

Chapter 7 - Cricket Voice and the Power of Wilderness

[Abstract](#)

[Acknowledgments](#)

[Chapter 1](#)

[Chapter 2](#)

[Chapter 3](#)

[Chapter 4](#)

[Chapter 5](#)

[Chapter 6](#)

[Chapter 7](#)

[Chapter 8](#)

[Chapter 9](#)

[Chapter 10](#)

[Chapter 11](#)

[Appendix A](#)

[Appendix B](#)

[Appendix C](#)

[Appendix D](#)

[Bibliography](#)

I am no longer interested in making music in the conventional sense; I am interested in addressing cultural and social concerns in the musical idiom. That's why I use environmental sound and language as my instruments. I want to find the "voices" of a place or situation, voices that can speak most powerfully about a place/situation and about our experience in and with it. I consider myself an ecologist of sound. (Westerkamp 1985: 8)

So begins Hildegard Westerkamp's 1985 article about her experiences in the Zone of Silence in Mexico; experiences which were eventually to lead to the composition of Cricket Voice (1987). This strong statement about her approach to music and sound ecology is a result of the influence this wilderness experience had on her compositional approach as well as her philosophy about daily living.

Cricket Voice and the Zone of Silence Story are not Westerkamp's first compositions based on wilderness sounds. Cordillera (1980) is Westerkamp's compositional working of Norbert Ruebsaat's long poem of the same name, a work based on sounds from mountainous regions in western Canada.

Cordillera means a ridge or chain of mountains. It is also used generically to describe the continuous range stretching from Tierra Del Fuego to Alaska. The poem describes an ascent and movement through the high country. It's composed of seventeen shorter poems of "snapshots" of specific locations, and these are each given their own acoustic shape as the composition proceeds. (HW: Inside the Soundscape #3 liner notes)

The difference with the Zone of Silence is that here, the genesis of the compositional work is not with Ruebsaat, through a completed poem, but rather with an experience that Westerkamp and Ruebsaat share, along with several other artists and their daughter, Sonja.

Artists in the Zone of Silence

The Zone is a mountain desert area in the northern part of Durango State, in Mexico. It is called the Zone of Silence not because of its silence (although it is very quiet) but rather because of its unusual magnetic qualities. Compasses, clocks and radios do not work in some regions of the area as a result of magnetic peculiarities, and for the same reason, it attracts thousands of meteorites. It also has dramatic and unpredictable weather. Because of its unusual nature, it has been recognized by shamans as a spiritual place, and contains many ceremonial sites both ancient and contemporary. It has also been researched by scientists from Mexico and the United States, including NASA (Westerkamp 1985: 8).

But until December 1984, the Zone had not been investigated by a group of artists. Domingo Cisneros, a Mexican Indian artist on staff at the Direccion de Turismo y Cinematografia in Durango, invited fourteen other artists to join him for the month of December, camping in the Zone: Richard Martel, visual artist; Sylvie Panet-Raymond, choreographer/dancer; Lise Labrie, sculptor; Jeanne McDonald Poirier, poet; all from Qu'Ybec. Wanda Campbell, writer, from the United States. Benjamin Medel, filmmaker; Francisco Perez Garcia, visual artist and poet; Gloria Cano, historian; Carlos Mahul, filmmaker; all from Mexico, along with Ruebsaat and Westerkamp from British Columbia. Two children also took part: Ayesha Cisneros and Sonja Ruebsaat.

The landscape and environment were entirely foreign to almost all of us. We camped under minimal living conditions. We didn't know each other, we didn't speak the same languages. What brought us together was a belief in art, and the notion that with artistic techniques you could discover and give voice to an environment that at first seemed totally hostile. (Westerkamp 1985: 8)

Westerkamp notes that one of the most unexpected experiences the artists had during this time was their intense memories of their childhoods, and how they used to explore place, especially unknown places such as holiday destinations, as children. She relates how as a child, the initial arrival at a place was often a let-down. But a child's genius is to find the magic in a place, to find that it is not just a normal mountain, a normal lake, but something quite unique.

I feel quite similar here now, because, of course, I had that same let-down when we first arrived. The colours here seem very dull, you can't really see them at first when you come from a place like British Columbia. Then you slowly find your way into the place, you begin to find its colours and its sounds, and that is exciting. This environment holds a lot of secrets in that respect. You need to work a little bit harder, to do a little more listening, a little bit more looking to get to know it. (Westerkamp 1985: 9)

She also finds it important to get beyond what people have said about the place beforehand: to discover the place for herself, to make personal contact.

So it was really important for me to walk off on my own and rediscover these things that had already become clichés in my mind. For example, the meteorites didn't excite me at all when I saw them strewn all over the ground. So what? I had to really step back and

make contact with, imagine the immenseness of a meteorite shower. It was as if the expectations had almost dulled my perception. (Westerkamp 1985: 9)

Even after this period of personal contact, Westerkamp still feels that works of art, especially when they are concerned with foreign places, evolve slowly by necessity. This evolution takes place through a long process of getting to know the place, its influence on her sonic perception and knowledge, the recordings made in the place, the particular sonic materials she chooses to work with. This is the reason that Cricket Voice was only composed several years later.

Zone of Silence Story

Initially, Westerkamp composed Zone of Silence Story, an acoustic environment for a gallery installation at the Museum of Quebec in Quebec City, December 1985 to January 1986. This composition is also included on the cassette Inside the Soundscape #3.

Because the Zone is so quiet, one of the features of the artists' experience there is the emergence of the desire to make sounds. The first sound on the cassette is recorded clapping and foot stomping inside an abandoned desert water reservoir. Westerkamp notes that the clarity of this sound derives from the silence that surrounds the reservoir. This is followed by the sounds of a group arriving at campsite, including voices speaking Spanish, French and English, and the sounds of crickets' night song. "Rockstories" records a game played by Norbert Ruebsaat with the two children, Sonja (seven years old) and Ayesha (nine years), in which they tell stories about rocks that they pick up, and make sounds with the rocks.

"Sonic Meditations and Star Language"¹ includes an excerpt of a longer sonic meditation that was performed at camp at night-time. The excerpt focuses on the word "silence" spoken in three languages. A poem series by Ruebsaat called Star Language is juxtaposed with the song of a single cricket with pitch modulation as a result of tape speed changes. This recording of a solo cricket song is later to form the basis of the piece Cricket Voice.

In "The Truth is Acoustic," Westerkamp makes sounds from cacti. She discovers that by plucking their spines, rubbing and caressing their surfaces, and pounding on them with an improvised drumstick, she can produce sounds that suggest the interior spaces of the plants through different resonances. These sounds are recorded very close up and later appear in Cricket Voice as well.

Ruebsaat watched Westerkamp do these recordings. Then after hearing the recordings, he wrote a poem:

Imagine the world
trying to get inside this plant.
Knocking on it
as one would on a sealed chamber.

The spines snarl angrily
like dogs chained to a doorpost.

The meat resists
the hand or the knife,
and when you finally enter
you're already lost in infinity.

In taste or text,
I mean texture or taste,
in pulque

it speaks
back at you hollowly
as if it were its own sound.
Already a magical potion:
maguey, ocotillo, cardenche,
mezcal, sotol
the infinite ear.

This process of discovery is exciting to Westerkamp. It is an intimate process, producing sounds that speak of hidden interiors, and reveals sonic life inside plants that may appear inert to the eye.

