Chapter 10 - Gently Penetrating Beneath the Sounding Surfaces of Another Place: Inside and Outside the Soundscape

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In the past few years, Westerkamp has been invited to lead soundscape workshops in a variety of international locations. One location that she has returned to repeatedly is India: this is partly because she has been invited back to take part in various projects, and partly because of her continuing interest in Indian sounds and culture. These visits have resulted in several musical works: the India Sound Journals (a work in progress), Dhvani (1996), and Gently Penetrating Beneath the Sounding Surfaces of Another Place (1997). In these pieces, she confronts the profound experience of hearing another culture and attempting to represent something of this experience to those who may not have shared it, attempting to bridge cultural difference without effacing it, remaining respectful of what she hears. The delicacy of this dance is reflected in the title of her most recent piece: she wishes to penetrate, but gently, not wanting to shift the sounds too far, to disturb what is there. She recognizes that it is only the sounding surfaces that she hears as a new visitor: the depths are beyond her reach.

India Sound Journals

The India Sound Journals begin as textual entries that Westerkamp writes during her trips to India. Like a travel diary, they are a way of making sense of the overwhelming stream of impressions that greet a newcomer on arrival in this extraordinary place, as Westerkamp herself notes in one of them:

It is the shock that everyone spoke about who has gone to India. I knew it would happen. I just didn't know how. Nothing can be processed into logical patterns here. At least not into the patterns I am used to. It all just is and demands attention. A startling enthusiasm fills me at the same time as tears well up inside. So many contradictions the cripples and the silk, holy waters and stench, men defecating by the roadsides, everyone always looking so clean such crazy making. (HW: India Sound Journal Part III: Riveted) In this excerpt, Westerkamp situates herself as a new visitor to India. Later, she contrasts her situation with that of some New Delhi residents, noting how protected she is in relation to their living conditions:

People sleeping on bedsteads right beside the road, sleeping there, often two or three to one bed, sleeping there. Looking content and comfortable. Groups of beds placed together, a small community of people huddled together, sleeping soundly beside the noisy road traffic and breathing the filthy air from the exhaust fumes. All this just around the corner from this hotel where I am lying safely under a soft blanket, protected from noise and pollution, protected from people walking within inches past my bed, protected from raw life. (HW: India Sound Journal Part III: Riveted) In another part, Westerkamp describes her astonishment on the first morning in Delhi when she hears and sees the traffic. At first she thinks it is complete chaos no lanes, all directions at the same time, no one stopping. She hears nothing but car horns. Then she begins to realize that the car horns speak differently in India than elsewhere.

They rarely shout "get-out-of-the-way." They talk. "Hallo," "watch out, I am beside you," "leave me some room," "I want to move over to your side," "don't bump into me," "hallo," I want to pass." What seemed like chaos initially starts to feel like an organic flow, like water. "There is an undercurrent of rules," says my friend Veena. (HW: India Sound Journal Part II: Carhorn/Traffic Ambience) She begins to understand the traffic by listening more closely to how the horns sound, and how this relates to the movement of traffic. She begins to hear a conversation happening between the vehicles, and this leads her to understand the logic driving the traffic flow. Her friend Veena, a New Delhi resident, uses a water metaphor to describe the rules of traffic.

The sound journals follow Westerkamp's attempts to understand this culture, through listening, watching, reflecting and talking to local residents about her experiences. They are like threads joining Westerkamp's home cultures in Europe and North America, and the new culture. In performance, she juxtaposes these journals with tapes of related sounds recorded during her visits to India. Some of these sounds also appear in her later compositions based on the New Delhi recordings.

Westerkamp also uses the sound journals to consider dislocation between the original experience and the later performance of it. In the first part of the India Sound Journals: "Camelvoice," Westerkamp stands offstage and speaks:

At this moment it's November 28, 1992 I'm riding on a camel a camel in the desert near Jaisalmer, in Rajasthan, India. Actually at this moment it is September 20, 1995. I'm riding through the electroacoustic ether together with my camel, at Place des Arts in MontrŸal. (India Sound Journals Part I: "Camelvoice") The dislocation is even reflected in the pacing of the text, which in this case is broken into phrases and cued by particular sounds on the tape of camel sounds, in contrast with the other journals, which are in a continuous flow accompanied by the tape. This creates a sense of disjuncture at the same time as it makes more of a dialogue between tape and voice than with the other pieces.

Here in MontrŸal September 1995

At Place des Arts Riding through the international electronic arts ether disembodied from the sand, the heat, its voice Where is the camel at this moment? Where is it eating? Who is riding it? Recording its voice? Photographing its body? Where is it now? Reproduced many times all over this uhm... Global Village? (India Sound Journals Part I: "Camelyoice")

The journals serve not only to locate herself while in India, but also to locate her work in relation to electroacoustic practice, to reflect on what happens when a sound is taken from its context and transported elsewhere. As she is offstage, her voice is disembodied like the camel's voice. Her utterances, in dialogue with a tape of camel sounds, bring the attention of the audience to where they actually are, and where the camel actually is not, even though they can hear it. Her own position is ambiguous: although she says she is present, no one can see her. She could be in some liminal zone between India and Montrÿal.

The sound journals are a way of making sense of her experiences in India, and of relating that growing understanding to an audience in Canada. At the same time, she reminds her audience that this is her perspective, of particular moments in the past, while the subjects of her recordings may have changed since.

