1. INTRODUCTION

Audio technologies offer affordances for forms of representation in musical practices unavailable before their advent. The recording ‘chain,’ from microphone to storage medium to amplified reproduction allows the incorporation of ‘real-world’ sounds into musical, or organized sound, contexts. These electroacoustic technologies frame environmental sounds in seemingly neutral or naturalized ways, although they are by no means neutral. It is important to remember that environmental sound recordings are transduced, mediated representations of environmental sound(s), and that both human and technological agency are always implicated in these processes of mimesis. The temporal and spatial displacement of environmental sound recordings allows the creation of “…surrogate environments…” (Truax, 2008, p. 104) both in terms of our mediated everyday soundscape, as well as in the potentialities afforded to composers.

Mimetic electroacoustic practices will be considered in terms of embodied forms of transduction and prosthesis. The environment will be considered as a form of music, and music, as a kind of niche building, will be considered as a form of environment made possible through audio technologies. Finally, both listening and sound-making will be considered as technologies of the self and forms of awareness practice affording us a more nuanced understanding of our world.

2. RECORDING

2.1 The Role of the Microphone

The recording process begins, of course, with the microphone transducing acoustical into electrical energy, allowing composers to record sounds from the environment and to incorporate them into their work. While a seemingly neutral documentation process, the microphone, like the camera lens, requires the recordist to choose what to record and from what position, thus framing the recording in a particular way. The resulting recording is an index of the recordist’s “composed listening.” (Norman, 2004)

While the recordist clearly has intention and agency in making a recording the microphone itself exhibits a form of agency by requiring the recordist to move in particular ways, and by mediating his or her choices through the polar response pattern and frequency response of the device itself.

The microphone, in effect, defines the space and sound of the resulting recording in conjunction with the intentions, interest, and goals of the recordist. As soundscape composer Hildegard Weterkamp, says: “the microphone can impart an intense glamour… [and] listening is a silent intelligence that directs us to what we think matters.” (Norman, 2004, pp. 86, 77)

The definition of microphone as transducer may be extended to that of a ‘transducing prosthesis’, since we may consider the recordist to be actively transducing his or her composed listening into the material form of a recording and composition through its use, allowing the recordist to reach, or in this case, listen, further or more closely than otherwise possible. The model of transduction is developed to included transduction of acoustical energy into electrical energy which is further transduced into feelings, thoughts, and emotions in order to finally be transduced into compositions and other sound artifacts.

2.2 The Recording

By allowing one to store sounds, recording has fundamentally altered how we listen. As alluded to above, sound recordings are more than merely passive documents that give us access to some objective reality. The sound recording as document changes our understanding and interrelationship with the soundscape immediately in the act of creating it.

Not only is sound displaced from its original time and place of occurrence, but traces of the space within which the original sound took place are inscribed into the recorded document. We can hear the “aural architecture” (Blesser & Salter, 2007) of the space to some degree in every recording. Even close microphone techniques, used to minimize the sound of the acoustic space, impose their own particularly intimate and eroticized perspectives.

2.3 Amplification and Reproduction

Amplification and reproduction allow us to experience sound in previously unheard of ways. Amplification may work like a sonic microscope giving us access to sounds that would otherwise either be difficult to hear, or would be impossible to hear at all. Westerkamp’s Kits Beach Sound Walk lets us hear the sound of barnacles, something normally impossible, particularly within an urban environment. David Dunn in The Sound of Light in Trees...
using specially developed microphone technology allows us to hear the movements of beetles under the bark of trees.

The medium of recording, through its mediation of our listening experiences, and by allowing new relationships to be discovered and created, changes our relationship to sound, the environment, music, ourselves, and each other.

3. ENVIRONMENT AND MIMESIS

The environment, through recordings and soundscape compositions, becomes music. We can hear our environment musically and compose our listening in accordance. By composing with real-world sounds we are engaging in mimesis: we are imitating aspects of our world. Audio technologies, including recording as well as computer based audio technologies, allow us unique opportunities to engage in mimesis.

The use of environmental recordings in soundscape compositions is one obvious way of using mimesis. There are also numerous examples of computer modeling of natural processes that are clearly mimetic. Algorithms have been developed over the years to model the behaviour of complex natural events. Stochastic distributions are used to model the sound of raindrops for example, and algorithms have been developed to model the behaviour of swarms, herds, and flocks.

Adorno contrasted mimesis with rationality, (Windsor, 1996, p 192) and considered mimesis as a threat to the autonomy of the artwork: a process he associated with ‘primitive’ forms of art and culture. Adorno characterized art “as the product of enlightened rationality.” (ibid) It may perhaps be the conscious pursuit of the ‘primitive’ or the pre-rational that fuels soundscape composers to pursue mimesis in their work.

Michael Taussig, in his book Mimesis and Alterity, considers mimesis as fundamental to our understanding of the world we inhabit. To Taussig, mimesis is positive in its opposition to Adorno’s notion of a universal and context-free rationality and valorization of the abstract.

4. EMBODIMENT AND PROSTHESIS

Auditory experience and audio technology afford unique forms of embodiment. Sound is experienced as an enveloping and immersive medium. This is true whether we are hearing acoustic sound or technologically mediated sound reproduced through loudspeakers. It is important to make a distinction between the origin of a sound and the source of a sound. The source of electroacoustic sound is the loudspeaker, whereas the origin of the sounds heard will refer back to the now displaced original context of the sound recorded. This distinction clears up the problem of considering recorded sound as ‘disembodied.’ (Chanan, 2000) We can consider that the origin may be disembodied or displaced, but the experience of the reproduced sound is located in the situated space of the listener. Embodied experience is the only kind of experience we have, and are able to have, whether it occurs in a mediated environment or not.

Auditory experience, which encompasses the experience of music in any form, may be seen as a form of awareness practice that utilizes music as a prosthetic device to ‘reach’ further into our world and to enhance our understanding. Music allows us to occupy and be part of the world in the environment or territory within which we are situated. Mimetic forms of electroacoustic music “…enhance our understanding of the world, and its influence carries over into everyday perceptual habits.” (Truax, 2008, p. 106) Music may be considered as prosthesis precisely because it enables us to explore aspects of our world in ways in which we would be unable to accomplish otherwise.

If we consider music as an environment, a territory, we can understand it as a form of niche-building, where we can build virtual yet material worlds for which we are perfectly adapted, in the case of our own creations, and perfectly adaptable through the transformative experience of engaging in the other’s constructed niche.

Listening and soundmaking constitute ‘technologies of the self’ insofar as auditory experience affords us the opportunity to transduce the vibratory forces of our world into thoughts, beliefs, desires, and actions and through our actions transduce these into material prostheses with which we may sing the world into tangible form and partake of its power to engage.

REFERENCES