I am excited by the fact that I found incredibly resonant sounds in dried up palm tree leaves, or in hostile looking cacti. It is exciting to me to be able to bring that back to the city. Here is a plant that looks absolutely dead from the outside and then you put a microphone close to that plant and you touch it, knock on it, "play" on it, and you hear the life inside it. It is as if you hear an acoustic representation of the secrets that this environment holds. (Westerkamp 1985: 9)

As she discovers the plants as instruments, playing them actively, Westerkamp feels as if she is tracing the sound of musical instruments back to their origins in local materials, part of the landscape.

You suddenly perceive a continuity between wilderness and culture, life and artistic production. And that continuity is created through an ecological relationship between a place and the people inhabiting it. (Westerkamp 1985: 9)

Desert "Nightlife"

Westerkamp was disturbed by times in which the group did not exhibit an ecological relationship to the environment, particularly with regards to sound.

I found that, acoustically, there was a lot of imposition onto the environment by members of the group, especially at night by the fire when we were all together. The nights are very fragile times here, with a very strong sky of stars, very bright stars. They are very spectacular nights, with an enormous silence, only crickets singing. But they became disrupted regularly by the same kind of voice, the drunken voice, the noisy voice. I experienced this voice as an urban kind of imposition, and an ecological interaction between environment and human being was not possible under those circumstances. The night didn't have a chance. (Westerkamp 1985: 8)

Westerkamp hears this as an imposition because the group in their noisiness could not hear the quieter sounds of the night, and denied themselves the possibility of finding a place within the existing night soundscape. Westerkamp notes that an ecological relationship can only develop over time, and that given the culture shock of the situation, perhaps it is unrealistic to expect a more balanced voice to emerge over a few weeks. Westerkamp exorcised the spirit of the drunken voice by creating a sound sculpture, in which the sound source was desert wind blowing on emptied beer and tequila bottles. She had heard that sound every day in the camp, as the wind blew over bottles that had been emptied the night before.

She tuned the bottles, using a small amount of water in each one, then placed them facing the south-eastern wind, slanted into the wind and supported by rocks.

As I was piling up the rocks ... the shape of a turtle emerged. The whole process took me four days. And while I was carrying rocks, the wind played its music on the bottles. The sound was surprisingly quiet, but it became a soothing, slightly haunting accompaniment to my work. The longer I worked the more clearly I could hear the "music." I internalized it to such an extent that I could hear it in my inner ear long after I had left the place. (Westerkamp, "Listening to the Zone of Silence," unpublished paper)

The soundscape imposed a certain kind of listening. It was so quiet that initially it could not be heard. In order to hear it, the listener had to remain close, without talking, for a long time.

The soundscape had become a piece about the experience of time, the slowing down of time, time coming almost to a standstill. It had become the locus for "a time and place to wait and a time and place to do nothing." (Westerkamp, *ibid.*)

Westerkamp created a sculpture that transformed the materials of the drunken voice into the materials of a quieter, more balanced voice, still of human origin, but more integrated with the sounds of the desert, creating in the process her own spiritual site. She imagines that as time passes, the voices of the sculpture will change as the water evaporates. She fears that it will not remain intact, and will become garbage, believes that perhaps she should have dismantled it. Ironically, she had made it in one place where she could not record its quiet sound, because of the constant presence of wind. The voice of this sculpture could only stay with her in memory.

The desert certainly can do without even the faintest memory of any urban visitor and I suspect so can the people who live in the desert. But we, the urban visitors, cannot do without the experience of the desert, we need to hear the desert voices, wilderness voices. It is, I feel, the political and social responsibility of the composer to make "voices" audible that in an urban, capitalist society at least have become inaudible. (Westerkamp, *ibid.*)

Her experiences in the Zone of Silence affected the composition of Cricket Voice, several years later. In some cases this is through the use of sounds made by the artists during their stay, and in other cases it is through the evocation of emotions and images that Westerkamp discusses about this experience. Cricket Voice makes the voices of wilderness, of desert, audible to the urban listener. It also makes audible the urban person's experience of desert: its initial seeming hostility and alien nature, its haunting qualities, the experience of immense space. These characteristics of the piece emerge through a detailed analysis of the musical structure of the piece, as well as through images and commentary that arise through listeners' reactions.

Musical Structure

Cricket Voice is a tape piece, 10:55 in length. Its primary sound source is the night song of a single cricket, recorded close-up. The first two minutes of the piece are composed almost entirely of sounds derived from this source, accompanied only by the sound of wind (unprocessed), which is the first sound heard. During this initial section, the cricket sound is slowed down by various amounts to create several pitches. This section is characterized by high vertical density, as a result of the various pitches being heard

simultaneously, as well as rhythmic complexity as the sounds at various tape speeds, layered upon one another, produce repetition of the original rhythm of the cricket sound stretched to different lengths, creating a sensation of polyrhythmic cycles. At 49 seconds, the original cricket sound is introduced, immediately perceived by its difference of timbre and tempo from the slowed down versions.

At 1:48, a voice-like sound which was created by processing a mix of slowed-down cricket sounds to emphasize and harmonize the pitch, is introduced. This sound stands out because of its timbral difference and less rhythmic character than sounds of the previous section. Another timbral difference is perceived at 1:52, when the sounds of whipping are introduced (branches moved through the air like whips). This sound is characterized by its rhythmic regularity, in contrast to the more irregular processed cricket sounds. At the same time, the slowed down cricket sounds fade slightly, receding to the background of the piece. Shortly thereafter, at 2:29, sped up percussive sounds made from knocking on the leaves of a palm tree are introduced. At 2:40, a loop from the same source is introduced. These sounds are related to the whipping sounds in that the strong beat of each rhythmic cycle is at a similar rate (around sixty beats per minute), but their timbral difference provides contrast. The loop is panned constantly from its introduction to the end of the section, a period of almost three minutes, creating a sense of constant, restless movement over the slow voice and slowed cricket sounds. The period from 1:48 to 5:20 is characterized by increased timbral diversity, and decreased rhythmic complexity with increased contrast in tempo.

At 5:21, the sound of Westerkamp knocking on the Maguey cactus is introduced. This irregular, fast rhythm with quick, close pitch changes has an intimate quality. The focus on pitch is intensified at 6:00 with the introduction of a loop of a particularly melodic section which rises and falls, playing the Nopal cactus leaves and spikes. Perhaps the most significant change in this section is that although the cricket sound continues throughout, the slowed down cricket sound (which Westerkamp identifies as a heartbeat) is not present at all. For that reason, the perceived tempo of this section is faster than anywhere else.

At 6:44, the slowed down cricket sound returns, shifting perceptual focus to its rhythm. Shortly after this, at around 7:00, a very low frequency sound is perceived (Westerkamp notes in the score that she introduces this at 6:23, but I did not hear it until around 7:00), which shifts focus to the pitch range, which at this point is very wide, from the very low frequency sound just mentioned to the high unprocessed cricket sounds. This wide pitch range is to be present until the end of the piece, giving a sensation of opening out into a large space. This sense of opening out is accentuated by the slow tempo of timbral change in the low frequency drone and slowed-down cricket sounds, creating a sensation of suspended time. In this section, the percussive cactus sounds associated with the previous part are still present, but recede into the background as they decrease in amplitude.

At 8:46, the sounds of clapping and stomping are introduced. Again, this sound attracts attention because of several differences from the previous section: the percussive and fairly regular claps have the resonance of a large enclosed space (they were recorded in an abandoned water reservoir), and are accompanied by vocal sounds that are the first sounds that could clearly be identified as human voices. This sound is foregrounded until around 10:00, when it is gradually faded out. The low frequency drone continues, and at 9:46, the sound of playing on palm tree leaves re-appears briefly. The unaltered cricket sound is fairly constant through this section, disappearing for a few seconds at a time, then re- appearing. For the last ten seconds of the piece, all other sounds except the cricket have faded out: as Westerkamp says, "the cricket has the last word."