Dhvani

A sonic gift from another place for the occasion of Vancouver New Music's 25th anniversary celebration. With thanks for staying alive and healthy for so long and with good wishes for the future. A sonic snapshot of India, a sonic moment of Indian life. Dhvani is a Hindi word for sound. (Westerkamp Dhvani program notes, 1996) "In this Universe, there is no form of knowledge which is not perceived through sound; all this Universe is but the result of sound." (Vakyapadiya 1.124, as quoted by Westerkamp in Dhvani program notes) In this program note for Dhvani, Westerkamp emphasizes the role of sound and listening in the production of knowledge and in creation. This short tape piece was written in 1996. It begins with a collage of traffic sounds, which move quickly by the listener in all directions, producing a feeling of disorientation. Westerkamp introduces the sound of her breathing, juxtaposed with a gradually shifting metallic drone. In the background, a vendor's voice is heard, introducing a section with many voices. The voices increase in number and intensity until Westerkamp breathes again. After this breath, many different kinds of bells are heard, with occasional birdsong. The bell ringing increases in tempo, and Westerkamp breathes again.

Like the India Sound Journals, this piece relates the rhythms of a newcomer's experiences in India, this time without words. Environmental sounds increase in intensity, producing a feeling of confusion, which is balanced by the quiet intensity of the kind of measured breathing that a listener might associate with yoga meditation. It gives a glimpse of the urban and spiritual intensity that Western visitors find in contemporary Indian life.

Gently Penetrating

The program note for Gently Penetrating... discusses several important aspects of the piece: its focus on human voices through the environment that surrounds them, Westerkamp's approach to the sounds of New Delhi as a Western visitor, and her desire to express contradictions that she heard in the sounds and experienced in relation to the culture.

Gently Penetrating... focuses on the voices of market vendors, and their acoustic environment in the streets and markets of New Delhi.

The vendors' voices in this composition were recorded in specific areas of New Delhi during my first visit in 1992: in the residential area of Januk Puri, at the early morning produce market in Tilak Nagar, at the market near the Jama Masjid, and at the market stalls just off Janpath near Connaught Place. I noticed that many of the other sounds in these places besides the vendors' voices were those of metal (such as buckets falling over, cans rolling, the handling of metal pots, squeaking gates, sometimes unidentified objects rattling or clinking as they pass), bicycle bells and scooter horns. As they seemed to be rather characteristic sonic "accompaniments" to the environments through which the vendors passed or where they had their stalls, these sounds became major players in the composition. (HW: Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997).1

This program note is even more specific than earlier pieces in its documentation of field recording locations. What all of these locations have in common is the presence of street vendors' voices. As Westerkamp notes, these voices change in relation to their surroundings:

The gruffer, coarser shouting of male voices seemed to occur in markets near noisy streets or where a lot of voices were competing with each other. The vendors moving through quieter neighbourhoods seemed to have musically more expressive voices and almost songlike calls for their products, with clear melodic patterns. And then there was the voice of the boy selling juice... (HW: Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997). In this piece, Westerkamp balances this

tendency of voices to change in relation to the environment by reversing it. She leaves the voices as they are, changing their surroundings to emphasize common points between the environment and the voices (for instance, changing the sound of the scooter horn to emphasize its vocal nature, harmonizing the slowed bicycle bell with melodic changes in a man's call).2 Westerkamp notes that the sounds of street vendors' voices are much less common in both North America and Europe. From her perspective as a visitor from the West, the presence of these voices in the soundscape seems magical.

Coming from a European and North American context, I was delighted by the daily presence of the vendors' voices. As the live human vending voice has disappeared almost entirely in Northern Europe and North America and has largely been replaced by media advertising, it is somewhat of a miracle for the visitor from those areas to hear such voices again. (HW: Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997).

Westerkamp experienced the soundscape and the culture of New Delhi as composed of contradictions that exist side by side, and she wanted to express these contradictions through her work. She heard the voices change in response to the shimmering, becoming more melodic, and to the grunge, becoming more gruff, and worked with these tendencies.

In a city like New Delhi, and other places in India, one experiences shimmering beauty and grungy dirt and pollution side by side all the time. These opposites are audible in most of my recordings as well and specifically in the sound materials selected for this piece. I wanted to express acoustically/musically both the shimmering and the grunge as it seems to represent so deeply and openly the contradictions within this culture and the intensity of life that results from it.

Finally I believe that this piece also explores outer and inner worlds as one experiences them in India: the extraordinary intensity of daily living on the one hand and the inner radiance, focus and stillness on the other hand that emanate from deep within the culture and its people, despite the hardships of life. (HW: Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997). Gently Penetrating... explores inner and outer worlds, shimmering beauty and grungy dirt as much by meditating on what holds them together as by listening to what differentiates them. Although these paired terms inner and outer, beauty and dirt seem initially like opposites, the intensity of daily living in New Delhi is composed of the intermingling of both, emanating from deep within the culture.

Compositional Process

In order to learn about Westerkamp's compositional process, I visited her in August of 1997, and interviewed her in her studio about the construction of Gently Penetrating Beneath the Sounding Surfaces of Another Place. I will describe her compositional process for this piece based on that interview. In addition, the website has a section accessible from the main screen called "In the Studio." In this section, it is possible to listen to individual sound files that make up the piece, read descriptions of how these sounds were produced in the studio, and listen to excerpts of the piece with particular sound files highlighted in the score. The following discussion is a theoretical extension of the dialogue between Westerkamp and myself that began in that interview.

Hildegard Westerkamp's compositional process attempts to balance work outside and inside, field recording and studio work, reflection and action. The process of composing a piece may take several years: for instance, Gently Penetrating Beneath the Sounding Surfaces of Another Place (1997) was based on source recordings made in 1992 and 1994, and most of the studio work was completed at Bourges in 1997. Also, during that period between 1992 and 1997, Westerkamp composed the India Sound Journals, which are related to this piece. She has since added to the India Sound Journals in 1998. Since she continues to visit India on a regular basis, I anticipate that the India Sound Journals will grow again in the future.

Field Recordings in India

The initial field recordings for Gently Penetrating Beneath the Sounding Surfaces of Another Place were done from September to December 1992 and in October 1994. Almost all of the recordings from 1992 were done in the context of a soundscape workshop with local residents, on days when Westerkamp went with workshop participants to particular areas (markets, neighbourhoods, etc.)

