of Raaf, space is given a type of agency, or as Sambolec further

Tao G. Vrhovec Sambolec, *Virtual Mirror – Sound* (2009), Oslo public library. Photo courtesy of the artist.

states, a "sound-consciousness."[14] A sound appears here, and then is echoed from over there, passing from one source to another, and from one body to another; a concentration of energy is gathered, a mirroring that, while being extremely subtle, collects and accumulates into an ambient presence that contours the spatial environment. The question of presence is, in fact, central to Sambolec's working methods, and his projects aim to support, through various real-time systems, a dynamic manifestation, what I might call a process of *presencing*.

By creating links to the exterior forces that surround an interior space, his works perform soft ruptures onto the demarcating lines that place inside and outside into binary relation. In contrast, Sambolec's work is more concerned with a sense of interweave, temporality, envelopment, and extension. As the artist states, "What interests me is how aware we are of the immediate atmosphere we breathe, we are immersed in, and what all we do in order to make ourselves unaffected and independent of it. The installations are sensing the immaterial … and heightening our awareness of all these flows."[15]

For another project, *Virtual Mirror – Rain* (2009), Sambolec focuses on the relation of a building to the exterior force of rain, in this case installed at the Museum of Modern Art in Ljubljana. Through the construction of a digital sensing system, the installation responds to the presence of rain: each drop of rain, as it falls onto a specially constructed horizontal plate located on the rooftop of a nearby gallery, comes to trigger a "mirror image" in which a small spray of water rises from the floor inside the Museum. This extremely delicate and yet no less

Tao G. Vrhovec Sambolec, *Virtual Mirror – Rain* (2009), Museum of Modern Art, Ljubljana. Photo: Dejan Habicht. Courtesy of the artist.

dramatic orchestration figures a spatial play. As viewers we are asked to follow the corresponding relation between an exterior input and an interior result, between a remote cause and its resulting effect. By forming a dialogical link between the rain outside and the interior event, Sambolec materializes the possibility of the exterior world coming in. The temporal instant of rain finds a way into the building, generating a performative and spatial event, defined by what the artist terms "undoing architecture."

Sambolec's project creates a network that comes to reform the built; in his work, architecture is more than the capturing of spatial volume, or the modulation of structure, but an event in time—a *presencing* that is also suggestive of a radical subarchitectural materialization.

In his book, *Fire and Memory*, Luis Fernández-Galiano provides a rich examination of architecture as a carrier of energy.[16] For Fernández-Galiano, energy operates as an extremely dynamic undercurrent to built form. This is initially examined by way of a consideration of fire and its place within the home. As that central (mythological) feature, fire is underscored as imparting warmth to the first dwellings, acting as an elemental force around which human life gathers and by which inhabitation takes shape. Architecture is thus immediately an enclosure surrounding this dynamic force, a spatial envelope that seeks to capture, sustain, and transmit the life-giving energy of fire. In this sense, architecture is held within an essential and determining dialogue with energy.

The primary example of fire, as that vital energy source, is further extended through an analysis of the laws of thermodynamics (e.g., entropy), forms of

combustion, and the material transubstantiation occurring in construction itself—how the building process involves innumerable material transformations, reconstitutions, and expenditures. Accordingly, matter and energy, architecture and fire, construction and combustion are placed into an extremely complex relation, forcing a suggestive link between architectural forms and energy expenditure.

Following Fernández-Galiano's analysis, energy is highlighted as a forceful, enriching, and undeniable element within built form; the material alterations taking place within construction may be understood to linger within any final architectural form as a type of memory. In this regard, elements of the ambient act as vital presences within architecture, where the flows and transversals of heating, electrical current, ventilation, and related infrastructures radically condition the stability and atmospheres of buildings. (I might extend this to questions of "digital ambience" and the flows of data and connection that create new spatialities, energy expenditures, as well as new modalities of inhabitation.)

Returning to Sambolec, *Virtual Mirror – Rain* considers how forms of weather continually envelop the built environment, to touch, to give texture, to effect and influence the conditions of spatiality. As Juhani Pallasmaa proposes, the ambient and atmospheric elements effecting architecture impart a feeling for lived experience, creating an important affective intensity "enabling us to inhabit the continuum of time."[17] The energies of the outside are thus elements that, while requiring resistance or partial control, impart a dramatic feeling for the passing of time. From seasonal changes to the passing of a day, the transitory conditions that flow around us are elements that may appear in contrast to the stability and seemingly immutable nature of buildings. Buildings might be understood as the things that mostly withstand time, that resist the pressures of the everyday and lend continuity to our daily rituals. In contrast, the shifts in light throughout the course of a year, the flux of weather conditions, and the vibratory undulations that flow over and around environments and buildings, for example, all come to animate the built. They may be the very means by which we gain a deeper sense of *locatedness. Virtual Mirror – Rain* stages this lived time, placing it at the center of a building and shifting focus from bodies in space to greater environmental forces. In doing so, Sambolec articulates a deep spatiality, capturing ambient and temporal occurrences not as supplemental to architecture, but as core material.

In constructing works that draw us into a field of relations, of weather conditions and the presence of ambient energy, as well as the performative events that heighten an expanded listening, Sambolec brings us into this zone of subnature and the subarchitectural articulations central to sound art. Such an approach is further elaborated by artists that seek out neglected sites and peripheral or leftover structures. In this case, we're led away from the question of weather and toward the detritus and debris of the abandoned building. It is my view that sound art is a form of research dedicated to the operations and behaviors of spatial form, explicitly utilizing the auditory as a platform for querying subject-object relations, as well as the atmospheric and ambient pressures that encircle us. In this regard,

it is often the case that sound artworks seek out the abandoned site, the marginal location, or the unique space for investigation and exhibition; rather than perform within the typical gallery space, works of sound art often bypass the official or major designs of architecture in favor of the textured territories of the everyday, and the idiosyncratic structures of the discarded and the hidden.

The works of John Grzinich, for example, poignantly express such tendencies, and in so doing afford opportunities for enriching not only our sonic consciousness, but also a deep engagement with the locationally dynamic conditions of the abandoned and the found. Grzinich has developed an extensive body of work aimed at deepening an understanding of sound as context-specific, as well as a vehicle for performative and collective expressions. What arises out of Grzinich's activities, as a performer, researcher, and teacher, is an engaging activation of sound within given spaces and through found materials, and brought forward through collective improvisation. These form an elemental foundation from which workshops, staged performances, and recordings are produced within a range of sites. For example, a workshop that Grzinich conducted in 2007 in the city of Riga, with Maksims Shentelevs, led participants to six locations: an abandoned apartment, a construction site, a former power station, an abandoned warehouse, an old military airport and a backyard. Each day the participants set out for one of these locations, occupying them for a brief period of time in an effort to develop methodologies of site-specific activity directed by acts of listening and sound making. Sensitivity for the auditory thus operated as a means to consider the locations and their given qualities, but importantly, it also provoked new types of behavior and inhabitation on the part of the participants. Their actions of improvising with found objects, and the material elements of the spaces, brought forward an array of "musical" and performative actions: scraping together found metals, resonating empty canisters, tapping and hitting objects, these gestures ultimately sensitized the participants to the environment, leading to states of collective listening and collective inhabitation. Sound, in other words, opened up an additional dimension to the given locations through which participants moved, paused, listened, and enacted a type of encounter, with each other, and with the materiality of the space, through gestures of sounding.

"Many abandoned sites offer an open space in which to work, where one has less of a chance to be disturbed."[18] Such a view forms a general ethos in Grzinich's working methods, articulated in an interest for less "defined spaces." The abandoned site, for Grzinich, ultimately affords more "open ended creative options." Yet, in following Grzinich's work, the abandoned site is revealed as extremely rich in sonic experience, and offers an extended material base for investigations into texture, resonance, and reverberation, as well as for spiriting expressions of collectivity and sound making. "I'm more interested in, let's say, processes at the generative end of the spectrum, where ideas can be freely explored, experimented with and expressed without certain constraints or conditions of time and space." This tends to lead Grzinich to sites that are rather "lost in the folds of history," for

instance in Riga, or elsewhere, such as an abandoned Soviet bunker in the countryside of Latvia.