Listener Responses

I had a very strong initial response to this work: it was Cricket Voice that I initially heard on the radio several years ago, the first work of Westerkamp's that I had heard. It impressed me with its simultaneous sense of space and intimacy, with its evocation of vast and intimate landscapes, and by the simple fact that the cricket sound was recognizable: it was the first electroacoustic piece that I had heard which used a recognizable sound throughout almost the whole piece. Although at the time I did not know how Westerkamp had constructed it, I had the initial impression that all of the other sounds were somehow related to this recognizable cricket sound. This excited me, and galvanized me: I knew that I wanted to work in this way myself.

Listener responses from other people within my research sample fell along three lines: musical structure, emotional responses and images evoked. Most people who commented on musical structure said little in the other two areas, while images and emotions seemed often to be linked. Several people wrote about the musical structure of this piece. Many were brief comments, while a few attempted to map out a more detailed structure.

Commentary on Musical Structure

In cases where the commentary on musical structure was brief, listeners tended to focus on one aspect of the structure that had seemed most important to them. Three out of the forty listeners who responded to this piece referred to it as "minimalist." One person also made a connection to the work of Steve Reich. Joan Peyser characterizes the music of minimalist composers as static: "minimalists ... reject harmony, rhythm and form in favor of

the creation of a static, trancelike state" (1971: viii). I prefer to define it more positively: minimalist music focuses the act of composition and of listening in some way by limiting materials or process.² In the case of Cricket Voice, the limit is on materials: the majority of the sounds heard in this piece are made from the recording of the solo cricket sound. All of the sounds used in the piece originated in recordings made at the same location, in the Zone of Silence.

One listener hears the minimalism as an intensification of a heard contrast between mechanical and natural sounds: "I hear sharp contrasts of sounds - the mechanical with natural sound intensified by minimalistic effects in the background" (Minfe, India, 51f, has taken a soundscape workshop). Although Westerkamp is not contrasting mechanical with natural sounds all of her sound sources are acoustic, there are no electronic sources this listener may be hearing the difference between unprocessed and processed sounds. I have remarked elsewhere (in the chapter on epistemology and composition) how Westerkamp considers how much to process a sound, not wanting to obliterate it through processing.³ This is a tension which manifests itself in her work, heard by this listener.

Another listener finds the selection of sounds arbitrary, not noticing any relationship between them: "little coherence from one sound to another - it sounds like he [sic] arbitrarily picked a sound to use - little flow" (Smitty the Rickety Old Man, 19m, Queen's electroacoustic music class).

Other listeners comment on the slow tempo and gradual transitions of the piece as the most significant: "gradual transitions" (Augusta, 46f, Queen's electroacoustic music). "Everything a gradual metamorphosis, strands coming to the fore and retreating again - nothing [or very little!] abrupt" (Euro, 22m, Queen's electroacoustic composition). "Useful as abstract wall-paper music, rather than direct experience, since themes develop so slowly" (Ladybug, 33m, Queen's electroacoustic music). "Soothing, repetitive cycles which tend to promote more relaxed breathing, gradual progression from section to section" (Tricam, 33m, University of Toronto Graduate colloquium). "No sense of build up sense of monotony/stability seems to pervade the work, with frequent oscillations being the only form of harmonic difference. It also reminds one of industrial art forms and music one theatre production I saw at the Tramway theatre in Glasgow utilized a similar musical style which was played on a series of mechanical and industrial instruments (cars, tires, scaffolding). It reminds me of Steve Reich and Minimalist composition (Fredd, 23m, Queen's electroacoustic composition).

These latter comments seem somewhat similar to Peyser's characterization of minimalist music as static and trance-like. The comment by Ladybug that because themes develop slowly, the music becomes like wallpaper, may be a rejection of the state of mind that Westerkamp is attempting to create. In her description of the turtle soundscape, quoted earlier in this chapter, Westerkamp refers to it as a piece about "the experience of time, the slowing down of time, time coming almost to a standstill. It had become the locus for 'a time and place to wait and a time and place to do nothing.'" Ladybug's description of this slow-moving state as like abstract wallpaper rather than direct experience is similar to Peyser's description of minimalist music as rejecting harmony and rhythm: both are assuming that in very slow movement, nothing is happening, there is no direct musical experience. Wallpaper has patterns, as minimalist music does: but in wallpaper, the patterns repeat exactly, without change. However, I would argue that one's perception of change at a micro level can be enhanced in pieces such as these. In Westerkamp's music, as in Steve Reich's, I become much more aware of rhythmic and harmonic intricacy within small repeated gestures than is possible in faster moving pieces. The meditative tempo of Cricket Voice does not preclude harmony, rhythm, or form, just as Reich's Come Out 4 does not preclude these musical parameters. Both pieces require a different approach to harmony, rhythm, and form based on a willingness to listen to each moment of the piece in terms of these same musical parameters. Perhaps in listeners who are more accustomed to harmonic forms that are mathematically based or derived from song-verse structures, the forms, harmonies and rhythms of minimalist music are at times imperceptible.

Some listeners commented in more detail about the musical structure, but without referring to particular sections in the piece. For instance, a listener at the Trent Radio Art day who had previously taken a soundscape workshop commented on many aspects of the musical structure, with a particular focus on the rhythm of the piece:

- strong spatial sense
- Initial cricket sound becomes diffused into a man-nature sensibility
- heartbeat rhythm en egale becomes backgrounded behind dryer timbres in faster rhythmic pulses
- the higher the pitch the faster the rhythmic oscillation
- restricted attack sounds palette almost amounts to mnemonics for rhythm

(30 something, 34 f) This listener uses the term 'man-nature sensibility' without making it clear whether this is perceived as a contrast or a continuity. Unfortunately, nothing in the rest of the commentary makes this more clear. However, it is clear that to this listener, the piece is about a person's experience of the desert, rather than an uninhabited wilderness. It is interesting that, like Westerkamp, this listener refers to the slowed-down cricket sounds as being like a heartbeat, perhaps because of the tempo, which at around 80 bpm is similar to the rhythm of a relatively relaxed heartbeat. Also, the rhythmic pulse, with a stronger beat followed by a weaker one, is similar to the sound of a heart. This listener notes that the restricted number of different attacks or sound onset types focuses

increased attention on the rhythms of the piece.

Another listener (Melody) comments on the musical structure of the piece. While she mentions timbral and rhythmic aspects, she focuses on extremes of pitch and the contrapuntal relationship of related sounds at different frequencies:

- very intense
- texturally very dense
- building, gradual changes, introductions, subtractions, transitions
- some live audio?
- wind, cricket, obviously altered somewhat
- rhythmic, also a sense of continuity created through this aspect covers most frequency ranges in a way that I find pleasing [extremes] seems as if there is a kind of counterpoint between the mid-range frequencies and the high range frequencies [cricket vs. percussive sound etc]
- nice use of dynamics
- almost a melodic effect with the drone frequency and higher frequency pitches
- sort of like Indian music extended improvisation on a raga/tala

(Melody, 20 f)

Her description of the relationship between the low frequency drone and higher frequency pitches as being "like Indian music" is interesting in light of Westerkamp's increasing fascination with Indian culture in recent years.