The following is an excerpt from email correspondence where I ask Westerkamp about the nature of these field recordings:3

AM: Did you record several locations in one day, or just one location at a time?

HW: Often several recordings on one day, because we would sometimes go all day and have our tongues hanging out at the end! Some days started at 4 a.m. (those very loud male voices are all from an early morning vegetable market). Later on we went to a neighbourhood park where I recorded a morning ceremony (not in this piece) and after that to a neighbourhood where one of the participants lived and recorded the Saturday vendors and on and on.

AM: Were any of them like soundwalks in that you were moving through a place, or were you more still?

HW: At the early morning vegetable market I was moving all the time as well as at some of the other markets. So, I guess they could be called soundwalks in the sense of the moving mic. But they were not recorded like soundwalks, i.e. with commentary. In other words, I did not go out with the intention of recording a soundwalk, as the real characteristic of a soundwalk from my perspective is the mediating voice of the recordist.

Note here that Westerkamp's definition of soundwalks and mine are somewhat different. For Westerkamp, the mediation of the recordist through her voice is what defines a recorded soundwalk (although she often prefers silent soundwalks when not recording). For me, the sense of human bodily motion in a soundwalk recording is what defines it. This still implies a certain kind of mediation, although it is not necessarily vocal. When someone records a soundwalk, moving through an environment at walking pace, they record the trace of their movements, and as a listener I can hear that someone is moving through a space. This moving trace of the recordist's subjectivity is what defines a soundwalk for me, while for Westerkamp it is also the presence of the recordist's voice, providing information about the place that is not audible. In still recording, the recordist's presence is less clearly felt. I feel the motion in Gently Penetrating... quite clearly, and sense Westerkamp's presence and perspective even though she does not speak.

In the program note for this composition, Westerkamp thanks those workshop participants who took her to the places where she did the recordings.

I would like to thank Savinder Anand, Mona Madan, Arun Patak, Virinder Singh, and Situ Singh-BÉhler for taking me to the places where these vendor's voices occurred. Without their help and local knowledge I would have had a difficult time capturing them on tape. (HW: Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997).

It is an important part of Westerkamp's compositional process to make contact with local experts such as these, particularly in a place such as New Delhi which was at the time unfamiliar to her. Their knowledge of the local soundscape introduces Westerkamp to sound environments that she might otherwise not encounter for some time.

In the Studio

Eventually, Westerkamp took the field recordings that she had made in New Delhi and began to work with them in the studio to create the composition. In my discussion of her studio work with field recordings, I focus particularly on the sound of a bicycle bell, a scooter horn, a sitar, and a bucket clanking. Westerkamp did not alter the sounds of the vendors' voices, but worked with many of the metallic sounds that she heard around the voices as she recorded them. This approach is consistent with her other work. When Westerkamp works with recordings of human voices, she rarely alters them to any extent. In Gently Penetrating... she uses long unchanged excerpts of field recordings that focus on the street vendors' voices, sometimes without any accompaniment of edited sounds, such as at the midpoint of the piece.

Bicycle bell sounds

Westerkamp uses a recording of a bicycle bell, including several rings of the bell in a characteristic uneven rhythm as sounded by the cyclist in a ringing gesture (in other words, she did not isolate just one ring of the bell). Most of the sound files produced from the original bicycle bell are transformed primarily by altering their pitch, which in turn changes their speed. For instance, the original four rings of the bell, when altered to one octave lower in pitch, become twice as slow, and take twice as long to play.

In a multitrack sequencer, Westerkamp lines up the original with its pitch-shifted transformations, so that they begin at the same time. For a fraction of a second, all of the octaves sound together. Then, as each pitch-shifted version works through its evolution, they move into more complex harmonic relations to each other. The effect is to create what looks like a set of stairs on the mixing score, and sounds like a cascade. The original four rings were only a few seconds long, whereas this cascade takes almost a minute to play through. Because of the uneven rhythm of the original four rings, there is a random, liquid and spectrally colourful quality to this long gesture.

I just let it be an octave slower at the same time, which creates very interesting rhythms, and it becomes random. You're getting into the details of the gesture because it gets slowed down, whereas with the time correction option [altering the pitch but keeping the original rhythm and speed], it sounds more artificial. When the pitch is changed but the speed and rhythm stay the same, it is almost as if the rhythm doesn't fit with the pitch. HW4

The same process can be used to make the pitch higher. In this case, Westerkamp proceeds by semitones, since the initial pitch is already quite high. The high bell sound in my CD ROM example is from 0 to 7 semitones higher, while the very high bell sound is from 8 to 15 semitones higher. These pitches are then connected in descending sweeps from the highest semitone in the series, creating fast chromatic scales.

Another way Westerkamp alters the original sound is to use subtle modulation to create harmonic bridges with other sounds. For instance, the very low bell sound was modulated slightly to highlight different features of a vendor's voice.

One vendor approaches the microphone, and then as he moves into the distance, the pitch of his voice shifts. It's a subtle doppler effect. [Using the sound file of a bicycle bell pitch-shifted five octaves lower] I made a sound file a semitone either higher or lower. The bell as it was resonated with one part of his voice, and the modulated one resonated with the other part. HW

One of the bell sounds is more radically altered. Westerkamp used gating, an electronic process that regulates the passage of a signal, to eliminate a large part of the reverberating part of the bell sound and emphasize the onset portion. The gate can be set to only let through the loudest portion of the sound. So, the sound becomes rather more "wooden" in its timbre, as the metallic resonance and reverberation that occurs after the attack have been reduced. This sound is used alongside other bell sounds: you can hear it in excerpt two of the piece in the "In the Studio" section. Westerkamp juxtaposes it with the other, more subtly manipulated, bell sounds to make a connection with its source. This is consistent with her aim to retain a connection between sounds altered in the studio and the sounds as originally recorded.