Under the umbrella of his related Revenant project, which is an ongoing collective project focused on site-specific acoustic actions, the work *Zeltini* (released on CD by unfathomless, 2008) captures the acoustical identity of the former Soviet bunker. As Grzinich describes:

> There were some "dark" elements surrounding this session. It was mid-November in the Baltics which meant that it was cold, gray and the sun goes down early. By the time we entered the bunker and set up to record there was no natural light left to see. Trying to find a shared experience through improvisation among a group that is not familiar is hard enough, trying to do this in the dark in an unfamiliar place is even harder. Knowing we would be without visual and sometimes auditory communication because of the multiple spaces available I suggested to do a recording experiment, to each use our own equipment yet synchronize the timing at the start. If we were to get "lost" or immersed in our own experiences, it would be interesting to reassemble them later as a shared "fictional" space. This is indeed what we ended up with. Using only my ears and a headlamp to guide my way, I foraged through that unknown space collecting objects and playing them on the varied surfaces I discovered. I remember the old rags, the dust, broken pieces of concrete, pipes coming out of the ground and how I searched for ways to animate the space and instigate interactions with the others. Whether it was the quest for new objects or the need to stay warm I constantly moved around and even ended up outside toward the end.[19]

The resulting work is an extremely evocative sonic experiment, full of surprising tonalities and textures, each punctuated by a vague yet concentrated compositional dynamic. A heightened intensity carries through the work, a palpable improvisational journey that locates us firmly within a space of detritus, as well as surprising beauty and nuance.

As Grzinich suggests, forgotten spaces offer opportunities for creativity, fully supported by what may be found on site, left behind by various forces, histories, and productions. The "fictional" element he further points to is suggestive of the subarchitectural: that what may lead us to such places may be a deep engagement with the found, as providing a raw stage for sounded actions, yet what results are *re-constructions* of such spaces. Someone scrapes something, while another drums something else, each action an element that *reimagines* what this place is.

The expandedness articulated by Sambolec, and the acoustical actions of Grzinich, may be seen and heard as methods of appropriation that force an additional dimension onto the architectural. This dimension can be further described by way of "minor architecture," which Jill Stoner suggests proliferates within the excesses of the abandoned, or the unused, leading to a sense for the indeterminate. As Stoner describes, "Minor architectures operate in that mercurial, indeterminate state that is the passage from striated to smooth, from closed system to open space."[20] The creative possibilities Grzinich finds in entering these forgotten

buildings and territories gives way to a dimension that is precisely the making of another form of inhabitation. The occupation and utilization of such abandoned architectures, however temporary, "reshapes space by transforming it"[21] into a collective zone of listening and sounding, an active search for ways of "animating the space." These procedures and minor productions instantly violate and flex the material state of architecture, suspending the spatial delimitations of the building through acts that tunnel through structures and infrastructures, along surfaces and depths. As Sambolec's work demonstrates, what may occur upon the line between interior and exterior, and by extension, between private and public spheres, can itself become a site for alternative meeting and sensing, as well as production.

Following Stoner, it's important to capture the political current within minor architectures. As the *Zeltini* recording reveals, the reworking of the abandoned site gives expression to a radical appropriation, explicitly turning the hard edges of architecture (and in this case, an extremely politicized and powerful architecture) into an acoustical materiality that, as Stoner suggests, readily dislodges the certainty of fixed forms in favor of "collective desire and enunciation." "Minor architectures operate from outside the major economy … outside these dominant cultural paradigms, but *inside* architecture's physical body" to become a form of "*practiced space.*"[22] Central to this is a dynamic, dialogical impulse supported by an engagement with what is at hand, and with what may be done with limited resources—a minor economy enacted undercover within the operations of stratified markets. A giving *and* a taking that makes due precisely by ducking under the plane of appearances, of visibility, and the presentation of the imaged. Instead, an array of opportunities are discovered, carved out or scavenged—the minor architect radicalizes any object or material as a vibrational body, shifting matter into energetic sounding. "For architecture to approach a condition of minority, it must first become not visible …"[23]—it must become covert, parasitic, secret. Such invisibility is central to sounding practices, suggesting a correspondence between minor architecture and the ways in which sound artworks often develop through acts of appropriation; searching for secret openings, undiscovered channels, and hidden opportunities onto the spaces and environments around us, sound art gives expression to an embodied sense of freedom. As Grzinich demonstrates, recognizing the potentiality in what is found on site and enacted through sounded appropriations may form a radical material base—to "vibrate with intensities …" and to reform "the object *into a relation*."[24]

Considering Stoner's characterizations of a minor architecture, I may return to the question of subnature to suggest a further understanding, for minor architects are prominently concerned with peripheries, as well as marginalization. From abandoned buildings to the matters that introduce particular force and energy—those temporalities, ephemera, and dirty textures—these become intensities of vitality, as well as means for *practicing space*. Minor architecture tunes itself to the subnatural, and in the case of sound art, opens out toward an appreciation for auditory actions as strategies of resistance.

Molecular Flux, Actant Particles, and Plant Life

It is my interest to focus on questions of subnature and subarchitecture by highlighting the ways in which an art of sound leads us into deeper engagement with the marginal, the peripheral, and by extension, the excluded. Vibratory energies, weather conditions, and abandoned environments incite sounding methodologies by which to unfold, disarray, and elaborate our sense of place and those relational intensities defining the *in-between.* Such approaches seem to also integrate a sense for the historical and political tensions that often territorialize a given location—what may lie underneath, to the side, or deep within the architectural form, or in the ground. Here, sound is participant within an energetic, disordering, improvisatory, and socially engaged action, supporting an appeal to the senses and the modalities by which we come to relate. This action, as I've tried to show, is found not only in grand gesture or formal narrative, but importantly, in the nuanced and sustained inhabitation and interaction with places, tracing over the textured details and background elements so as to tune ourselves to more complex engagement: a *presencing* that is equally a displacement of the powerful formalities of spatial ideologies.[25]

To consider this further, I'm interested to take a step closer, as well as deeper, to reflect upon these energies of sound as they reveal a *molecular* territory. The textured surfaces, the fluctuation of vibrations, and the waste found on the underside of architecture all come to suggest the movements of molecular activity—a layer of animation on the threshold of human presence and perception. Such molecularity, if one were to glimpse it, also suggests a level of listening that is certainly subnatural and subarchitectural, as well as *subliminal.* The *presencing* enacted by these auditory practices—vibrational amplifications, ambient dialogues, sonifications, sounding actions—define an additional focal point, instigating a deeper and more complicated meeting between the body and its place. We move into a space of listening that is never fully within the human order, but rather is participant within an assemblage—a complex association of sonic force, spatial structures, elemental energies, animate forms, and the temporalities constantly at play. *My body is only a fraction of this event; my listening is one of many.*

A molecular territory resides within such assemblage, where every audible event must be heard (or imagined) as something that exceeds my perception: what I hear is already embedded within a greater field beyond my senses (as Morton's writing-listening suggests). What sound art registers is such deep relationality as one that is immediately *not only about me.* I might term this a "particle event"—a molecular flux, a frequency spectrum, an animal spirit, echoing what Pauline Oliveros refers to through the term "quantum listening," which she defines as "listening to more than one reality simultaneously."[26] Such a formulation also includes a reality manifested in the slightest of reverberations; that is present upon a surface in such a way as to suggest a hidden territory, in the skin or deep within matter—in short, realities beyond my seeing. It is my interest to map out this

deeper perspective, and to give further detail to sound art's subarchitectural practices and the dirty ontology of sound.