Three listeners mapped out a sectional form for the piece. Dr. Strangelove (22m, Queen's electroacoustic composition) marks five sections:

Portion near beginning made me feel like I was in a swampy/marshy area [pitch-shifted cricket sound?] general feeling in beginning with wind noises - serenity, isolation

4:00 a bit more tense, suspenseful, even agitated feeling in me kind of thing I would like to hear in warped movies

5:20 monstrous sounding

5:40 sort of jungly, outdoorsy feeling, very natural and WILD overall feel: nocturnal, haunting

8:46 nice groove with rhythm stuff, aboriginal sounding (?)

At 4:00, when he notes becoming agitated, Westerkamp is using a lot of panning with a looped rhythm, creating a restless motion in the piece. The part that is marked as "monstrous sounding" is the section where Westerkamp strokes various kinds of cactus. This is the part that I marked as having sounds of inner resonances, creating a feeling of intimacy.

P-Ron (22m, Queen's electroacoustic composition) describes four sections:

A: I enjoyed the use of sustained, rhythmic pulses dynamics were very well used [place] I felt like I was observing a cricket in a field of tall grass with wind blowing

B: I found the transition a little too abrupt; disappointed because there was such a nice initial build up cricket sounds very well placed/positioned almost had a night atmosphere

C: again, transition was abrupt definitely more of a synthetic feel [processing of cricket sounds was obvious] low drone [didjeridoo-type sound was very pleasing] a nice contrast to the initial drones

D: faster rhythm section almost seemed out of place [without visual cues] ending could [unfinished]

It is difficult to exactly place P-Ron's section beginnings in relation to my own, based on the information he gives; however, there are some clues. His Section C would probably begin around the time that the low frequency sound is heard (7:00). Because this low drone is initially accompanied by the cricket sound slowed to various different pitches, this would account for the more "synthetic feel" that he mentions, since there is more processing. The faster rhythm section that seems out of place to him could be the introduction of clapping and stomping, perhaps seeming out of place because these are so clearly human-produced sounds in a sound world defined by the cricket's voice. It is interesting that P-Ron describes the transitions as abrupt, a stance opposite to other listeners' descriptions of this piece as concerned with gradual transitions. His statement that the processing of cricket sounds is obvious indicates that he has experience working with this type of processing. Perhaps this experience would make him more aware of micro-level timbral, harmonic and rhythmic changes, so that transitions that seem gradual to others seem more abrupt to him. P-Ron only describes an image of a place in the first section. Was this image consistent throughout, or did he pay less attention to place as he became more involved in discussing the musical structure of the piece? Or did his attention shift during this structural thinking from a physical place (the cricket in a field) to a more abstract place (sounds that are "out of place")?

Cager (32f, University of Toronto graduate colloquium) describes the piece as having two sections:

first section - establishment of a sort of ostinato background sound and pulsing, phasing washes of sound: evokes images of nature, especially in the oceanic sound of the ostinato [or cricket rubbing wings]

second section-continuation of ostinato background [with stops and starts], additional layers of sound that are percussive in nature -these additional layers produced 2 reactions -

1. that the percussive sounds were acoustic
2. that some sounds were more obviously electronically produced.

in this piece the title definitely is strongly associated with the sound ostinato of the cricket wings that is present throughout. if I did not know the title I would still associate the beginning of the piece with some type of noise from nature, due to the pulsing wash of sound

According to this description of the two sections, I would place the second section as beginning at about 1:52, when the whipping sounds enter. Cager brings up two interesting points. The first is her delineation of one important part in the piece that creates two sections for her: the point at which the percussive sounds are introduced. She then remarks that she hears the sounds from this point as either acoustic, or electronically produced. This brings to mind the reaction from Minfe, earlier: "I hear sharp contrasts of sounds - the mechanical with natural sound." Both of these listeners are hearing contrasts between two types of sound, categorized either as natural-mechanical or as acoustic-electronic. They do not hear the processed sound as a hybrid, an electronic processing of an acoustic sound. At the same time, however, Cager says that even if she did not know the title, she would still associate the beginning of the piece with nature because of the "pulsing wash of sound." The sound from the beginning of the work that pulses is the slowed-down cricket sound, which is electronically processed. So the sound that represents nature for Cager is one that has been treated in the studio, not an untreated acoustic sound.

Cager's description of the musical structure in terms of an acoustic-electronic contrast seems related to many listeners' comments about the emotions and images that this piece evokes. I will discuss emotions and images together, as they often seemed linked.

Emotions and Images

The word used most frequently by listeners to describe the piece is 'hypnotic'. Five listeners used this term, with a sixth referring to it as mesmerizing. This is perhaps because of the repeated rhythmic patterns in the work, and again recalls Peyser's description of minimalist music as trance-like. One person associates the hypnotic effect with the low drone pulsating at the same rate as his heartbeat.

Seven people said that they really enjoyed or liked it. One described it as soothing, and another said that it would be useful to clear one's mind of stress. One listener said that she liked it because it was creepy. Two listeners had ambivalent reactions: "eerie energy/tension, irritating yet strangely alluring" (Live, 20f, U. of Waterloo theory). "I enjoyed it, but it had something about it that was a bit disturbing [although I can't pinpoint exactly what]" (Wim, 20m, Queen's electroacoustic composition).

Some of the images that were evoked by the piece were pleasant. There were images of moving through a generalized nature: landscapes being traversed at great speeds, trekking through fields and mountains, open spaces, a horse galloping, a train rounding a curve. Several people also associated the piece with a night-time experience of nature. They remembered their own experiences with crickets, in open fields or woods. "Open spaces/swamp - my backyard near the river when I was a kid heard frogs too." (Charles C, 29m, Trent Radio Art Day).

Only two people referred to an image of a desert environment, and this was in a session where I introduced the Zone of Silence as the background of the piece, and described what this environment is like. One creates a detailed image of the desert, which she constructs from other environments that she knows (populated for instance with a woodpecker):

I closed my eyes while listening to this piece and visualized a desolate area for the first little bit. the use of both speakers brought the feeling to me that I was actually lying in the desert. When the cricket sound came into earshot, I started creating scenery in my mind. crickets, a woodpecker, a frog. It's quite visual although I haven't been given anything of substance to see. It's quite a soothing soundscape. Near the end when the clapping and stomping sound came into effect, it didn't really seem to suit the entire theme that I had developed in my head. This actual instrumentation had a beat that varied from the rest of the piece. This change brought me from the desert visualization to someone being trapped in a tunnel, tapping continuously to alarm others. interesting. (Ger, 20f, Queen's electroacoustic composition) It is interesting that her visualization only lasted until she heard a sound that did not fit her imaginary place the clapping and stomping, a sound made by a group of people. Until that point, there had only been sounds made by an individual person, or by the cricket, or wind sounds. Since she was alone in her imaginary environment, the sounds of several people disrupted it. Then it changed to an image in

which she was trapped.

In other sessions, where I gave less background information, some people heard the piece as far from a dry place: six people referred to the sounds of water, with two of these describing the sound as like what one hears underwater, and another referring to the sound of being inside the womb.

Alienated Reactions

"I don't like the country: the crickets make me nervous." - Marlon Brando in *On the Waterfront*.

Several of the responses indicated feelings of being trapped, lost, captured, or afraid. Some described these feelings growing throughout the piece: "I feel myself walking through a storm after dark. My body is bent against the wind, and I am fighting to get home. I have a vague, growing, sense of unease, maybe a fear that I can't attach a cause to." (Nameless, 22m, Trent Radio Art Day). "I imagine being trapped within an ice cave, water dripping off the icicles and into a vast glacial pool" (Fredd, 23m, Queen's electroacoustic composition). "Like a windy cliff looking over the ocean in a scary movie. Hair blowing in the wind, kind of oblivious to everything that is happening, until you begin to run from the cliff into the forest. As if you are on drugs for the whole time - everything is distorted." (Beth, 32f, Waterloo theory). "Rain, heart-beat like pattern, changed from rainforest mood to something else horror. Heartbeat pattern is gone-sound reminiscent of a helicopter. Changes to sounds which sound very 'electronic'." (Caum, 22m, Waterloo theory class). Note that in this latter quote, the listener talks about a change from rainforest to horror as he also hears the sounds becoming more 'electronic'. Again the heartbeat pattern, which is an electronically-processed sound, is associated with nature (rainforest). Ironically, when the heartbeat pattern is gone, there are actually more untreated acoustic sounds, when this listener hears a helicopter.

