Notes Towards Sound Ecology in the Garden of Listening

Virginia Madsen

As soon as I heard my own voice I couldn’t make the piece. It was a truly shocking experience. I had come to view these recording experiences as a type of connection to the environmental sound. [By speaking] I was violating that connection which I was trying to make with the sound. It makes me feel quite emotional to think about it even now. But this had happened and I didn’t know it had happened.


Go into any music shop these days and you are likely to be confronted with a whole host of CDs, cassettes and videos all aiming to soothe and nourish the soul with hour upon hour of healing 'natural' soundscapes. Nature appears in the form of these 'natural symphonies' (also the name of an Australian CD label) -- recordings of specific ecosystems. It has also innocently entered (via the digital) the subcultural realm of techno dance and trance music, as evidenced in the extraordinary success of the Deep Forest series.

Prior to this, and concurrent with it, has been the sonic exploration into the natural sound world by all manner of composers, sound artists, radio soundscapists and sound designers.\footnote{Natural sound environments around the globe increasingly are being recorded, explored and 'tuned' using the hi fidelity technology at our disposal. All sorts of sound windows 'appear' to be opening onto a pristine and undisturbed Nature. Les Gilbert remarks:}

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I don’t know whether we’re replicating natural environments, or re-creating or simulating them. All these words are wrong to me because as soon as we do the sort of things we do, we are re-depicting, we are creating something entirely new.\footnote{Les Gilbert remarks:}
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Natural soundscapes or sonic eco-architectures are in effect being grafted as 'virtual realities' onto the flesh of Culture. Les Gilbert’s soundscapes, for example, were used as an integral part of the San Diego Zoo in California. Here, through an interactive computer sound system, various complex recordings from 'the wild' were re-located and 're-depicted' for the benefit of human and particularly (one imagines) animal ears. Through a sonic 'virtual reality' grafting process animals were able to hear the sounds from their original habitats and interact with them. The already virtual space of the zoological garden with its artificial pools, mountains,
vistas, etc., was given a second degree of actualisation by embedding the animals in this sonic environment. Here 'the wild' meets its lost shadow or echo (memory): a new time-space comes into existence which may well serve to confound our preconceived notions of the 'natural' and the 'cultural'.

Much of this genre of sound design is rooted in the field of acoustic ecology, which finds its inspiration in the 'sound design' philosophy of Canadian composer R. Murray Schafer, particularly through his book *The Tuning of the World*. Here Schafer outlines his 'World Soundscape Project' which, he states, 'will begin to lay the foundations of a new inter-discipline -- acoustic design'. For Schafer, acoustic design begins with a particular ecological ear. His research enters the realm of ecology proper by 'collecting sounds threatened with extinction' and by analysing a sound environment (that is, an acoustic ecosystem of interrelations of sounds which in turn reflect interrelations in the bio- and technospheres) in order to 'decide which sounds to preserve, encourage, multiply...'. Almost like weeds, '[b]oring or destructive sounds will in this process become obvious and we will know why we must eliminate them'. Schafer is not only referring here to nature as separate from culture but specifically is discussing the lo-fi soundscape he believes we are fast approaching everywhere. For Schafer, this essentially is a homogenising, polluted, and 'disturbed' environment where noise (equated with poorly designed acoustic technology) is the parasite that consumes its host.

As Schafer outlines it, any ecosystem or environment has a sonic character which comes from the particular economy of sounds which bestow upon this system its 'signature tune'. When the sounds of an environment lose their definition they tend toward white noise. And white noise, as Schafer hears it, is the dominant key of the lo-fi soundscape.

The influence of Schafer's thinking can be heard in the work of Australian writer and radiophonic artist Paul Carter, who has worked in association with Gilbert. He writes:

> What the musical richness conveys is information about the health of the environment, about the integrity of its spaces, dimensions and distances. Degraded environments will be sparsely orchestrated and badly tuned, while relatively undisturbed habitats will be harmonically subtler and rhythmically more various. These are the precise meanings that the music of the bush communicates. The musical signature of a natural environment may be essential to its survival.

Gilbert's labour of listening, recording, and tuning such an environment is of course a cultural practice and a specifically compositional one, but it is above all to be heard within a larger
ecological / conservationist practice. The perspective of listening opened by the microphone is 'scientific' and bio-acoustic in spirit, as well as musical. But it is the precision instruments of microphone and its hi-fi 'pick-up' via low noise analogue and now digital recording technology, which gives this practice its epistemological and ecological foundations. Through hi-fi, sound presents itself as the distilled spirit of the real -- its vibration, its invisible presence.

Noise, then, is the enemy of high fidelity, as in Schafer's lo-fi soundscape, where noise becomes the parasite which threatens to dominate the environment in the same way as weeds choke a vacant block. Lo-fi, like the eco-system degradation it refers to, amounts to a 'sound sewer' or a 'screen of white noise'.\(^\text{10}\) Beyond this, it contributes to the loss of the 'sacred' (in Schafer's terms), the loss of resonant wildernesses. One of these neglected sacred spaces worth reconsidering, according to Schafer, is the space of listening. To this I would add the lived time or \textit{durée} of listening.