Jane Bennett expounds the issue of material culture by way of "vibrant matter," unfolding a view onto objects, materials, and things that reminds us of the often-unseen influential force passing between our bodies and the surrounding world. Key to Bennett's argument is a concern for the "agency" beyond the human, an agency of foods, metals, electricity, furniture, etc., and which fully conditions human and worldly experience. Heeding to such seemingly "peripheral" elements, Bennett leads us into an extremely multi-faceted understanding of what constitutes "a body of force" and the powerful enactments exerted by them. It is imperative, for Bennett, that we "attend to the *it* as actant," as one that may enrich not only a sense for worldly presence, but also the democratic project.[27] For instance, the author opens her analysis by considering the properties of our own bodies (skin, fluids, bone, etc.) as "actants"—lively, materially vital elements rather than "passive or mechanical means under the direction of something nonmaterial, that is, an active soul or mind."[28] Such a view forces a greater, and more "ecological perspective," in which "materiality" is often composed of ever-deeper, more complex assemblages, each element or part whose form equally consists of additional forces and matters. In this regard, often what we perceive as a "body"—a singularity—is fully supported and conditioned by an array of things or elements, each operating within their own constellation of forces and productions.

Bennett's vital materialism seeks to inspire a more sensitive approach to how we relate to our surroundings, as well as complicating or displacing the dominance of human-centrism. Accordingly, it becomes crucial to ask: how do I understand my body as *mine*? And in what way do my gestures and acts of agency dialogue (or not) with a greater field of animate life? What comes forward in following Bennett's analysis is an appreciation for how material bodies and related energies are not as sharply divided as we might imagine; energy and matter are rather different states of a given "thing," or different "vitalities" that pass continuously through and against other vitalities, exchanging energies, shifting material conditions, growing or decaying, *transitioning*, and importantly, imparting effective influence. As a consequence, Bennett seeks to integrate such a sensitive assemblage of matters and energies, life-forms and forces, into understandings of "public life" and "public good"; in short, she questions whether acts of democratic governance and self-determination are to be seen as always susceptible to and in dialogue with a greater material and vital sphere of actants.

The ecological perspective, in support of an assemblage of life-forces, is certainly aligned with more holistic and integrated understanding, and one that we might also follow in relation to sound art. As an art of listening, the project of sound art is often one that occupies a complex aesthetical zone between material form and energetic force; a creative space between representational and performative practices, and populated by a range of bodies and their rustlings. In this regard, the subnatural and subarchitectural are experienced as acoustical spatializations of

the ecological, a manifestation of the minor that equally spirits the interweaving of vitalities and their thingness, their audibility, to force an assemblage in which objects and subjects cohabitate.

The work of Chilean artist Juan Downey (1940–1993) accentuates this dynamic of integration, aiming to capture and extend the intensities of such ecological engagement. Throughout the late 1960s and early 70s the artist developed a complex series of works that sought to manifest the field of energies always already present within our environments. Though for Downey, such interests were expressive of a greater "cosmological" view in which invisible energies and particle oscillations bring into contact multiple realities and which integrate precisely what is beyond the purely physical. For Downey, it thus became increasingly important to create works that would involve visitors, explicitly bringing them into a space of active participation to ultimately "make people aware of the vast number of different kinds of energy within the universe."[29]

His early electronic sculptures of the late 60s, for instance, integrate into their seemingly minimalist appearance live sensing elements, such as radio receivers, photocells, and Geiger counters, to create extended and experiential work. One such example, *Against Shadows* (1968) appears as a cubic floor sculpture, which is connected to a panel of light bulbs mounted on an adjacent wall. The shadows cast down onto the top surface of the floor sculpture by visitors are subsequently translated into light, as the bulbs are illuminated in corresponding patterns, thereby creating a positive image of the cast shadow. Or, in his work *Invisible Energy Dictates a Dance Concert* (1969), energies found within multiple locations are captured and transmitted using Geiger counters and walkie-talkies. These signals are subsequently interpreted by performers and musicians who are located in different rooms to form a networked weave of movements and sounds. In this regard, Downey was particularly interested in materializing the energies that circulate around us, harnessing their presence and using them to create a type of performative network, or what he called "invisible architecture." He envisioned a dynamic experience that moved from an invisible, molecular flux through to the metaphysical channels that connect us to greater forces: collective memory, spirit presence, universal being. Energy thus becomes a metaphor for more transmitted conditions.[30]

One of his more elaborated works, *Plato Now* (1973), presented at the Everson Museum of Art, stages this expanded interest. Consisting of nine "meditators" captured using closed-circuit TV and shown on nine corresponding video monitors, *Plato Now* functions as a literal meditation on the nature of perception and being. While the participating meditators focused on reaching a level of alpha state, prerecorded excerpts from Plato's *Republic* and *Timaeus* were triggered, creating an auditory backdrop to the participants and their televised image. Again, Downey attempts to create a networked and participatory work, producing an aesthetic event where each element connects to form a dynamic, fluctuating space of electronic interaction and integration. As Valerie Smith describes, "Downey captured the invisible energy of the human mind, letting it circulate between the interlocking

systems of auditory suggestions, videotape recordings, and feedback, forming an elaborate electronic architecture to contain its collective power."[31]

In this regard, Downey's works move in and out of visibility to shift our attention toward that of the invisible and the energetic; from radio signals to the cellular activities of brain waves, Downey amplifies what is often only intuited: the energetic movements that shape our physical world. In doing so, the artist searches for a means of relational contact to overcome separation, and to unsettle the lines that alienate one body from another. In building out invisible architectures, Downey's work leads us into greater recognition of that "quantum view" by which relationships expand into a form of radical inclusion, where an array of conscious states and energy fluctuations coalesce to form an altogether different view of the sensible.[32]

I want to further tune this perspective of the molecular, the vibrant, and the invisible by way of the bacterial, a life-form hidden within other life-forms and that imparts an essential, elemental force to living matter. The research projects developed by the artist group The House of Natural Fiber from Yogyakarta, Indonesia, lead us into this cellular dimension, where bacterial actants and biological processes are harnessed for social, sonic, and digital work. In particular, their project *Intelligent Bacteria – Saccharomyces cerevisiae* (2011) draws out this relation by addressing the question of the illegal production of alcohol by local residents. In response to religious and national prohibitions on consuming alcohol in Indonesia, as well as the introduction of increased taxes on its sale in 2010, many people ferment their own, which at times can be fatal. (The project was originally motivated by increased deaths after the introduction of the tax.) The illegal and often unsanitary alcohol production inspired the group to develop *Intelligent Bacteria*. The work takes the form of a "live laboratory" for the fermentation process of ethanol and integrates information on its safe production. Fitted with a set of large glass beakers and tubing, electronics and loudspeakers, the work displays as well as *amplifies* the bacterial culture. During the course of the installation, the group also presents the "Bacteria Orchestra," which performs a live mix of the fermenting process. In this regard, the group makes a link between fermentation and sound mixing, cultures of cellular activity and sonic processing. I might speculate further, to pose the group's parallel interest in bacteria and sound as indicating a potent correspondence, one that leads us right into the center of listening as means for delving into hidden depths to confront vital elements.