One of these descriptions was a fairly detailed narrative, involving an alien kidnapping:

I see myself taken aboard an alien spacecraft. The low rumblings of the middle section are the whine/roar of the drive and I am caged, numbed but not particularly feeling fear. The throb of the spacecraft leaves and I am surrounded by noise. The alien, cricket sounds multiply and I am examined, tagged, whatever. I am anxious to leave and bang repeatedly on the plastic-like confines of my containment. The alien tells me to [be] quiet (almost recognizable speech). I am disciplined but continue to bang a couple times. There is no pain, or intense sensory input. As if I am viewing from a distance. I hear my footsteps as I stumble away at the end. (Mario Welsh, 22m, Queen's electroacoustic composition).

This is not the only reference to alien cricket life-forms. Seven listeners refer in general to alien encounters, outer space or a sense of being 'out of this world'. Two others refer specifically to the aliens being giant crickets: Raen (22f, Waterloo theory class) says "apocalyptic crickets come to devour. Reminiscent of old sci-fi movies attack of giant crickets but presented in a very real, serious way." Jamca (33f, Waterloo theory class) writes: "I'm in a maze trying to get out every corner I turn I see a huge cricket in front of me blocking my way."

These reactions were so different from my own my sense of ecstasy and freedom on hearing this piece that at first I could not understand them at all. It was recently, when I was watching *On the Waterfront*, that I began to speculate about where they might originate. *On the Waterfront*, a film made in 1954, uses innovative sound design. There are moments where conversations between the principal actors are completely drowned out by ship horns and other dockyard noises, indicating the oppressive acoustic environment of the area. But when the male lead, played by Marlon Brando, talks about the country, which might seem a welcome relief from the noise and dirt of the city, he rejects it, saying "I don't like the country, the crickets make me nervous." In the country, the crickets are a constant acoustic presence at certain times of day, just as machine sounds are in the city. But to Brando, the machine sounds are familiar, yet the cricket sounds are unfamiliar and potentially threatening.

I remember my own experience when I first arrived in Grenada, West Indies, and was living in a rural area. The soundscape was totally unfamiliar, and when I attempted to go out for a night-time walk shortly after arriving, the sound of tree frogs was so loud and close that I almost couldn't move. It took me several days to begin to feel comfortable. My son had a similar reaction to the sound of surf when he first arrived in Grenada. And as I note earlier in this chapter, when the group of artists went to the Zone of Silence, initially they experienced it as an alien and hostile environment. Of the listener response group, Cooil (30m, Queen's electroacoustic music class) articulates this feeling most clearly in his writing:

The title along with the sounds really take me back to my tree planting days, trying to fall asleep at night and getting a little freaked out, trying to come up with rational explanations for all the different sounds outside the tent walls.

Now, it could be argued that cricket sounds are fairly common in the city. I heard some quite clearly one August evening on University Avenue at College in Toronto, in the downtown core. My own strongest memory involving crickets is of walking by a vacant lot next to Highway 427 with my parents the evening after I arrived in Canada. The cricket

sounds were very loud: I had never heard so many crickets in England. Yet cricket sounds in the city are still framed by traffic and other familiar machine sounds. In the country they are more naked.

And when Westerkamp works with the sound of a single cricket, this is the cricket sound at its most naked. Then when she slows down the sound, bringing its pitch lower, she evokes the image of what is for some an unbearable intimacy with the cricket, in which it is enlarged and deepened, seeming to emanate from a much larger organism, and perhaps humans can feel relatively diminished in comparison, therefore more vulnerable.

Although one listener refers to older science fiction movies, I would argue that it is in recent science fiction films that giant insects have become the most terrifying hostile alien, the greatest threat to people. While the horror of a human genetic mixing with insects is explored in Cronenberg's *The Fly*, I am thinking more particularly of the *Alien* series.⁵

The original movie in the series, named simply *Alien*, has been described as one of the most terrifying science fiction movies ever made, more horror than space fiction.⁶ In the *Alien* series, the female lead character (Ellen Ripley), played by Sigourney Weaver, comes into contact with an intelligent alien species which seems a cross between a cockroach and a cricket, at larger than human scale and with a human-like cranium. In each of the films, she uses technology to defeat the alien, in two cases blowing the creature out of an airlock, in another case strapping herself into a full-body forklift with mechanical arms and legs that become extensions of her own, giving her the strength to match the insect. These films also explore the dark sides of pregnancy and inter-species intimacy. The alien impregnates humans, who then give birth through the stomach wall, dying horribly in the process.

When the Weaver character herself becomes pregnant, the creature does not harm her, but comes unbearably close, sniffing her scent. This scene is a marker in the developing relationship between the monster and Ripley. Ripley might be described as a particularly feminine hero because of her ability to develop an intimate relationship with the alien, at the same time that she is willing to sacrifice it as well as herself to protect humanity. But is this particularly feminine? Gaining knowledge of an enemy seems to me to be the basis of espionage, as well as the old folklore phrase "know thine enemy." Her desire for knowledge of the alien, for a relationship with it, is to better arm herself in order to destroy it.

In its exploration of inter-species intimacy and monstrosity, the film associates the alien monster with a natural world that is threatened by corporate capitalism. Thomas Byers describes the monster in *Alien* as representing Nature:

The creature is, in fact, an embodiment of nature as perceived by corporate capitalism, and by an evolutionary science whose emphasis on competition is a manifestation of capitalist ideology. (1990: 40) I believe that the *Alien* series may be a contemporary depiction of urban dwellers' alienation from unfamiliar wilderness environments, the country (unfamiliar place) where the crickets (alien creatures) can make us nervous (lost, trapped, threatened). The generic *Alien*, depicted as a giant insect, is the latest manifestation of human (plus technology) against nature (out of control). The characters of the movie depict various attitudes towards the creature. The corporate scientists in the films wish to domesticate it, to control and funnel its powers, to enslave it. They do not recognize its power to destroy, and do not treat it with respect. Ripley knows it, respects it, but cannot let it live. Ultimately, although the films flirt with intimacy, the relationship developed is all about conflict. This is quite different from Westerkamp's relationship with the cricket, where she wishes to enlarge and deepen the cricket sounds, metaphorically bringing herself closer to a larger insect, without obliterating the cricket in the process.

Science fiction is a popular genre, and the *Alien* series is an immensely successful example. In each film, the threat to humanity is an alien which appears as a giant insect. In each case, humanity is saved by technology. And interestingly, in each case technology is wielded by a woman: in the *Alien* series, Ellen Ripley's role has been described as one of the most interesting and strongest roles ever created for a woman in Hollywood (Byers 1990: 39).