I want to retain those rhythms, sometimes small, sometimes larger gestures ... they usually give me surprises. I like a certain amount of control, but I also like to work with what is already inherent in the materials. I receive them as gifts from that place with which then I can play. I want to go inside this bicycle bell, but I don't want to lose sight of the larger context within which it occurs. I have to understand why I want to do it, otherwise I just don't do it. HW

Scooter horn sounds

The sounds of motor scooters are prevalent in the New Delhi street ambience, so Westerkamp wanted to work with them. At the same time, she found the sound so unpleasant that initially she found it difficult to listen to.

I didn't like the sound at first. It was so ugly, I shrank away from it. HW

The scooter horn mix includes the original with several lower octaves. It is used in the piece to highlight the scooter sound when it happens in the street ambience.

I start with the scooter horn going into that ambience, then include the mix exactly at that point. HW

Adding reverberation to this sound softens the edges, and brings out its vocal quality.

HW: The way I mixed the [reverberation] and the original, the vocal part comes out more--the male voice, throaty, I knew I wanted that.

AM: Because it connected to the voice quality of some of the vendors?

HW: Yes, it suddenly connected to that, which I didn't anticipate at all, actually.

Clank sounds

Westerkamp creates a 'clank mix' by searching through field recordings for various metallic sounds that are related in their 'clanking' timbre, such as a bucket falling over, the sounds of hand-operated machines, and metallic objects being placed on the ground. She also processes some of these sounds more radically.

There was one that I wanted to use but wasn't sure whether I should because it sounded more like my harmonies than those of India. I just fell in love with it, I had put it through a processing unit called the string modeller, and it was almost too much. HW

The string-modelled clank sounds are used infrequently in the piece, like an exotic, strong spice that could overpower if your hand slipped. You can hear how this sound file is used in excerpt two, near the beginning. This came from around the eleven minute mark in the piece. It appears briefly in the midst of a dense mix.

Sitar sounds

I added the sitar sounds at the very end when the piece was basically finished. The sound colour of the sitar I perceive like a sound signature for what is typically Indian. It has a particular brilliance to it which occurs in the high frequencies of that sound. To emphasize that characteristic I filtered out all lower frequencies. When I had done that I had a sense of completion. I knew then that the piece was really finished. HW

For a Westerner, the sound of a sitar immediately brings an image of India to mind, probably due to the use of the sitar in Western popular music.5 These sitar sounds were recorded in a music store. If you listen to the original sound, you will hear hammering in the background as a store employee makes an instrument. Westerkamp simply equalized

this sound to bring out the brightness of its tone.

"An interesting dance"

Westerkamp's work in the studio is strongly connected to the acoustic characteristics of the sounds that she has recorded, and how these relate to her experience of the place where she recorded them.

The structure of a piece always comes out of the materials and the way I work with them, through knowing a place for a long time With any environmental sound, you are dealing with a given. Sometimes you want to impose something on it ... and it won't let you. There is an interesting dance that happens between the materials ... and your own compositional imagination. HW

Westerkamp listens to the materials to decide how to work with them. During this listening, she may hear things that were not apparent at the time of recording, but become obvious as she listens to the recordings again in the studio: aspects of the sounds that are particularly musical, evocative, connected to her experience of the place. Sometimes she will reflect on a piece for months or even years before she is ready to go further, allowing the piece to come to fruition slowly. In other cases, it happens very quickly, as in the text for Kits Beach Soundwalk. Then, she begins to highlight certain aspects of the recording by working with the materials. Often, she will take a certain sound gesture or fragment, work with it, then place it next to where she found it, by layering the original recording with the processed sounds. She creates harmonic and rhythmic bridges between sounds by listening to what they have in common. You can hear some of these processes more clearly by listening to the sound examples (In the Studio section).

Gently Penetrating... Musical Structure

Introductory Section 0:00 to 2:00

The piece begins with an introductory section characterized by high timbral density and diversity, as well as high vertical density. The slowed bicycle bell mix is juxtaposed with the sitar, ambient metal sounds mix and ambient recording of vendors' voices. The higher bicycle bell mixes come in after about one minute, followed by sounds derived from the scooter horn and cobbler's wheel. During the two-minute introductory section, there is a movement from bell sounds to the more guttural horn sounds that end the section.

Rhythmic Section 2:00 to 4:30

This part begins with a recurrence of the slowed bicycle bell mix. Layered over this are repeated sound excerpts that are similar in their rhythmic qualities: the cobbler's wheel, a rolling can, metal clanks, a scooter loop and the gated bicycle bell. These are juxtaposed with vendors' cries that seem particularly rhythmic because of their resemblance to these other sounds.

Distant Section 4:30 to 7:00

Again, the slowed bicycle bell sounds signal a change. This section is characterized by spacious ambiences in which a boy vendor is heard far off. The traffic sounds, too, are more distant. In the foreground, we hear occasional bird song. Some mixes are also included in the foreground, such as squeaks and metallic sounds. The most striking element of this section is its perspective, in which we can hear a great distance. This is in contrast with the first two sections, in which the soundscape pressed closer to the listener.

The boy vendor 7:00 to 8:30

Here, at the centre of the piece, is a section in which all mixes and processed sounds are stripped away to reveal a single stereo recording of the market ambience. It is introduced briefly by the high bicycle bells. The boy's voice, which we heard earlier in the distance, is now right next to the listener, surrounded by other voices, metallic and traffic sounds. The repeated cry of the boy's call is clearly the focus of this section, both in terms of amplitude and melodic clarity.

Jama Masjid 8:30 to 10:45

At the end of the boy's voice section, the scooter horn, a man's voice repeating "Allah, Allah," combined with high bicycle bells, begin the next section with a suggestion of harshness through the guttural tones of the scooter and man's voice. The slowed bicycle bell mix returns. Again, the processed sounds are stripped away, and we are presented with more of the ambience of the Jama Masjid, where the boy works. However, unlike the last section, in which this ambience seemed quite gentle, in this part there are some shouting voices with harsher timbres, and the sound of spitting. Perspective changes throughout this section as voices move closer then farther away from the listener. From 9:55 to 10:40 we hear only the Jama Masjid ambience.