Listening lies at the heart of what we might now define as a sound ecology -- an ecology which implicates listener and environment, sound and acoustic space. In this reckoning it is not just the sounds of an environment that are threatened with extinction but our ability to listen to them, to distinguish a tune, to extend ourselves through \textit{technē} into sonorous space and to open ourselves to a more 'germinative thinking'.\(^\text{11}\)

Just as there are a variety of ecologies and eco-sophical\(^\text{12}\) positions, however, we should be wary of one all-encompassing sound ecology which seeks to dwell outside of an engagement with culture. It is time to open up sound ecologies, to explore what in fact is an eco-sophical, heterogenous field where the subject is not a given, and is as susceptible to the loss of place (bewilderment) as to the possibilities opened up through 'machinic'\(^\text{13}\) mutation and cultivation. In an urban intellectual environment 'cultivation' has acquired the taint of soil erosion and factory farming -- of exploitation. But 'cultivation', in the sense of gardening, may still hold the key to a re-enchanted sense of nature. And perhaps this re-enchantment will stem from the space opened up by the relative slowness of an open and tactful listening, a listening which is aware of its presence, is alert, solicitous, and open to the possibility of interpenetration and mutation. Listening is not only an action born of the desire to know and to acquire; one cannot strain too much to hear. Sounds must be allowed to settle and to resound.

If listening is to be recognised as playing a key role in the development of what we might call an eco-sophical practice (a practice that impinges on the environment, the socio-political as well as on a rethinking of subjectivity\(^\text{14}\)) then the ear might lead us
away from dialectical oppositions between subject and object, nature and culture. Listening as an eco-sophical practice would abandon a passive positionality of the ear and become actively charged. The ear is only passive to the extent that it is not lent or cultivated.

Schafer suggested in his essay 'Radical Radio', that we might put microphones in remote locations uninhabited by humans and broadcast what ever might be happening out there; the sounds of wind and rain, the cries of birds and animals -- all the uneventful events of the natural landscape transmitted without editing into the hearts of the cities.15

Here, he was proposing an acoustic ecology which relied for its effect on the magical and healing properties of high fidelity radio and recording technologies. But the key to new and more productive hybrid forms may in fact lie in an ancient gardening (cultivating) practice, that of grafting. Schafer adds: 'It seem[s]...that since man has been pumping his affairs out into the natural soundscape, a little natural wisdom might be a useful antidote'. In this he is echoing an almost shamanistic belief that nature's forces (through sound) could be gathered up and channelled by a medium, by a healer, and brought to bear on the sick body (traumas) of the patient. The patient was in need of being touched by nature's voices and of being infused with their healing power. Here that patient is culture. But in Schafer’s vision, we are bound by the essential dualism of the western metaphysical tradition. In these terms culture is as distinctly separate and distant from nature as is the occidental trope of wilderness.

What Schafer touches on here turns out to be a central trope of what we might call the 'culture of nature' -- the trope of innocent nature versus corrupting culture. Many writers have critiqued this simplistic schema. Donna Harraway, writing about the repressed 'fictions of science' pervading scientific discourse, suggests:

Nature is such a potent symbol of innocence partly because 'she' is imagined to be without technology. Man is not in nature partly because he is not seen, is not the spectacle.16

The easy elision made between innocent nature and, for example, Pygmy culture (the sampled singing in the Deep Forest recordings) should concern us for the same reasons as Woman being equated with nature concerns Harraway and other expressly feminist readings. Nature, wilderness, and the forest have long been at play within cultures and carry diverse meanings.17 Neither the 'deep forest' nor Woman exist outside history, outside cultivation. Nature, woman, and all kinds of cultures are not to be seen as threatened 'acted-upon' reserves. As long as we see ourselves and our tools outside of nature’s reserve (or try to conceal them, even if in the
name of ecological protection), we set up an impossible ecology beyond the reach of history or politics, an ecology that will always consider 'us' (those with tools, technology) as exiles inhabiting an 'offworld', a kind of 'spaceship earth', where survival becomes a matter of regular reconnaissance trips to nature (hunting trips?) in order to re-infuse sick culture with nature's healing spirit. In this light, the 'New Age' appears naively unaware of history. Women, 'noble savages', children, animals and nature are often reduced to the realm of the bewildered, the speechless, the static, even when removed to the magical and high-definitional realm of high fidelity. That other nature we call culture (coming from agriculture, cultivation) is simply edited out. Cultivation now 'appears' to leave no traces, no history, just as the sound designer, in faithfully recording the wilderness (and representing it to the public) seeks to silence all noises of his passing, particularly the excessive rustle of his history-writing-in-sound.