The original *Alien* film also has a very interesting soundtrack, in which the sounds of insects are used to index anxiety in the main character, and bodily sounds (both human and alien) are used to indicate danger. In the film, when the crew first investigates the alien ship, and has found some giant eggs, several parallels to Westerkamp's piece emerge. First we hear the wind (as in Westerkamp's piece). In the *Alien* film, the wind is used to indicate the hostile environment of the planet, and is heard each time we see the planet surface. The crewman's voice makes an explicit connection with a hot exotic environment, saying it's like the goddamn tropics in here. A held note in the musical track heightens suspense. The crew member's breathing is amplified in his space suit, giving the audience member the illusion that she is right next to the crew member, sharing his experience intimately, so close that she can hear his breathing, and feel his anxiety. In the background, we hear high-pitched rhythmic clicking sounds that sound like amplified insect sounds. These sounds are used in the film throughout the sequence where the crew members find the alien eggs. Later, these sounds emerge again each time we see the main character wrestle with the decision to let the crew members back in to the ship.

A little later in the film, there is a birth sequence, beginning as the crew eat a meal

together, and the crew member who we heard earlier gives birth to an alien through his stomach wall. Here, a heartbeat is used to heighten anxiety in the audience, and intimate squishy wet bodily sounds are employed to make the alien seem both very close and too intimate. From this point on, the alien is consistently associated with intimate bodily sounds and wet sounds in general: when the alien kills a crew member later on, sounds of dripping water are juxtaposed with chains swinging, and the crew member lifts his face to feel the water drip onto it, just before the alien interrupts this intimate moment to attack and kill him.

Several sounds in the Alien soundtrack are quite similar to those used by Westerkamp in Cricket Voice, although with very different intent. Westerkamp uses the sound of the wind and of a cricket, simulates a heartbeat, and plays with these sounds using amplification and pitch-shifting to bring them closer to the listener. Her intent in doing this is to establish an intimate connection between listener and cricket. In the Alien film, many similar sounds are used, and amplification is used to create intimacy, but this time with the intention of heightening drama and suspense, to make the audience more afraid of the monstrous alien.

The first film in the Alien series was released in 1979. Of my respondents, only two out of the fourteen listeners over 25 had a response that I would relate to horror or science fiction encounters, although several mentioned some feeling of disturbance. Most of the horror or science fiction responses came from younger listeners, who would likely have been more affected by these science fiction films which are aimed at a young audience. Respondents under twenty five have also grown up with science fiction television series such as the X-Files, programs which use sound design balanced evenly with music in a similar way to that of the original Alien soundtrack, so that recorded environmental sounds are more foregrounded in the sound mix than in most television programs. Rob Watson (22m, Queen's electroacoustic music) says that Cricket Voice reminds him of the X-Files "or a major network television program investigating an alien in area 51, the New Mexican desert. Mysterious, foreboding, terrifying, beat with a sense of driving curiosity." My following journal entry describes how sound design is used in this type of television program to establish a suspenseful mood:

October 27, 1998. Tuesday, 10 pm. Space channel. A program begins without credits. It is night-time, a farmer's field. Establishing soundtrack: crickets, accompanied by a synthesized pulsing wash, a narrow noise-band. The sounds are fairly evenly balanced with regard to amplitude, neither music nor sound effect dominates. Text appears on the lower left corner of the screen, giving the date and location. There is a feeling of expectation. The sound of digging, closeup of a shovel, and there a dead body. It is the X-Files.

Unfamiliar sounds often cause an anxious, alienated response as people feel threatened by what they do not understand. This is reflected in the Brando quote at the beginning of this section: the unfamiliar sound environment of the country can make the urban listener nervous. Recent science fiction programming in film and on television uses sound design to play on this anxiety to create drama in a production. Although Westerkamp intended listeners to hear an intimate encounter with a cricket that would bring them closer to this alien species despite their anxieties, some listeners experience this encounter as uncomfortably close, an anxiety that I believe has been maintained and extended by contemporary science fiction programs.

Other Wilderness Pieces

Cricket Voice is an exploration of the acoustics of a specific wilderness environment as well as a celebration of the cricket's voice within that place, through the ears of an urban visitor. Other pieces such as Cordillera, Contours of Silence, Beneath the Forest Floor and Sensitive Chaos explore other places and environments, all with a similar interest in listening for acoustic clarity, the importance of small sounds, and the exploration of microphonic intimacy with the environment.

A published review of Cordillera focuses on the experience of silence in wilderness:

Cordillera is Ruebsaat's poem of the same name read by him, altered and united with wilderness sounds, again full of silence. Echoes, hallucinogenic noises, mysterious aural gestures, and a lesson in how natural sounds are interpreted, for those who've never really listened to the mountains. (Wreford "Inside the Soundscape," Anerca 1987: 8) There is no sense here of the anxiety mentioned by some with reference to Cricket Voice, although the references to "hallucinogenic noises and mysterious aural gestures" could be related to listeners' descriptions of Westerkamp's work as hypnotic.

Contours of Silence is a piece from Westerkamp's larger work entitled One Visitor's Portrait of Banff. It juxtaposes the sounds of ice, recorded by moving a small sheet of ice along the surface of a frozen lake near Banff, with the recollections about winter silence of Louis Trono, a man who was born in Banff and has lived there for a long time. In her article about soundscape on radio, Westerkamp writes about how she close-miked these small sounds:

The technique of close-miking sounds and creating new sounds by touching the material of the environment reveals sonic resonances, timbres and textures of a place Because it was winter, I found small winter sounds, cold sounds, sounds of ice. I spent time on a side channel of the Bow River where the water was frozen in horizontal sheets

layered on top of each other. By rubbing or knocking small chips of ice on the contours of the large sheets of ice, a very glassy resonance was recorded, ever-changing in its timbre as it encountered different hollow spaces underneath. The sounds had an almost unbearable crispness to them if amplified too much. Because of its incredible clarity the surrounding silence seemed emphasized.... These ice sounds had all the characteristics around which the contours of silence could be brought out: clarity, crispness, acoustic phrasing, changing timbres like the close-up intimate whispers of a human voice. (Westerkamp 1994: 91-92) Here, Westerkamp uses chips of ice to sound hidden cavities below the surface, getting to know the hidden landscape beneath winter through its acoustics. This is a perspective on the idea of north in which silence is the threshold of whispers as much as hollow space, intimate as much as cold and crisp.

In his listener response, a German soundscape composer, Hans Ulrich Werner⁷ (his real name) mentions *Beneath the Forest Floor* when he discusses Westerkamp's work as meditative and focusing inward: "[it] seeks a motive of contemplation. The inner voice. The sound in us, like in 'Beneath the Forest Floor.'" It is interesting that Werner describes a wilderness piece as focusing on the 'sound in us' when the first intuition with wilderness is often to think of the sound "out there." He elaborates: "Sound is inner structure and outer context. Meaning and significance." Indeed, Westerkamp's aim in both *Beneath the Forest Floor* and *Cricket Voice* is to evoke the ability of wilderness to reduce the noise of daily life, giving the urban listener the space and time to listen to inner voices.

Critic Tamara Bernstein describes *Beneath the Forest Floor* as magical and otherworldly:

a magical fusion of sounds recorded in B.C. rain forests. Alongside waves, birds, etc., we hear mysterious, otherworldly sounds that are in fact slowed down versions of the same phenomena. A raven's croak becomes a strange, rhythmic throb that seems to come from the depths of the earth. Other snatches of bird song, when slowed down, yield shimmering sounds that made me feel as if I were hearing the light and life force of the forest. The experience had a special poignancy given the B.C. government's decision last week to allow logging of the ancient forests of Clayoquot Sound on Vancouver Island. ("From Dream to Nightmare," April 27, 1993) Bernstein experiences many images in response to this music, particularly in response to the slowed-down sounds that she describes as mysterious and otherworldly. She describes a strange but not threatening landscape, where throbs come from the depths of the earth (another heartbeat?), and shimmering slowed bird sounds evoke the light and life of this ancient forest.