10:45 to 14:00 Conclusion

At 10:45 begins the final section, which is again characterized by high timbral diversity and vertical density, like the introductory section. It is also a point of very high amplitude, with many loud voices producing an atmosphere of confusion. We hear scooter horn loops, slowed bicycle bells, metallic clanks and sitar simultaneously. At around 11:30, this dense soundscape reduces in amplitude. The ambience of the Januk Puri is presented, but more in the background, surrounded by slowed bicycle bell sounds. After the confusion and density of the previous minute, this section seems almost serene in its slowing of time in the bicycle bell mix. Right at the end, from 13:25 on, the sitar sound

appears briefly again.

Listener Responses to Gently Penetrating, Dhvani and the India Sound Journals

I was particularly interested in including responses to these works by people who live in India. Westerkamp provided me with the names of several people who had taken soundscape workshops with her in New Delhi, and I wrote to each of them individually. Two of these people responded, one by email and one by regular mail. In addition, I played Gently Penetrating ... and one of the India Sound Journals for one of Prof. Beverley Diamond's undergraduate ethnomusicology classes at York University . The respondents in this case were from a wide variety of cultural backgrounds, and had experience from this course of thinking critically about sociocultural issues as they relate to music. I also played these works for a University of Waterloo composition class. In addition, I played Dhvani and some India Sound Journals at the Trent Radio Art day. I also received one response from a listener who heard these pieces in a Vancouver concert, and Professor Barry Truax of the Department of Communications at Simon Fraser University passed on listener responses to Gently Penetrating ... from one of his classes.

Musical Structure

Few of the responses to this work describe a particular musical structure or form. This is different from responses to Westerkamp's other works, and somewhat unusual given that I played it for a composition class and a group of radio artists, who did write about the musical form of other pieces. It could be that, because of the focus on the voices of the vendors, which are hard to categorize as music or documentary they don't exactly sing in the traditional sense, yet are obviously not narrating listeners tend to pay more attention to the types of sounds used rather than how they are organized. In other words, perhaps they have not yet decided whether this is music or documentary. Only one listener questioned the status of the piece as music. Mattie (19f) seems ambivalent: "I don t particularly like this piece because it is not what I consider music to my taste. I do however find this piece incredibly innovative and creative and I give Hildegard credit for that." It seems strange that this listener finds the work innovative and creative, yet does not like it as music. She notes that she feels as though she is visiting many different parts of a city: "some places I felt I 'visited' included a busy street, a church, a park, an asylum, a market place, a restaurant." So she experienced a complex journey, yet did not define it as a musical experience.

For several listeners, the dense imagery produced by recorded environmental sounds reminds them of a movie soundtrack. This is a comment made about many of Westerkamp's works, because people hear environmental sounds mixed with music in film soundtracks. It seems to be mentioned particularly in response to this work: at least nine of the 55 listeners who responded to this piece described it as filmic or similar to a movie, provoking vivid mental imagery.

Particular sounds

Many people made lists of the sounds that they heard as a way of making sense of the piece. In these lists, several common threads emerged as particular sounds impressed themselves more strongly on listeners. Three listeners include the sound of a sitar in their list without comment. A fourth, Orvam (22m, York undergraduate ethnomusicology) says that he finds this sound offensive, although he does not say why. Perhaps he believes that the sound of a sitar is stereotypically associated with India in the Western mind. Certainly this class was much more aware of the dangers of exoticizing another culture: the term exotic came up more often in their responses than elsewhere.

Only one listener discusses a much more subtle cultural difference which she hears in the piece: Runt (49f, York undergraduate ethnomusicology) says "All the work sounds seem 'small' not overpowering like heavy industry sounds." I remember Westerkamp telling me of staying in a hotel in New Delhi when the management informed her that construction would begin the next day. She dreaded the onset of the work, anticipating the sounds of heavy machinery. When it began, what she heard were the sounds of people sweeping, scraping and hammering. They did not use any heavy machinery, and the construction sounds were much easier to live with than she had expected.

Sixteen listeners comment on the voices that they hear. Several mention the fact that the language is unfamiliar: Frances (22f, University of Waterloo composition) asks "I wonder how this would sound to someone who knows the language?" Jemma (23f, University of Waterloo composition) notes that because she cannot understand the voices, she focuses less on meaning and more on musical aspects of the sound: "Foreign language makes the voices seem more musical without the 'interference' of words, meaning and syntax." Many of the respondents are struck by hearing only the voices of men and children, but no women. Frances (22f, Waterloo composition) says "I picture mainly men because of the voices I hear." Runt (49f, York undergraduate ethnomusicology) asks: "Men with rapid voices marketplace Is it significant that the low drone and bells are needed to break through this?" I return here to two of Westerkamp's comments on this piece. In the program note, she says: "The gruffer, coarser shouting of male voices seemed to occur in markets near noisy streets or where a lot of voices were competing with each other." In our interview in her studio, talking about her use of the scooter horn sounds, she says: "The way I mixed the [reverberation] and the original, the vocal part comes out more--the male voice, throaty, I knew I wanted that." So the low drone in this

part is the scooter horn, slowed down and processed with reverberation to increase its vocal quality, not to cut through the sounds of the voices, but to emphasize their throaty gruffness at that point.

An Indian listener gave me her reactions to the sounds in Westerkamp's composition, and also includes responses by other members of the audience:

I had not heard of her until recently --- when she presented a "soundscape" composition here in New Delhi, processed from recordings made from an earlier visit to this city. Her presentation was very well received. Most people in the audience had not been exposed to this type of work before. She managed to capture many sounds that are quintessentially "Indian" and maybe even specific to Delhi -- e.g. the morning sounds of sweepers and hawkers on the streets, the chitter-chatter of crowds and openly curious questioning of bystanders in this populous city. The sound of blaring car and scooter horns, bicycle bells, vendors, etc. Even some singing in some medieval tombs, kids laughing, etc.