Let's address Les Gilbert's bewilderment upon hearing his own voice while trying to create a soundpiece in Kakadu National Park. This loss of speech and subsequent trauma speaks as a wound speaks -- of a subject, a place, a time. It came only after he had been intensively listening to the sounds around him via digital longplay technology. He writes:

> At the time I was using a PCMF1 digital [audio tape] recorder which for the first time allowed me to make complete two hour uninterrupted recordings of an environment. That becomes a process then of the observation of the environment -- lizards walk over your feet, things which wouldn't happen in the normal course of events happen. In this type of recording, you have to sit in this place, totally still for two hours. I then realized this was an amazing meditative experience which provided a real sense of connectedness to what I was doing; so when I'm recreating these things [as sound documents] I'm recreating, to myself, the essence of those experiences. I'm totally convinced that somehow or other the power of those things allows something to be transferred.18

Gilbert's trauma19 at hearing his own voice coming back to him in the wilderness is the trauma opened up by the noise of language, of self consciousness, of cultivation -- that which separates him definitively from nature. This leads him onto the path of silence and into the garden of an intensive listening.

The paradox of course is that Gilbert, through his high fidelity sound recording technologies, and Schafer, with his version of a radical radio where no editing occurs -- no cuts, no wounds -- are present in nature as never before. It is through tools of cultivation that the sound ecologist is able to call up neglected 'wild sound'20 and 'sew' it as a virtual presence onto the flesh of culture -- and give it new prominence as a player rather than as a background. This is the type of 'magic' Gilbert performs when he grafts his wild
sounds onto cultural sites such as the museum, the gallery, the zoo. To Gilbert, authenticity comes only from the relation he has to the sounds, a relation established in the durée of listening.

He enacts the suturing of virtual sound flesh, alleged bearer of a transcendental presence, onto the cultured listening spaces of second nature.

What we hear are the wild gardens shaped by the cultivating machinic listening of the sound ecologist. Gardens which are not the simple transport of nature, or wilderness, into culture, but which involve the graft; that liminal and transformative space which is the turbulent border zone of the culture of nature. In this space, this durée, we could go on producing purely ornamental cultivars or, instead, labour in a place where we might respond creatively to intensive listening, raise hybrid forms where even noise might lose its parasitical nature and instead be turned towards the reinvigoration of neglected grounds.

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1 For instance, *Wild Soundtracks* by Jane and Phillip Ulman was featured at the recent Brisbane Biennial. Musical consultant to the Biennial and composer Jonathon Mills is now a senior research fellow on the Acoustic Environment at the Royal Melbourne Institute of Technology's Faculty of Environmental Design and Construction. Soundscapes and radiophonic art based on sounds recorded in 'the wild' make up a large proportion of the work broadcast on the Australian Broadcasting Corporation's (ABC) audio arts program, *The Listening Room*. CD and 'wilderness' cassette magazines add to this proliferation.

2 Les Gilbert interviewed by Tony MacGregor, ABC Radio, for the 'Second Nature' series, broadcast on *The Listening Room*, ABC FM, 1990. Gilbert was then Director of Melbourne's Sound Design Studio (now defunct). The company's work principally involved the production of large-scale computer interactive sound designs, using a vast collection of recorded soundscapes from many different eco-systems.


4 *ibid.*, p. 4.

5 *ibid.*, p. 4.

6 *ibid.*, p. 205.

7 *ibid.*

8 Robert Pogue Harrison takes on philosopher Michel Serres' idea of the parasite when he says: 'More precisely, we are beginning to appear to ourselves as a species of parasite which threatens to destroy the hosting organism as a whole'. See *Forests: The Shadow of Civilisation*, Chicago: University of Chicago Press, 1992, p. 199. I have in fact drawn on Serres' use of the word 'noise' which in French also comes to mean noise in the system, the parasite. (See Serres' *The Parasite*, Baltimore: Johns Hopkins University Press, 1982.) It goes without
saying that noise, as the parasite-in-the-system, cannot be completely excised. Communication can never be a pure pathway to Truth; noise is part of its message. Noise is both parasite -- interference to communication -- and the possibility, through chaos, of rejuvenation and mutation.

9 Paul Carter, sleeve notes from the CD Gone Bush by Les Gilbert, Natural Symphonies, Camden, Australia, 1992.

10 Schafer, op. cit., p. 98.

11 See on this point Gemma Corradi Fiumara, The Other Side of Language, A Philosophy of Listening, London: Routledge, p. 60. Fiumara consistently uses ecological metaphors.


13 Guattari ties his eco-sophical thinking to the need for not only an ecology of the natural, of the environmental, but for an ecology of the virtual spaces opened up through the coupling of humans and machines.


17 This is not to say that the natural world is a fully cultured subject; humans have language and the world continually slips out of language's net as an excess. As Harrison remarks: 'Language is a differential, a standing-outside of nature, an ecstasis that opens a space of intelligibility within nature's closure...Language is the ultimate 'place' of human habitation...We do not inhabit the earth but inhabit our excess of the earth'. Robert Pogue Harrison, op. cit., p. 201.

18 Gilbert interview, op. cit.

19 Trauma, from the Greek, originally means any wound.

20 'Wild' sound is used to refer to 'actuality' or background ambience in film/video production. It is always 'collected' by the sound recordist in order to make the audio-visual scene sound natural.