Sensitive Chaos is less closely linked to a particular place than *Cricket Voice* and *Beneath the Forest Floor*. It explores the many sounds of water, and how water itself evokes as it subtly changes the sculptural shapes of the land it moves through. All of the sources are water sounds, recorded in a number of locations. I played it for a listener at York University in February '94. His response:

-violence (disturbing nature)
-archetypes of water sound? I never realized that water could make so many different sounds)
Log hitting side of dock? In rhythm of natural waves - less disturbing (Nom, 53m)
Once again, the anxiety arises of a potential violence in disturbing nature, or a potentially disturbing violence within nature. This listener initially hears the piece as disturbing a kind of primordial peace. Later, he records that it is less disturbing when the piece takes on the rhythm of natural waves. Ultimately, he hears what Westerkamp intended: the archetypes of water sound, the endless variety of water voices.

Westerkamp's wilderness pieces are not relaxation nature tapes, where familiar classical music is combined with selected symbolic nature sounds that listeners will find soothing, a release from the urban jungle. While some listeners find Westerkamp's work soothing, the majority hear a power in nature that does not soothe. For some listeners this power is mysterious and strange, yet not threatening. It is a reminder of the alien nature of wilderness environments to the urban listener, and Westerkamp's continuum of acoustic sounds to electronically processed sounds and back again allows them a way into (and out of) that other world. For others, Westerkamp's wildernesses remain alien environments, evoking not mystery in accessible nature but an unknown space where the intimacy of close sounds is threatening. In my analysis of *Cricket Voice*, this seemed particularly true of listeners under twenty five years old, who often referred to horror and science fiction films. The role of popular film in emphasizing a view of nature as alien and intimacy as threatening cannot be overlooked in this analysis.

Westerkamp and the Idea of North

When I compare Westerkamp's wilderness pieces with the construction of northern wilderness as a dominant Canadian image of place in contemporary concert music, I note several qualities that are specific to her work. Westerkamp's wildernesses are not only northern. She creates a sense of intimacy simultaneously with a sense of space, her wildernesses are peopled, and she explores them with the help of technology.

Not Only Northern

Cricket Voice is based on recordings from the Mexican desert. Cordillera has a Spanish name describing "the continuous [mountain] range stretching from Tierra Del Fuego to Alaska," a gesture that links the place of recording in the Canadian Rockies to its mountainous neighbouring regions to the far south as well as the north. Westerkamp

records a specific place in each of these cases, but she is not focusing particularly on the Canadian wilderness; in fact with Cordillera she is making a point that geography crosses national borders. Murray Schafer says "as the project of a northern territory Canadian art has a wildness and vigour not evident in the hot-house effusions of more civilized centres" (1994: 224), conflating civilization with heat and effusion, Canadian identity with wildness, vigour, and northernness. Westerkamp makes a piece in Cricket Voice which explores the silence, wildness and life of a southern desert. In Contours of Silence she explores the silence and austerity of winter in Banff National Park, while in Banff Razzle-Dazzle she moves through the commercial effusions of the town of Banff. These pieces defy polarities such as north-wildness-vigour vs. south-civilization-effusion.

Westerkamp does make a distinction between wilderness and civilization, on the basis of acoustic clarity. For Westerkamp, wilderness is not limited to an idea of ruggedness, purity and cold. A wilderness is an acoustically hi-fi place where contours of sounds can be heard in their entirety, away from the broad-band machine noise that characterizes urban centres. As her work indicates, these places can be found in southern as well as northern locations. And as she points out in Kits Beach Soundwalk, they can even be constructed by filtering out the noise from urban recordings. This is an idea of wilderness based on a sense of acoustic space and an ability to find the breathing room to hear inner voices. It is an urban perspective of wilderness, but does not create a stereotypically Canadian image of ruggedness.

Intimacy, Space and People

In Cricket Voice, Westerkamp creates a sense at once of intimacy (being right there with the cricket, hearing the interior resonances of cactus) and of immense space (the heartbeat of the desert, singing with the stars). The traditional approach to wilderness is to describe it as an unknown space, an immense territory in which any sense of intimacy is lost in the distance. Hence the emphasis on roughness, isolation and ruggedness in musicologists' descriptions of Canadian composers' work that I discussed earlier in Chapter Two.

By creating a musical space which explores the contours of interiors and which changes the listener's perspective of scale, Westerkamp is creating an unusual approach to the exploration of wilderness. It is a wilderness of microscopic detail, slowness and visceral closeness as well as motion through immense distances. When listeners' anxieties are raised, they are related as much to issues of intimacy as they are to isolation or hardness.

Westerkamp's wildernesses are always peopled. In Beneath the Forest Floor, we hear a human presence in the far-off sound of a chainsaw: humanity as threat, much more distant than Schafer's use of the snowmobile in North/White, without this human-nature drama being central to the piece. In Cricket Voice, we hear the artists' clapping and stomping. In Cordillera, Ruebsaat's voice reading poetry asserts a human presence. In Sensitive Chaos, the piece ends with the laughter of a child playing with water. Contours of Silence is woven around the stories of a Banff resident. Again, there is a difference here from Schafer's idea of an isolated north protected from the incursions of people. Westerkamp insists on a human presence in her work.

Authenticity and Technology

Westerkamp's wilderness works are produced using the aid of electrical technologies. In fact, because she composes with recorded sounds, her work would be impossible without technology. When she enters the studio, she works further with technology to draw attention to certain sounds and the relationships between them. She is not attempting to create an authentic, transparent document of the actual sound recorded, but colours it with her own perspective.

This approach presents some problems in relation to an idea of wilderness as pure nature, unswayed by contact with technology. Let me compare it with Ellen Waterman's description of the CBC recording of R. Murray Schafer's And Wolf Shall Inherit the Moon, colloquially known as the Wolf Project. This week long work, performed each August by a corps of seventy-five amateur and professional participants at the Haliburton Forest and Wild Life Reserve in Central Ontario, is the epilogue to Schafer's Patria series, and an example of his approach to environmental music. Waterman says:

Schafer's environmental music is integrally linked to his concept of "authentic" Canadian culture defined by geography and climate the romantic "idea of the North" that permeated many post-1950 Canadian compositions. (Waterman 1998: 17) Waterman describes how, following the 1996 Wolf Project, she returned to the Haliburton forest with Schafer, a group of other musicians and a CBC radio crew to record the music from the piece. This experience highlighted for her a dichotomy which she says is central to the performance of this work: the dichotomy between art as ritual and art as commodity. Reading Walter Benjamin (1970), Waterman describes two polar types of art, with the purpose of one being ritual and the purpose of the other being exhibition value:

"Cult value" describes art originating for ritualistic purposes rather than public entertainment, which Benjamin sees as belonging chiefly to a pre-modern world, before technologies of mechanical reproduction were widely available. The value of this work is vested in its particular context, rather than in its wide dissemination ... "Exhibition value" refers to a modern world in which art is a commodity subject to the laws of supply and

demand. (Waterman 1998: 16) Linked to this idea of art as either ritual or commodity is the dichotomy between "authentic" Canadian culture the romantic idea of North as sparse, wild and acoustically clear and the culture that most Canadians live on a daily basis: noisy, trafficked and electrically mediated. In Benjamin's work, ritual belongs primarily to a pre-modern world, without reproduction, just as the romantic idea of North celebrates its wildness, sparse human inhabitation, and distance from urban technologies.