Of course, some skeptics in the audience thought she had missed a lot e.g. the sound of birds that are so numerous and varied here with particular songs for particular times of day. As a psychoacoustician, I have to confess I was listening in more of an "analytic" mode, noticing types of processing she had done to the sounds, - e.g. slowing or speeding them and making pitch transpositions, etc. Anyway, -- in a nutshell -- her composition did capture the spirit of the city, and helped people NOTICE the sounds all around -- that most generally take for granted. (Punita Singh, contact by email)

This respondent clearly finds that Westerkamp's work reflects much of Indian life in a way that does not particularly exoticize it, but instead finds the spirit of the city of New Delhi. This is aided by her emphasis on everyday sounds. As I will discuss later in the section on place, many people heard in the voices of the vendors and the sounds of the marketplace a connection to places that they know rather than to an unknown and foreign place.

At the same time, some audience members who listened with Singh commented on what she had missed, particularly the sounds of the many varieties of local birds singing songs linked to the time of day, like a raga wheel. Is this because a European visitor to India is attracted by what is unusual in her experience (the sounds of a sitar, the voices of vendors on the street)? Is it because in an urban environment these sounds are more prominent? Anna (29f, York undergraduate ethnomusicology) says "Emphasis on human sounds voices, vehicles, etc. rather than natural sounds located in a specific place in India. Sections of natural sounds are less emphasized (shorter and infrequent)." Is this because natural sounds, and specifically bird songs, were less frequent than human sounds in the specific locations in New Delhi where Westerkamp recorded? Or is it because as a Westerner she was particularly fascinated by the unusual sounds of the vendors, so focused her attention on these sounds?

Perhaps it is both. The most frequent description of the musical structure of this piece is as a blend, of an "ebb and flow," as Runt calls it, between different states or places. Affected (22m York undergraduate ethnomusicology) hears a blend of the magical and the real:

An intricately intertwined blend of authentic, worldly sounds (bells, people conversing or discoursing, etc.) with fantastic sounds (especially the glittery tingles) makes one feel like one is in a magic world. Anna (20f, York undergraduate ethnomusicology) hears it similarly, as a movement from dream to a waking state:

To me, it seems almost like drifting through a dream like state, with sections of incoherent, mystical music , which clears somewhat to reveal and focus on the actions and voices of the people around, but the mystical music is still available reminding us that it is still a dream. It then fades back and the dream-like music becomes dominant again. It then repeats the cycle. Several people associate the movement between states or realms with the slowed bicycle bell sound. Starr (33f, University of Waterloo composition) says that "wind chimes hold fabric together, and indicate a change in scene." Spooky (26m) associates these sounds with memory and trance, a reaching into the past:

The chimes or bell sounds have a hypnotic or trance-like effect, or a feeling that you re being brought into the past (music similar to that I ve heard used in movies at times when you re looking into the past or even a dream sequence). It could be that the slowed-down bicycle bell has the function for Westerkamp of exploring what is similar and different between German, Canadian and Indian cultures. The slowed down bicycle bell sounds are similar to temple bells, as many listeners note. They are also similar in some ways to churchbells. I remember Westerkamp talking to me about the differences between the use of bells in the Christian church and the Hindu temple. In the Christian church, they are used to summon the congregation to come to worship, or to mark special occasions. In the temple, they are used by the worshipper to announce his or her presence to the gods. In the program note for The Deep Blue Sea (1989), Westerkamp notes how the sound of bell chimes connects her German and Canadian experiences:

As I was working with the sound of these [Chimes of Olympos by Woodstock Percussion] chimes I realized it had a deeper meaning for me than simply "wind chime." I associated their rich sound with the sound of European churchbells. Somehow these chimes connected the two worlds for me: the "old world" where I grew up with its churchbells and

my Canadian backyard into which I had put ... windchimes for years. (Westerkamp program note for The Deep Blue Sea 1989)

Marg (21f, York undergraduate ethnomusicology) imagines Westerkamp as fluid, painting the edges of culture together through her experience of them:

Who (what) is penetrating quietly? The listener, the white noise ... the woman. I feel like the chimes, gongs, clock, bicycle wheel sounds come in to separate the scenes... (or join them together) like the one penetrating is liquid and can move in and out of space, time, and cultures. This description of the slowed bell sounds as a means of separating scenes or joining them together makes me think of a liminal space, a border zone defined by the slowing of time through pitch-shifting. Homi Bhabha (1992) suggests that a liminal space where signs and symbols can be interpreted differently, in a state of psychic ambivalence and social contingency, can be described as a "time-lag': an ... interrogative space produced in the interruptive overlap between symbol and sign, between synchronicity and caesura or seizure" (1992: 59). The slow-moving, reverberant space of the bells allows for a multiplicity of cultural meanings (Chinese temple gongs, German church bells, windchimes) which allow listeners to hear the separate locations and shifts of emotions that Westerkamp has recorded, as well as hearing related locations and psychic states from their own memories. Bhabha's formulation seems particularly apt both in its reference to the lagging of time, quite literally what one does when slowing down the speed of movement through a sound envelope, as well as in its reference to iteration: Westerkamp layers the original bicycle bell over successive slowed versions, gradually leading the listener into this liminal zone through repetition.