The work was initially developed in collaboration with microbiologists at Gadjah Mada University, and has at its center the sharing and dissemination of knowledge on methods of safe alcohol production (initiated as part of the group's Education Focus Program). This is furthered in a more recent project, *Micro/Macro Nation*, which addresses the government's proposed cuts to fuel subsidies in Indonesia. The new policy essentially would increase the difficulties around paying for fuel, and in response the HONF developed a research platform to consider new methods of fuel production. Indicative of the group's approach, the project is part-education program and part-installation work, bringing together data on the

economies of fuel production and alternative means found in methods of recycling. The research finally led to the production of a prototype—an installation containing a fermentation machine showing how ethanol fuels can be generated from recycled hay, a computer grabbing data from across the world on issues of fuel and agriculture production, and finally, a visualization that shows how Indonesia may achieve fuel and energy independence. Central to the work, as with *Intelligent Bacteria*, is an extremely dynamic understanding of the relation between microscopic forces and macroscopic issues. Following Jane Bennett, such a perspective performs an important insight into how the molecular, or the bacterial, radically influence much of our daily lives, and how a material like hay can alter national infrastructures. As Oliveros' "quantum philosophy" suggests, it is by recognizing the dynamic inter-connectedness passing between "multiple realities" that greater attention can be given to the contemporary urgencies threatening our environments. For Oliveros, and the HONF, listening may play a crucial role in fostering this expanded attention and criticality.

Attention, and its current politics, may in fact be central to these debates. Malcolm McCullough raises the issue of attention by specifically linking this to the ever-intensifying augmentation of our physical environments with that of digital presence.[33] Attention is captured within an increasingly complex "immaterial" economy, where digital screens, computational sensing, remote presence, and daily rituals interweave with the force of a global logistics; our attention is always already elsewhere within the age of digital capitalism, affording both new modalities of exchange as well as anxiety. Attention is under pressure, forced into a rather endless labyrinth of possibilities; as a consequence, information is no longer useful for certain ends, but rather exists as an oceanic flood that requires new modalities of navigation, orientation, and attentiveness.

This political economy of attention leads McCullough to a greater reflection on what he terms "ambient commons." Ambient commons are emergent environmental territories formed by digital information and platforms, the increasingly present digital screen (in all its forms), and shaped by evermore "peripheral" signals—an informational capture that consistently pulls at my attention, at my body. Remoteness is thus paradoxically manifest as the proximate; in short, it is *already* close by. Ambient commons are explicitly found in such new dynamics, located *in-between* objects of attention and the tangible horizon of digital connection.

Ambient commons operate equally as a new formation of social relations and economic structures, one defined by the networked reach of digital activities. As a commons, they are exposed to both colonization *and* expressions of resistance. As the HONF demonstrate, the capacity to resist the hierarchical dictates of a state policy is bolstered by the possibilities generated through digital networks and articulated in forms of self-organization, networked information, and creative labor, and especially, through the dissemination of alternative models. Such productions appear by linking a range of peripheral and heterogeneous knowledges, and dramatically find support by reaching out through a global network. The group's

focus on how bodies might find alternative means for sustaining new resistances exemplifies what is crucially at stake in ambient commons: the enactment of new modalities of public life. Here we might highlight this dimension to ambient commons through a notion of the "nanopolitical." Echoing Michel Foucault's theories of biopower, and the biopolitical configurations through which the modern subject is "produced" (while finding recourse to methods of resistance), the nanopolitical is concerned with the intensely powerful procedures by which biopower invades the body and its movements through the expanded spheres of the social. As such, it aims for a set of practices based upon "working with the sensitivities" of corporeality, and "the infinitely small operations that bring us together as bodies in movement, struggle, love, work and so forth."[34] The "body" is thus posited not as a singularity, or as "a container of truth"; rather, it is something "we are and take part of, in sharing movements and sensations." It is explicitly a molecular figure, shaped through processes of exchange, of finding ways of being vulnerable, of charting routes toward "ways of relating to one another beyond our specialised or personalised roles and habits."[35]

The nanopolitical turns us toward the ambient commons defined by McCullough, locating our corporeal experiences within a proliferation of micropolitical movements and augmented interactions in which the body is always in more than one place; importantly, this forms a new possibility for sharing, collective engagement, and for imagining new ways of caring for all types of bodies.

McCullough's work, and the issue of the nanopolitical, provides an extremely suggestive perspective for approaching the subnatural, subarchitectural, molecular, and energetic forms and productions I'm tracking here, and accordingly I'm tempted to link the practices of sound art with features of ambient commons. The peripheral experiences and elements McCullough captures by way of ambient commons, and the territorial disputes central to the economy of attention today, may contribute to understanding the expanded perspectives that sound art constructs with such radical focus. There is certainly a politics of the senses alongside the politics of information, and increasingly it is not only a question of where to *put* our attention, but also how to negotiate the informational pressures and systems surrounding us. Ambient commons are precisely what link the new configurations and bodily forms inherent to digital culture, indicating a new potentiality for alliances and resistances (as well as markets). As McCullough concludes, "May the ambient invite tuning in instead of tuning out. May it do so with an emergent sense of a whole, or at least of continuum," which may also deepen our sense for the linkages between microbes and codes, formal and informal cultures, bodies and places, and all that may be heard through quantum listening.[36] As the HONF suggests, sound art may function as a register of the embedded elements always already active, amplifying and sonifying so as to charge our attention against the continual distractions and capitalistic gains placed upon its sustained focus.

The House of Natural Fiber's projects manifest a DIY ethos, generating propositions and prototypes for "democratizing energy" and bringing forward awareness

of current ecological conditions. I'm interested in their projects and how they underscore a view onto the "agency of the molecular," where legality is a question of bacterial cells, and sustainability can be managed through the fermentation of waste. Returning to Downey, the invisible architectures developed through his works may lurk not only in the perceptions and sensations of networked identity, but also within the bacterial matters below the skin, in the linings of the body, and elsewhere, in the infrastructures of digital exchange. These elements, in fact, participate in ambient commons by explicitly reminding of what we all share: the molecular particles that sustain as well as capture the energies that keep all things going.

The fascination with, as well as the questioning of, organic life is a central thread within practices that cross-over between the arts and sciences; and the spatial productions that integrate a sense for minor culture often accentuate a deeper, ecological view. From humming backgrounds, abandoned buildings, weather conditions, and ambient commons that support ways of being attentive, understandings of embodied life shift dramatically to the vibrancy Bennett outlines. The minor force of subnatures and their related practices lead to an incorporation of marginalized elements, and in doing so force a dissolution of the lines that circumscribe and distinguish what we understand as subjectivity. Instead, radical forms of integration and inclusion appear, to fill the *in-between* with deep promise as well as intensity and confrontation.

A further marginal and subnatural element often brought into the sphere of sound art, and lending to acts of minor production, can be found in plant life. Plants force into view a certain tension when it comes to questions of the built environment, not to mention that of natural landscapes and organic matters. They are clearly fundamental to our environments—to the idea of environment in general—and yet plants are often relegated to the peripheries of architectural work, as strictly beautifying elements (integrating a phobia of the weed), or objects that stand in the way of the act of building; they may function as metaphors within a spatial imaginary, while also intruding upon the abstraction of space central to architectural planning.[37] In this regard, plants occupy an ambivalent threshold between formal and informal spaces, human culture and natural force, providing material for experimental and subnatural practices.

There are many projects that pay attention to plants, specifically as entities full of hidden animate and cellular force, as well as offering sounding or compositional potential, as expressed in Mamoru Fujieda's *Patterns of Plants* (1997).[38] A collection of compositions based on data gathered digitally from plants, *Patterns of Plants* presents music full of melodic experimentation. Using a digital interface developed by botanist Yuji Dogane, the resulting compositions are hybrid constructions, fusing botany and musical technology, as well as diverse tuning systems, instrumentation, and appropriated melodies. From harpsichord and viola to Japanese mouth organ, *sho*, and koto, the composer relishes the intermixing of tonalities and structures, forming a rich and extremely subtle music that seems to locate us within the deep and seemingly silent presence of plants.