Waterman describes the efforts of the radio crew to capture the essence of the experience:

The CBC crew ... had never recorded outside of a studio and they worked hard to adapt to the demands of the space. For instance, they began by recording too close to the performers, listening for the clearly articulated sound valued in the concert hall. Recording precariously from canoes, the crew learned to place microphones at increasing distances in order to capture remote echoes and a sense of spaciousness. "Good" environmental sounds (loon calls, lapping water) were eagerly sought after, while "bad" environmental sounds (the hum of the DAT recorder, stomach grumbles) were ingeniously eliminated. Even when the sonic environment was right, the mediation of the music through recording technology was problematic. On a recording, the sound of a plane passing overhead can ruin an otherwise perfect performance. (Waterman 1998: 24) The CBC crew learn to accentuate the sense of space in their recordings, leaning precariously from canoes like Canadian painter Tom Thomson. They create an "authentic" wilderness space filled with loon calls and lapping water while eliminating traces of the recording equipment, the recording body, and sounds of urban travellers flying overhead.

Waterman also notes that the CBC program was originally intended to include recordings made live at the 1996 Wolf Project by participant and soundscape composer Claude Schryer. Schryer says:

Recording makes me even more aware of my surroundings. Every small sound is amplified by the microphone, which puts me in a critical frame of mind. But then I can't experience the simplicity and depth of the moment. (Schryer as quoted in Waterman 1998: 24)

Waterman comments that this account of his recording experience expresses the dichotomy of documentation vs. immanence. But is it the presence of the recording device that necessitates a move to a critical frame of mind, what Waterman refers to as documentation dichotomized from immanence? I sometimes experience a heightened immanence when listening to an amplified small sound that I might otherwise have missed. My perspective has changed, becoming more aware of microphonic details, the amplified small sounds that Schryer speaks of. I often hear something wondrous that deepens my experience and knowledge of whatever I am listening to.

Where does the criticism in Schryer's mind come from? Perhaps from the assumptions that we as a culture have about what it means to document. Schryer's recordings "were not clean enough in technical terms to use on the radio program," says Waterman (1998: 24). "Such pristine tapes could only have been achieved at the cost of interrupting the process of the work itself." The authenticity of art ("the work itself") is here contrasted with the purity of technology ("pristine tapes"). Technically clean recordings can only succeed at the price of artistic authenticity.

Schryer seemed to be attempting something different, in which the performance could be uninterrupted, whole and without repetition, and the recording could also take place. What did Schryer do to avoid interrupting the work itself? He placed the microphones unobtrusively, resulting in "weird perspectives, from foot level or filtered behind a bush" (Waterman 1998: 24), recordings that would betray the physical position of the recordist. Schryer desires to "think about the colour of sound, the sonic background, people's moods, the time of day, the weather" (Waterman 1998: 24). He searches for the aura of the piece as he reproduces it, and in his denial of the dichotomy between a piece of art's ritual aura and its reproduction, creates a work in which the presence of his subjectivity through the recording of different perspectives is considered unsuitable for mass reproduction. In a "suitable" recording, the dichotomies of immanence and documentation, subjectivity and objectivity, acoustic truth and electronic manipulation are maintained as each stomach grumble, weird perspective and airplane sound is erased from the final product.

Subsequently, the group decided to prohibit the use of any electronic recording devices at the Wolf Project, agreeing that:

And Wolf Shall Inherit the Moon must remain an experiential and ultimately ephemeral work, for that is the only way to preserve its unique qualities of community and connection to its wilderness environment. (Waterman 1998: 24)

The CBC radio show allows a version of this experiential and ephemeral work to reach a mass audience, while attempting to maintain the work's aura of a spacious wilderness lake experienced precariously from a canoe. Waterman says that in this process of reproduction, something is lost in the translation. At least some of the things that are lost are the stomach grumbles, DAT hums, weird perspectives and airplanes that are hard to fit into a mythology of isolated and wild "pristine" northernness.

Westerkamp's wildernesses are idealized, too. The sounds of drunkenness that disturbed her visit to the Zone of Silence are transformed to long sighing sounds reminiscent of wind blowing across open bottles. The awesome destruction inflicted on West Coast forests by logging is reduced to the distant whine of a chainsaw. At the same time, a sense of subjectivity remains in a microphonic intimacy facilitated by technology through audible strokes on a cactus skin, or listening to the deep insides of a cricket voice, at the same time as we hear the dizzying distant height of the stars. Making audible her work with technology, Westerkamp does not cast it out of Eden.

1 Both the first phrase in the title of this piece, *Sonic Meditations*, and the exploration of the resonances of an abandoned water reservoir, suggest a connection with the work of Pauline Oliveros.

2 This is similar to Schwartz and Godfrey's definition: "For our purposes, we define minimalism as music for which materials, or their working out, are deliberately limited." (1993: 316)

3 "I do feel that sounds have their own integrity and feel that they need to be treated with a great deal of care. Why would I slow down the cricket's voice but not my daughter's? If the cricket had come from my own garden, had a name and would talk to me every day, would I still be able to slow it down? Would I need to? It did take me two years to dare to compose with that cricket's recording, as it had been such a magical moment of recording, such a gift. I could not just 'manipulate' it. It had to be a new sonic discovery journey to retain the level of magic for me. And I remember a moment at which I said 'Stop.' The journey was beginning to turn into electronic experimentation and the cricket was being obliterated. Same experience with the raven in *Beneath the Forest Floor*. I tried to make it into a regularly beating drum...it simply wouldn't let me. So I returned to the shape of the original full call, slowed that down and received from it a drum-like sound. It took a whole day to fly off into electronicland and return to the raven call" (Westerkamp, personal communication, March 26, 1995).

4 "Come Out is composed of a single [vocal] loop recorded on both channels. First the loop is in unison with itself. As it begins to go out of phase a slowly increasing reverberation is heard. This gradually passes into a canon or round for two voices, then four voices and finally eight. By using recorded speech as a source of electronic or tape music, speech-melody and meaning are presented as they naturally occur. By not altering its pitch or timbre, one keeps the original emotional power that speech has while intensifying its melody and meaning through repetition and rhythm." (Liner notes to Steve Reich: *Early Works*. New York: Elektra/Nonesuch, 1987).

5 Also recent programs in *Star Trek: Voyager*, although I tend to believe that these are themselves inspired by the *Alien* series. In the *Star Trek: Voyager* series, the greatest threat to humanity for a long time was the Borg, a cyborg race who range through the universe taking others' technology and assimilating them to serve the collective. In the 1997-98 season, the Borg were themselves devastated by a far greater threat: amphibian insects resembling giant crickets, who have no compassion: when a character establishes telepathic contact with them, they only say "the weak will perish." Once again, it is through technology that the crewmembers survive: they learn how to adapt a Borg nanoprobe to repel the aliens. In the 1998-99 season, the *Voyager* crew meets this amphibian species again, they spy on each other, and through spying learn that they had more in common than they realize, finally establishing a truce.

6 "Ridley Scott's surprising, smoke-filled scare fest is the Old Dark House of space movies more horror than sci-fi, really". Reviewed by Eddie Cockrell, , posted November 26, 1997. "Chilling, tense, and perhaps the scariest movie ever made! Ripley (Weaver) is back to do battle with the creepiest, most realistic extraterrestrial life to ever menace a space crew!" Accessed October 21, 1998.

7 Hans Ulrich Werner, (like a few others such as Barry Truax and Gary Ferrington) has worked closely with Westerkamp over some time. Because this close knowledge of her and her work is an important difference between these listeners and others, I asked if I could use their real names.

[home](#) [introduction](#) [in the studio](#) [moments of laughter](#) [soundwalking](#) [dissertation](#)