But not exact repetition: choosing an irregular gesture, amplifying and slowing it and setting it against itself focuses attention on the interrelationships inside the irregularities, a repetition which is like waves reaching the shore, a continually changing rhythm, with continually changing meanings. Rosi Braidotti refers to the interconnectedness of different experiences as "the philosophy of 'as if'":

It is as if some experiences were reminiscent or evocative of others; this ability to flow from one set of experiences to another is a quality of interconnectedness that I value highly. Drawing a flow of connections need not be an act of appropriation. On the contrary; it marks transitions between communicating states or experiences. Deleuze's work on lines of escape and becoming is of great inspiration here; nomadic becoming is neither reproduction nor just imitation, but rather emphatic proximity, intensive interconnectedness. Some states or experiences can merge simply because they share certain attributes. Nomadic shifts designate therefore a creative sort of becoming; a performative metaphor that allows for otherwise unlikely encounters and unsuspected sources of interaction of experience and of knowledge. (1994: 5-6) In the liminal spaces of the slow pitch-shifted world, a bicycle bell can become nomadic, shifting its meaning depending on the listener's experiences and memories. It becomes a church bell or a temple gong, marking transitions from one scene to another and allowing for a number of different stories to be told about the vendors in the street, allowing for interconnection between diverse experiences.

In a presentation at the Stockholm Acoustic Ecology conference in 1998, Westerkamp discusses the role of the recordist-composer as being at once inside and outside the soundscape, like a visitor to a foreign country:

The microphone collects all sound indiscriminately. It does not select or isolate them. This is in fact similar to how ears behave when we are in foreign surroundings. There our ears and psyche initially are incapable of selecting and making sense of what they hear. All sounds stream in unfiltered. They are as naked and open as the ear of the newborn and can only become selective once we begin to know and understand the sounds of the place. In that state of nakedness, the newborn s ear, the ear in a foreign place, or the technological ear, the microphone, are all equally powerful awareness raising tools. When the recordist is in a foreign country he or she is in fact positioned in a sound bubble within a sound bubble: doubly separated and at the same time doubly exposed, naked by virtue of hearing through microphone or headphones and with a stranger s ears. (Westerkamp 1998: unpaginated).

From the moment a recordist picks up a microphone to record, she becomes at once more of an insider, hearing every sound amplified and being able to use the microphone to focus on particular sounds, as well as an outsider, experiencing the soundscape through the technologically-altered ears of the microphone, observing the scene. I wonder, though, about whether a newcomer hears sounds unfiltered like a newborn, or whether indeed after the initial moments of confusion we resort to filters developed throughout our lives, whether we listen to compare with sounds that we already know, whether we already begin to translate? The listener responses to this as well as other pieces indicate that people often interpret sounds in relation to their prior experience, assisted by Westerkamp's liminal spaces.

Different Places

In Gently Penetrating, Westerkamp invites the listener to join her in an encounter with the sounds of New Delhi. As she notes, listeners will occupy that place differently from her experience of it. Punita Singh, a resident of New Delhi, says that this piece reflects the spirit of that place. Another New Delhi resident, Minfe, finds that working with Westerkamp has changed her attitude towards listening to the sounds of urban Indian life, leading her

to compose with the sounds of that place:

Hildegard made us very aware of the variety of sounds India has especially the city life. She hears and picks out in her compositions of soundscape the otherwise mundane sounds which we don t even hear consciously any more or take for granted. She hears rhythms and patterns and selects very well, sounds that make a composition interesting to a listener. No-one here had thought of doing such compositions but it has given many of us ideas for the future to think of the variety of musical and natural sounds. I have done a few experiments in four environments with her using my voice in different spaces of an old moghul tomb in Delhi. Several listeners from the York undergraduate ethnomusicology class heard in the vendor's voices a link to the sound environments of their birthplace or ancestral home. Pointer (22f, Chinese) says: "The first thing I can imagine is I am in a temple. That's kind of like the temple music in China." Grace, from the Philippines, imagines a rural environment similar to that of her hometown:

In the very beginning, I imagine a soothing rural place with a church. The church bells are ringing while the peasant natives in the market place are trying hard to sell something. This is particularly evident when I heard a boy shouting. Other background conversations seem like other natives are trying to bargain. In the middle section, incidentally, I could hear some common fighting. It seems like they re quite uneducated. That s why it creates such a commotion for them if the capitalists won t let them give the least price. As a bottom line I think it has a story showing what s going on in some rural areas. It reminds me of my hometown in the Philippines. Grace hears a story here about rural economics and politics in the Philippines, because the sounds of the New Delhi marketplace blend with her memories of a similar sound environment in her hometown. Ono, an Italian-Canadian, is reminded of her street in an Italian-Canadian neighbourhood "People yelling reminds me of my street in the summer all Italian people yelling like that."6 Later, the tapping and hammering takes her even closer to home "tapping hammering harvest (my parents' garden)." Lea, also an Italian-Canadian, is reminded of Italy: "This work evokes memories of when I visited Italy in 1988; some of the vocals in the piece remind me of the street vendors shouting out to come buy their products." This listener's response makes clear a difference between her experience in southern Europe, and Westerkamp's not far away in Northern Europe. In the program note, Westerkamp says:

As the live human vending voice has disappeared almost entirely in Northern Europe and North America and has largely been replaced by media advertising, it is somewhat of a miracle for the visitor from those areas to hear such voices again. (Program note, Gently Penetrating Beneath the Sounding Surfaces of Another Place 1997). I grew up in Northern Europe, in England, where vendors' voices are also rarely heard on neighbourhood streets. This difference between European countries points out how complex and differentiated sound mapping can be.

Fara, a Jamaican, heard first the Middle East, then Africa:

I first imagined bustling streets somewhere in the Middle East and then I imagined Africa. I had visions of African people having some sort of ceremony. Suddenly, the images fade away. Interesting music!! (I m almost afraid that people in the class or anyone after hearing this will have a negative view of India). I wonder when she heard the piece as located in India, prompting the final, bracketed comment? The earlier comments do not mention anything specifically negative, focusing more on the urban and social ("bustling streets," and a "ceremony") aspects of the sound environment. Fara heard the piece moving between geographically distant places. Different respondents heard the place as located on different continents, in either an urban or rural environment. How they placed it depended on their own previous experience of different sound environments. What is fairly consistent is people's description of the place as a market: twenty one respondents use this very word. Some of these respondents describe their upbringing as Canadian or Northern European, so their experience of markets might involve quite a different sound environment. How do people know that street vendors speaking a different language are in a market? I wonder how much this sonic recognition comes from travel, how much from film and television soundtracks?