The life of plants is further considered by media artist Leslie Garcia in her project *Pulsu(m) Plantae* (2011). Using a variety of stimuli, from lighting to water to sound and touch, Garcia focuses on how plants react, capturing these rather unseen responses in amplified sound. Her project acts as a workshop aimed at developing not only the means for hearing the sounds of plants, but also for considering the plant as an animate presence. The focus on such vital energies is equally found in the work of Scenocosme and their project *Akousmaflore*. Developed by the artists Grégory Lasserre and Anaïs met den Ancxt in 2007, the work appears as a hanging garden in which each plant is turned into a live sensing interface. As the artists state: "Scenocosme uses the plants like sensors. With interactive technology, plants become instrumented, and their senses are augmented. The sensing approach used in this technology treats plants and humans as a biological interface. Plants and humans become living sensors."[39]

As in Garcia's work, the Scenocosme project attempts to create a heightened interactive experience, and in viewing video documentation of the installation what becomes so clear is the degree to which such interaction enlivens not only our listening, but the tactile sense as well. Acts of touching, caressing, fondling, and even embracing reveal an extremely sensitive "instrument"; the plants respond to the slightest of contacts, which immediately intensifies a feeling for our own sensate bodies and the plants as life-forms, materializing in the emanations of amplified sounds, or what the artists define as "the voice" of the plants.[40]

Central to the works I've been exploring here is a great dedication to *becomingsensitive* to our surroundings and the elemental energies that configure and inflect much of our experiences, and the experiences of others. Vibrant matters, invisible architectures, bacterial cells, and the sonified expressions of plants, these form a constellation of references and productions that energize the ways in which we come into contact with *other materialities, other collectivities*. Sound art is a field of practices drawing focus onto such matters. In doing so, it leads by way of the ear toward an intensification of microscopic and cellular encounters and occurrences—the sensations arising in that point of contact; what exists within the molecular, and that informs and infects the very breath we take, is articulated, mobilized, sonified, and transmitted so as to not only accentuate the power of the sensed, but also to intensify the relational parameters of common life.

Phantom Memory, Secrecy, and the All Too Real

In considering these qualities of subnature, and the subsequent minor or subarchitectures built from sonic events, I've been led into marginal, molecular, and hidden regions and spaces, each conditioned by energetic elements and atmospheres, where listening must strain itself, to lean forward into a constellation of agitated molecules. As part of this, a deep sense for the intimate and the proximate appears, specifically in relation to what may live and breathe under our skin, or within the cells of other organic matter close at hand. In this way, sound art occupies

a complex space between research and aesthetic production, between documentary capture and fictional telling; often what we hear is an amplification of what is already there so as to deepen our listening sense. Thus a type of oscillation occurs, one that weaves together an auditory imaginary with the tangibility of the real, forming what I may refer to as the *all too real*.

What I find striking is the degree to which sound art is able to engage with the real, the tangible, and the concrete, while always maintaining a palpable and investigative connection to the imaginary, the intuited, and the ephemeral. I take this as an indication of sound's own inherent potentiality and behavior, as one that offers a dynamic interaction between multiple fields of experience and sensing. The *presencing* enacted by sound art is precisely one that allows us to be extremely sensate, able to pay attention to what is around us, and deep within, while relating this toward a broader imaginative arena—of emotions and the ineffable, of spirits and the sensed, the invisible or the disappeared. I may suggest that sound art operates according to faith in sound as a path for unsettling the dichotomous view that emphasizes the real and the imaginary, subject and object, as stable and distinguishably separate territories; a hyper-experimental platform by which ideas and materials collapse into frequencies of the *all too real*, which are riddled with the unnamable and the unspeakable, and thus are communicative of the complex drive of the body which always mixes things up.

Focusing on what I'm calling the "all too real," I'm interested to insert a final coordinate within this appendix with a view toward the psychological, or the psychoacoustic, to highlight this as an additional question within these zones of sonic subnature. The artist and writer Budhaditya Chattopadhyay investigates the question of presence, and how sound suggests another understanding of perceptual experience. For him, sound and listening are intensely "associative," never singular but always already superimposed across multiple levels of presence and that easily stitch together present and past, now and then. As he suggests, "Knowledge about the locative source of sound becomes blurry in its juxtaposition with memory, contemplation, imagination and mood," which creates a rather "disorienting" experience.[41] This associative property of sound is, for Chattopadhyay, a central articulation of what he terms "nomadic listening"—a listening that wanders across thresholds of presence and absence, the immediate and the remembered to create all sorts of associations. Interestingly, the author further elaborates this by way of reflecting upon his own "migratory" status: "when I hear the distant sound of what may be a horn, it reminds me of numerous other horn-like sounds from different cities that I have heard …"[42]

Chattopadhyay's view is extremely suggestive for understanding the ways in which sound provides a deep sense of presence, of *presencing*, that immediately links to what is also absent, momentarily forgotten or disappeared. The temporality of sound is fundamental to our experience as listeners, acting to prompt our feelings for places, of the here and now, and yet in such a way as to heighten our sense for what is already missing or passing: memories of previous experiences, possibly, as well as the energetic intensities that still reside within our auditory

Leif Elggren, *Under the Couch* (2011), Freud Museum, London. Photo courtesy of the artist.

unconscious. In this regard, a sound may loom to ultimately rivet together presence and absence, to open a door onto the all too real.

Considering these questions of presence and absence, sound and memory, the work of artist Leif Elggren can be appreciated as a continual expression of sound's potent ability to give way to the *all too real*, as a collapse of time and space, and the shuddering of subsequent reverberations. Elggrens' works lead us into the uncertain territory of the associative listener, reminding of sound's ability to unhinge from a stable referent, object or body, and to draw out sudden associations, memories, phantasms, and also repressions.

For his work *Under the Couch* (2011), produced for the Freud Museum in London, Elggren made an audio recording from under Freud's sofa. The sofa—in this case, the sofa where countless patients lain or sat upon, to recount their dreams, their worries and anxieties to the expectant analyst—functions as a type of vessel, or as Lucia Farinati, curator of the project poses, a "listening device."[43] Elggren's recording seeks out not only the ghosts of the voices of patients, but equally the possibility of hearing *through* the sofa. The psychoanalytic sofa is highlighted as a particularly active place where listening itself has found a new point of registration: to hear not only what is spoken by the patient, but more so, the unconscious itself and the intensities of the fragmented self.

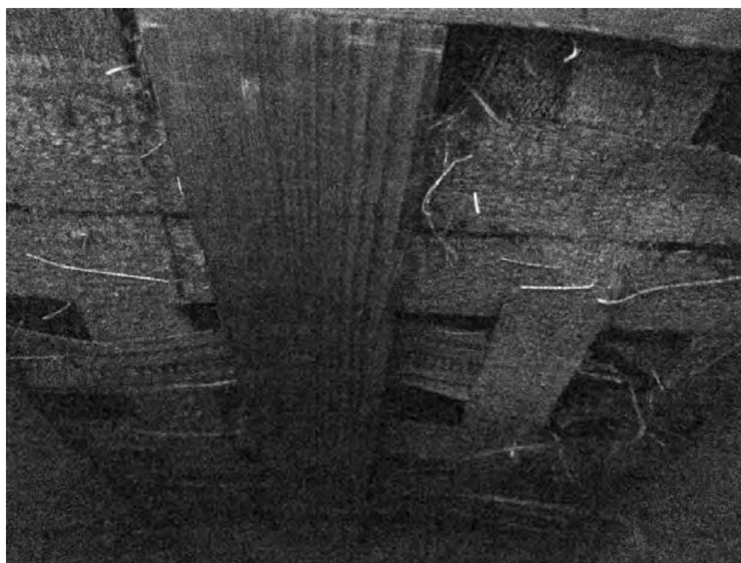
Elggren has continually sought the trembling conditions of the unconscious, the shadowy underneath of the body, and the ghosted territories of memory. His works give us an audible view onto the population of existential phantasms, and in doing so reveal the individual as not so much a body standing in the world, but rather a figure always already constituted by more than we can know. Particularly for Elggren, memories seem to continually *press in* to influence the expressions and

anxieties of subjectivity. For example, his work *Extraction* (2002) is a recording made from within the artist's mother's uterus. As Elggren states:

> This basic sound material was recorded in my biological mother´s uterus with my not yet developed teeth used as a fundamental and simple recording device a few days before my birth. This sound material was kept recorded and hidden until recently inside one of my wisdom teeth, but has now been brought to daylight and exposure. Digitally mastered, reproduced and sent out into the room which we all mutually share and which we usually call reality, the world. Sent out with the main purpose to change that room.[44]

The resulting work is an hour-long block of electrical sound, a complex drone that bristles with slight fluctuation; it is more a form of unleashed "energy" than composition with the purpose, as the artist suggests, of transforming the room in which listening occurs. To stir, and alter.

Elggren ceaselessly confronts primary wishes, memories, and fantasies, and his works are startling depictions and materializations of their lingering influence—movements toward what he calls "the magnificent center." The use of sound in his works thus operates as a literal channel for probing and delving into the peripheries of consciousness—to sound out an inner acoustic. Elggren harnesses particular sounds as vehicles for embodying what can no longer be recovered: the magnificent center can only ever be a dream, a fantasy, a phantom memory, and yet one that functions as a feverish base for production—to reanimate what may be buried, in his teeth, or under the sofa.



Leif Elggren, *Under the Couch* (2011), Freud Museum, London. Photo courtesy of the artist.

As *Under the Couch* reveals, the recording made under Freud's sofa is haunted by the traces of disappeared voices—all those that have spoken and uttered upon (or through) this listening device—as well as Elggren's own obsession with *going under*. As he states in the liner notes to the related CD release: "I can tell you that almost everywhere I have been, in an apartment or somewhere similar, I have crawled in under a bed and made some small drawings if I could. Excusing myself to go to the bathroom has many times been the perfect alibi to sneak in and make my actions in private, without being caught."[45]

This space *under the bed* is certainly a space connected to the unconscious and the drives of the body; it is a space underneath, hidden, and secretive—a psychoacoustic space echoing with what we may one day hear. This realm of the below is given poignant description by Gaston Bachelard in his *Poetics of Space*. Considering the space of the cellar, which is the ultimate territory of the below, he writes: "… to go down to the cellar is to dream, it is losing oneself in the distant corridors of an obscure etymology, looking for treasures that cannot be found in words."[46] Elggren returns to this darkened territory for his private activities of dreaming and drawing, listening and recording, amplifying precisely those "distant corridors."[47]

His practice results in a phantasmic aesthetic where any single object or identity is interrupted by an addition, whether in the form of a memory, of the below, or also, that of channeled voices. Elggren's ongoing engagement with the figure of Emmanuel Swedenborg further iterates the artist's concern for interrupted identity, for an identity always already haunted. *Angel Modulations*, a CD capturing a series of recording sessions Elggren undertook in 2007 while at the Swedenborg summerhouse in Stockholm, is an attempt to "carry" the voice of Swedenborg through the artist's own.[48] Elggren's interest is not so much in the content, but in the possibility of contact, a spectral communication whose sonic features are fully marked by *the beyond*. What we hear is a voice suddenly overwhelmed, or overtaken, by the pressures of an unseen force; it breaks, it multiplies, it is a voice drowning in noise.

Elggren's work contours the area of sound practices I've been exploring in this appendix with a pressure found not in structural vibrations, or weather conditions; the subarchitectures of energy, and the micro-productions of organic matters, while extending the spatial and relational enactments of sound art toward that of the atmospheric, the vibratory, and the molecular, are also suggestive of unconscious life and the drives that fixate us on the unimaginable. As Elggren's sonic works testify, listening is prone to dynamic slippages and obsessions—a nomadism—to forge new links across time and space, and between present and absent bodies. Going under the bed to record the lost sounds existing below the line of audibility, Elggren tunes us to invisible presences that no doubt live as so many agents and actants, and that may drive us toward the ineffable.

The question of memory, the unconscious, and invisibility, in turn, is one that must be considered on a political level. As Bennett's work suggests, the agents of

change are fundamentally operating within the matters surrounding us, and often wield effective influence through an animate presence that is mostly peripheral to our attention. Bacterial flux, vibrational energies, and phantom memories are thus operating on the field of power, and are fully implicated within the political economies traversing the globe. As I've been interested to consider, sound, as that elemental material making tangible the *in-between* and spiriting a range of relational contacts, is extremely operative in terms of enabling practices that hinge together diverse bodies and materialities. The "dirty listening" that I'm mapping here is one that relishes such intersections and productions, such palpitations and sensations that pass between and through bodies and things. And that also lend to the force of our freedoms of expression.

I'd like to conclude with the question of freedom, and the power dynamics at play within this field of the unconscious, as well as in acts of *secrecy*. The territories of the below, as well as that of the ambient and the molecular, must also be understood to overlap with the more nefarious operations of surveillance, a *listening in*, and the forensic apparatuses that increasingly relate the body and the social to the level of microscopic information. These function within a system whose increasing capabilities render us susceptible to all sorts of biopolitical invasion. The nanopolitics of contemporary forensics is indicative of a greater sweep, one that invades and catalogues the molecular as so much coded information.

The works of Rainer Krause, an artist originally from Germany and working in Chile for many years, often focus on issues that consider the politics of listening, drawing out the tensions between social conversation and apparatus' of policing. In particular, his project *Kleiner Lauschangriff* ("Small attack listener"), initially presented at the Museum of Solidarity, Santiago de Chile in 2011, is based on the

Rainer Krause, *Kleiner Lauschangriff* (2011), Museum of Solidarity, Santiago. Photo courtesy of the artist.

Rainer Krause, *Kleiner Lauschangriff* (2011–2012). For the course of one year, the artist made daily recordings of conversations with people. Photo courtesy of the artist.

artist recording conversations with people. Such a seemingly simple undertaking though is explicitly shaped by references to histories of surveillance and their continuation within today's environment.

For the work's presentation, Krause intentionally located his work in the basement room of the Museum, which was specifically used by the secret police under the dictatorship of General Pinochet for tapping phone conversations. Presented within this underground chamber, the artist placed a white customized vest on the back of a chair embroidered with the statement: "Fellows: for better care every conversation with me can be recorded." The work thus articulates a somewhat ironic view onto acts of recording to draw out the uncertainties and ambivalences that may exist between the archive and its more covert motivations. While we may support a notion of historical record, at the same time recordings participate within all types of spying and incriminations. Recordings, in fact, have become central to our contemporary cultures, where data is endlessly stored, copied, and transferred across innumerable digital channels. Krause additionally addresses this question in the second exhibition of the work, exactly a year after its first installment. Following the presentation at the Museum of Solidarity, the artist decided to continue the work: for one year he attempted to make recordings each day, throughout his usual routines and experiences. Whenever leaving the house, Krause would wear the customized vest (this time, a black one), thereby announcing his intentions to the general public. From conversations at the shopping mall to interactions with students, Krause developed an audio archive of conversations over the course of the year. This process though had a set limit: he decided not to exceed one terabyte of data. This digital material was subsequently stored on a single hard disk and exhibited at Sala Juan Egenau, University of Chile, along with

a list detailing all the places where the recordings were taken. The hard disk was presented within a transparent acrylic box and locked with a "secret key," rendering it inaccessible to visitors.

Krause's work emphasizes the possible appropriation of every conversation, reminding that words, and their circulation, by wielding great force and freedom may also prompt governmental offices and authoritarian states to monitor and appropriate their ongoing articulations for certain ends. Secrecy and freedom of expression, covert listening and social interaction come to interlock, held within a suggestive project of appropriation and symbolized not only by the final hard disk, but initially by this territory of the Museum's basement, a space of covert intensity and hidden intentions, and in this case, one marked by brutal history and the hushed silences that contain its reverberations.