The other issue raised by Fara is that of a listener's possible negative view of India. This concern about a listener's possible sociocultural judgment of the place through the music is also raised in responses to the India Sound Journals. Fara, for instance, says: "I found the poem very disturbing and absolutely brilliant. Then again, I am almost certain that people will have a negative image of India, Delhi after listening to this" (Fara 20f, York undergraduate ethnomusicology). Doughboy says: "I can almost see the situations the narrator is in, these images are haunting and disturbing (some of them) of India" (21m, Filipino, York undergraduate ethnomusicology). Laverne responds: "does not make me ever want to visit India the honesty about what it is really like, the harsh and vulgar realities are not appealing for me to want to listen again" (21f, Canadian, York undergraduate ethnomusicology). These respondents found the imagery both disturbing and unappealing. At the same time, in the class discussion afterwards, some other students said that the journals made them more curious about visiting India, rather than less.

Some other respondents heard class differences in the piece, without mentioning how it affected their own opinions about India. Grace says: "A lady speaking with Western background narrates the gaping difference between the rich and poor in India" (20f, Filipino, York undergraduate ethnomusicology). Karen Elstone hears a "contrast of poverty and wealth" (35f, Anglo-Saxon, York undergraduate ethnomusicology).

Other listeners made connections to different places and experiences, and did not comment on Indian life. For instance, Lea says "This work reminds me of my trip to Acapulco taxi drivers are very brave and drive very fast but they always got us safely to our destination" (22f, Italian-Canadian, York undergraduate ethnomusicology). She describes a southern location, and her experience there as a visitor, where contact with local life is only at a surface level through taxi drivers and other service workers.

Some listeners commented on the recording perspective that they heard in the India Sound Journals. Rick says "In this one we are more the observer than the participant, instead of following her, we are walking beside her" (22m, Canadian, Trent Radio Art day). Peter Hau, also at the Trent Radio art day, notes: "relationship between narrator and soundscape works! Honest, uncontrived, direct. Appealing prose well delivered" (35m, white anglo). These listeners, as radio artists themselves, seemed more interested in how the piece worked technically as radio art, in terms of its heard perspective and the relationship between environmental sounds and narration, more than what its sociocultural implications were. Also, as white people born in Canada, they may not have had direct experience of the sociocultural implications of the work, so it does not evoke related memories.

Three other listeners' comments point out the limitations of my presentation format. Because I was always limited in terms of time, especially when I was playing pieces for university classes, and was playing recorded tapes rather than including live performance of the India Sound Journals, it was not the ideal listening situation. Wanda says "I really didn't get the point of this story in terms of 'This IS India" (20f, York undergraduate ethnomusicology). Each of the India Sound Journals explores a different facet of Westerkamp's experience of India. Perhaps because I was only able to play two short excerpts, the experience was not as multi-faceted as it would have been within the piece as a whole. Ian says "I d like to hear this within the context of the larger work" (22m, York undergraduate ethnomusicology). Compare these reactions with a response from Anthon (47m, Vancouver Cultural Centre) who heard the work as a whole, as a live performance by Westerkamp:

I appreciated From the India Sound Journal at the cultural centre in Vancouver especially for the mystery of the presentation and composer's entrance and for the clear, evocative aural ambience. I was "with" the piece throughout.

As with Westerkamp's Moments of Laughter, the India Sound Journals are intended to be live performances with tape accompaniment, and clearly work best in this context.

The other issue raised by Wanda's comment in the last paragraph is in what way this piece increases a listener's knowledge of India. Even when more of the facets of Westerkamp's experience in India are included, as in a performance of the whole piece, the work is not intended to describe India in the sense of encapsulating this complex and diverse culture, but to relate a Western visitor's initial experience of India. This is clear throughout the piece, as Westerkamp includes phrases in the narration like:

Waking up in Delhi on the first morning... We have been here less than 48 hours... It is the shock that everyone spoke about who has gone to India...(HW)

In both of these pieces, Westerkamp takes on the difficult and dangerous task of gently penetrating another culture, while trying to respect its integrity, strength and complexity. It is difficult and dangerous because she runs the risk of exoticizing Indian culture as she works with its sounds. Aware of this risk, Westerkamp clearly situates herself as a recent visitor, speaking not as an expert insider but as someone who is outside this soundscape as a foreigner, trying to understand through moving as far inside the sounds as she can, through listening. In her many visits to India, Westerkamp facilitates the work of a growing number of soundscape composers who live in New Delhi, who are insiders to this culture. Even her choice of places for initial field recordings are the result of being taken to these places by her New Delhi friends, as she describes in the program note of Gently Penetrating. Her approach to life in India is as exotic as her approach to the sound of a cricket, of her baby daughter's sound world, or of the sounds of her own body. She makes each of these soundscapes exotic, even though they may initially seem mundane or foreign, by bringing out their musicality and magic.

- 1 All of Westerkamp's quotes in this section are from this source.
- 2 See methodologies chapter or "In the Studio" for more details.
- 3 Westerkamp's recordings for this piece were made using a Sony DAT TCD-D10 recorder, a Sony D3 recorder, and a Sony stereo condenser mic ECM 959DT.
- 4 All quotes in this section are from Westerkamp's commentary when I interviewed her on August 18 1997, at her home studio in Vancouver.
- 5 Initially with the music of Ravi Shankar and the Beatles, more recently by Janet Jackson and Madonna, among others.
- 6 When I moved to Toronto to do graduate work, I was drawn to the St. Clair-Dufferin area, partly because it is predominantly Italian. On my street in the summer I hear the sounds of people speaking and yelling this beautiful language, and sometimes singing

arias as well. And then there is the World Cup celebration, an intensely vital human soundscape.				
home	introduction in the studio	moments of laughter	soundwalking	dissertation