Leif Elggren's occupation and obsession with the territory of the below, and all related unconscious phantasms, can be understood equally as a space of terrible monitoring: a zone additionally shaped by acts of policing and surveying, and processes that instill fear within the populace. As Elggren acutely shows, what may lurk below can haunt—or as Krause's work further suggests, *terrorize*—the imagination. The invisible and the hidden are thus always marked by the dynamics of power.

The project of Rainer Krause leads us to an expression of "presence" located within the subarchitectural, though one that manifests in the form of a figure in the dark listening in, a voice trapped in silence, a sound archive full of political uncertainty, and the pressures that circle in and around its muted audibility. Krause's project is one that unsettles the spatial and aural imagination with what is so present and yet absent at the same moment; the hidden mechanisms of surveillance always pose the threat of physical abduction and the silencing of others. Acts of *presencing* thus may be understood as processes that enhance or amplify invisible and secret energies, whether in the form of phantom memories or that of surveillance apparatuses, unsettling the demarcations that keep space in place so as to highlight the below, the hidden or the seemingly empty room as full of particular force.

Concluding: Nanopolitics, Peripheral Publics, and Cohabitation

I'm interested in sound art as a field of practices that nurtures ever-broadening relations to places and things, bodies and materials, people and creatures, and that initiates an array of related productions often aimed at intensifying levels of attention. By considering such aspects I've been led to ideas of subarchitecture and the minor practices of space, which, in occupying the peripheral zones of the weathered and the abandoned, carve out rich forms of expression and inhabitation, specifically within those regions most often discarded or overlooked. Through such work, new modalities of relating to the found, the trashed, the transient, and the marginal come to spirit a new materialism—a crafting of "the instrument" from

fragments and shards, as well as from the forces of weather, vibrations, and the ambient. Such aspects support a deepening of the senses, leading to expressions of agency and the actant based on radical attention, processes of *attending to*; placing one's attention upon peripheral subnatures may broaden the experiences of contact and dialogue, even to the point of intense multiplicity and diffusion. This materiality is continually unsettled and displaced by an obsessive concern for all that may elude our grasp; the molecular and the hidden are continually foregrounded in projects that amplify and sonify the animate particles under surfaces, within the textures of things, and that importantly connect embodiment to that of the energetic. Here, attention may also be directed *at us*. Subsequently, matter *and* energy, perception *and* sensation are brought into a deep complicated weave. This may be further understood as an oscillation specifically between the acoustic *and* the acousmatic—that is, between the spatialities of the real and the tremors of the imaginary. Sound art pivots upon this unsteady and generative point, hinging together the immediacy of the everyday with the intuited worlds contained therein. *Our listening is located within multiple realities*, which may enfold us within greater relations, and which may equally intensify the fragmentations central to existence.

Sound art eloquently stages such dirty intensities, leading to productions that disrupt and unsettle hierarchies with horizons, subjects with all types of animate presences, ideas with their material counterparts, their embodied *drives*. These productions bring us under the surface, and accordingly set the scene for a psychology of the below, a psychoacoustics in which abandoned spaces, secrecy, and the hidden all come to act as triggers and coordinates within a sonic act, a deep listening. In this way, sound art puts into question the limits placed upon the body, teasing its edges with the pressures of what Gaston Bachelard calls "the instant"—the time of the event.[49] Is not sound art often requesting a deeper engagement with the *all too real*, as that which diffuses my body, unsettles myself, tuning all particles to a starker, richer, and more complex orchestration? A temporality edged by so many memories, durations, and futurities?

I want to conclude this appendix with a number of threads of speculative thinking, which twine themselves around notions of public life, cohabitation, and the creative ways in which critical questions may be asked. Might sound art be heard to initiate forms of practice in support of new expressions of agency? Is there a way in which the construction of deep attention spirits greater sensitivity to our own bodies, as well as those of others? To the silences so full? If sound art is essentially a careful configuration of molecules, a sculpting of the air, a base for aesthetical listening, can we follow it as a proposition for a nanopolitics, that is, a platform for challenging precisely what is always already at work, those discourses, technologies, and social systems that impress themselves upon, within, and around *my body*? As well as the groups we find ourselves in?

I may elaborate such questions by considering the work of Peter Cusack, and his "sonic journalism" of dangerous environments, *Sounds from Dangerous Places* (2013). Traveling to the exclusion zones of Chernobyl and the Caspian Oil Fields, as

well as along the Tigris and Euphrates rivers in Eastern Turkey where controversial dam projects are planned, among others, Cusack records the sounds, things, people, and experiences found there. Such work locates us as listeners within spaces of contention and contestation, as well as surprising beauty and intimacy; pollution and social injustice, decay and disaster are counter-balanced by the voices of those Cusack meets, as well as the textures and technologies on-site, resulting in captured atmospheres riddled with complexity. The recordings are a journalistic survey, as well as a diary of what happens when our attention turns to the difficulties of others.

> When faced with irresolvable issues on this scale, how can an individual artist, or any concerned citizen, respond? My answer has been to inform myself as far as is possible, but also to listen to the small voices, to the environment itself, to those whose personal knowledge of the area goes back generations, to those on the front line and to those whose lives have been changed forever by events over which they had no control.[50]

I appreciate Cusack's example and how it points toward a heightened concern for interaction, of moving from the major channels of information to more minor exchanges, where knowledge is grounded in direct meeting, as well as by sensing what may be found within the detritus. In this regard, the project of listening is certainly a relational activity, one that affords face-to-face meeting and caring, but also one that supports the coming into being of "a public." Here I use the term "public" to suggest a form of association, however temporary, weak or unspoken, and which by nature contains the possibility of future solidarity. We move *away* from ourselves when we listen, to return more fully, and it is just such a circulation that enables a sharing of space, an association with what surrounds me. I may suggest that sound art, in seeking out peripheral zones of contact, and by bringing our attention toward the territories between human and non-human, bodies and things, energies and expenditures, incites the formation of publics *at the periphery*. These "peripheral publics" I would characterize as existing below the line of an articulated "public sphere," as an instant of meeting found not in the articulation of debate, or even the fullness of conversation, but in the associations gained from drift and daydream, chance encounters and secret missions, improvisation and attunement, intense listening and sounding, journeys that move around the obligations and expectations of appearance, of a full singularity. In this way, sound art expands and disrupts an understanding of agency and public life, to incite recognition of what has always quietly been there, and brought into proximity through an instant of attention, care, sounded collectivity, and which may not necessarily require any particular form of vocal address. Rather, within this territory of peripheral publics, affiliations are made according to what Michael Warner terms "the visceral" experience of publicness: the pressures and pleasures, the urgencies and joys of cohabitation.[51]

Sound art is an experimental project aiming for connection, whether across or through architectures and spaces, between species, within locations of certain silences or even through the interrupting force of explicit noise, and finally, by tuning into the sonorities of subnatural ambiences and the energetic presences that disturb subjectivity. As Gissen suggests, subnatures are important precisely because they challenge what has come to occupy the center of our spatial realities (and which greatly condition what a "public" can be) to ultimately support productions of inclusion—practices that contend with what has been left behind. As Cusack reveals, there is much to be found within zones of exclusion. Peripheral publics exist as formations around such practices, specifically through acts of attention that seek out affiliation with marginal elements. In the case of sound art, this may be on the basis of hearing *more than can be imagined.*

It is my argument that something potently influential resides within the trajectory and trembling of any sound, something that unsettles the stability of our material surroundings and which doesn't stop at the edge of the body, but travels inward, and through, to ultimately force us out. I hope by recognizing this body as a "relational body" fully wed to organic and inorganic matters, I might give further detail to these intensities of the auditory, following particular artistic works that lead the way to another type of listening: the event of radical association formed by agitated molecules.

Notes

1. The notion of "dirty listening" is something I've been pursuing for some time, and which appears under different guises in past work, for instance, what I also describe in *Acoustic Territories* as the "promiscuous" nature of sound. See *Acoustic Territories: Sound Culture and Everyday Life* (New York: Continuum, 2010).

2. Timothy Morton, *Realist Magic: Objects, Ontology, Causality* (Open Humanities Press, 2013), 110–111.

3. Ibid.

4. Ibid.

5. I'd like to make reference to a recent doctoral work by Ruth Hawkins *The Smooth Space of Field Recording* delivered at Goldsmiths' College, University of London, 2013. Hawkins gives a rich analysis of the practice of field recording, specifically challenging many of its conventions of both production and especially, reception (listening habits); in contrast, she developed four projects that aim to disrupt and unsettle these normalized patterns around the practice, offering complex and conceptual works that from my perspective lead precisely to a dirty listening.

6. David Gissen, *Subnature: Architecture's Other Environments* (New York: Princeton Architectural Press, 2009), 22.

7. Ibid., 25.

8. Jean-Paul Thibaud, "The Three Dynamics of Urban Ambiances", in *Site of Sound: Of Architecture and the Ear, Vol. II* (Berlin: Errant Bodies Press), 43.

9. See Édouard Glissant, *Poetics of Relation* (Ann Arbor: The University of Michigan Press, 2010).

10. Mark Bain's *Bug* work is permanently located at Brunnenstrasse 9, Berlin, and was developed in collaboration with Tuned City, a festival and research platform focusing on sound and the city.

11. I particularly value Barry Truax's examination of "acoustic communications" and how sound acts as a temporal and spatial medium for environmental information. He also highlights how vibration can resonate cavities within the body, to cause "tension" and stress. See Barry Truax, *Acoustic Communication* (Norwood, NJ: Ablex Publishing Corporation, 1994).

12. See Shelley Trower, *Senses of Vibration: A History of the Pleasure and Pain of Sound* (New York: Continuum, 2010).

13. See artist website http://raaf.org/

14. Ibid., 89.

15. Tao G. Vrhovec Sambolec, *Manual for the construction of a sound as a device to elaborate social connection* (Berlin: Errant Bodies Press, 2010), 88.

16. See Luis Fernández-Galiano, *Fire and Memory: On Architecture and Energy* (Cambridge, MA: The MIT Press, 2000).

17. Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: Wiley-Academy, 2007), 32.

18. John Grzinich, from an interview in ear room (2009): http://earroom.wordpress.com/2009/10/01/john-grzinich/

19. John Grzinich, text from liner notes, *Zeltini* CD (Belgium: unfathomless, 2005).

20. Jill Stoner, *Toward a Minor Architecture* (Cambridge, MA: The MIT Press, 2012), 7.

21. Ibid., 10.

22. Ibid., 15–16.

23. Ibid., 62.

24. Ibid., 64.

25. My view here certainly favors a rather "optimistic" perspective on sound's ability to circumvent the formalized structures of "power" through more subtle and sensual actions. This is not to overlook the ways in which sound is continually incorporated into methods of crowd control; the use of sound weapons specifically relies upon the porosity and vulnerability of our ears to reinforce state power. As I tried to consider in my book *Acoustic Territories*, sound as a medium is appropriated and re-appropriated specifically through acts of "territorialization" as well as "deterritorialization," producing cultures and politics, as well as technologies, that shape public manifestations. In this regard, I would hold up sound art as a deterritorializing platform for the disruption of the functionality of state logistics and all such militarized applications.

26. Pauline Oliveros, "Quantum Listening: From Practice to Theory (to Practice Practice)", *MusicWorks*, No. 76 (Spring 2000), 37.

27. Jane Bennett, *Vibrant Matters* (Duke University Press, 2010), 3. (my emphasis)

28. Ibid., 10.

29. Ibid., 25.

30. For more on the question of energy and the arts, see Douglas Kahn, *Earth Sound Earth Signal: Energies and Earth Magnitude in the Arts* (Berkeley: University of California Press, 2013).

31. Valerie Smith, "Juan Downey: The Invisible Architect", in *Juan Downey: The Invisible Architect* (Cambridge, MA: MIT List Visual Arts Center, 2011), 28.

32. The notion of "radical inclusion" I'm pursuing here, as an echo of Oliveros' "quantum listening," is supported by her statement: "Music is no longer merely human notation, machine calculations, or even merely vibrations and sensations of sound"; instead, it is a "fluctuating totality" in which sounds, composer and listener are inexplicably connected. JoAnne C. Juett, "Pauline Oliveros and Quantum Sound", in *Liminalities: A Journal of Performance Studies*, Vol. 6, No. 2, October 2010: p. 5. I'd like to also draw attention to the work of Carl Michael von Hausswolff, in particular his interest in the infective and influential potential of sonic particles. He often intervenes through sound works that charge the air with subliminal force, implementing drones, radio signals, and sonic frequencies. See in particular his work for the Istanbul Biennial (1997), which was presented inside the Atatürk Airport, and subsequently released on CD. Carl Michael von Hausswolff, *Perhaps I Arrive—music for Atatürk Airport, Istanbul* CD (Cologne: aufabwegen, 2008).

33. Malcolm McCullough, *Ambient Commons: Attention in the Age of Embodied Information* (Cambridge, MA: The MIT Press, 2012).

34. The Nanopolitics Group, *Nanopolitics Handbook*, edited by Paolo Plotegher, Manuela Zechner and Bue Rübner Hansen (Wivenhoe/New York/Port Watson: Minor Compositions, 2013), 24.

35. Ibid., 26.

36. Ibid., 20.

37. One brief example in support of this view can be found in the work of Yona Friedman. A renowned experimental architect and urban thinker, Friedman throughout the 1960s, and to the present, developed a highly socially engaged practice; often integrating forms of participation, and a sense for malleable form, Friedman nonetheless depicts architecture as an intensely urban sprawl: modular forms hover above the city, and render human subjects as players within this spatial utopia. I'm at a loss to find any plants within his architectural vision—one must wonder: where have they gone within this moment of humanistic space? See Yona Friedman, *Toward a Scientific Architecture* (Cambridge, MA: The MIT Press, 1975).

38. Mamoru Fujieda, *Patterns of Plants* CD (New York: Tzadik, 1997).

39. Quotations and information found on the group's website http://www.scenocosme.com/akousmaflore_en.htm

40. Ibid.

41. Budhaditya Chattopadhyay, "Auditory Situations: Notes from Nowhere", in *Journal of Sonic Studies*, Vol. 4, No. 1 (2013). Found at: http://journal.sonicstudies.org/vol04/nr01/a06

42. Ibid.

43. Lucia Farinati, *Under the Couch* CD (Stockholm: Firework Edition Records, 2012).

44. Leif Elggren, *Extraction* CD (Stockholm: Firework Edition Records, 2002).

45. Leif Elggren, liner notes, *Under the Couch.*

46. Gaston Bachelard, *Poetics of Space* (Boston: Beacon Press, 1984), 147.

47. The bed as a zone of primary wishes and amplifications is also central to his audio work, *Pluralis majestatis*, in which Elggren utilizes a metal bedframe to extract "a certain 'voice' or a sound, and let it go." Leif Elggren, *Pluralis majestatis* CD (Stockholm: Firework Edition Records, 1997).

48. Leif Elggren, *Angel Modulations* CD (Stockholm: Firework Edition Records, 2011).

49. See Gaston Bachelard, *Intuition of the Instant* (Evanston, IL: Northwestern University Press, 2013).

50. Peter Cusack, *Sounds from Dangerous Places* (Thornton Heath, Surrey: ReR Megacorp, 2012), 18.

51. See Michael Warner, *Publics and Counterpublics* (New York: Zone Books, 2002), 21–64.

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