Hildegard Westerkamp is a composer, radio artist and sound ecologist.¹

>Lex: Can you tell me on what you’re currently working?

>Hildegard: Right now, I’m working on a piece which is slightly unusual in that it has a live instrumental component. I don’t actually work so much with live instruments. I really have no training in it, and I get slightly anxious because I don’t know much about it.

The piece is called Like a Memory. It has a bit of a story because it comes out of another project I did previously - a sound installation with photographer Florence Debeugny about ghostowns in one of the old mining areas of British Columbia. That area is called the Kootenays and was an active mining area around the turn of the 19-20th centuries. I’ve known about this place since I emigrated in 1968. My ex-husband grew up there and showed it to me. I was always very enchanted by these abandoned sites. You find lots of scrap metal, and collapsed houses, and traces of past activity. But, it’s also a huge mess, an environmental mess.

So, there is that edge between the incredible mess that industry left behind once it was finished and of nature moving back into the abandoned sites. It was exciting to find traces of former activity in places that nature had begun to reclaim. I proposed to Florence that we should do an installation about this.

We went to the area. It’s a quiet area, so you have wilderness sounds, and water sounds, but it’s generally very quiet. What I love doing, often when it’s quiet, is to touch the materials. Banging on the wood and the metal. You find these incredible resonances in the old metals: steam engines and what not.

>Lex: Were you just using condenser mikes or did you use pick-ups?

>Hildegard: Actually, for this project I rented a Sony MS-5, which is a very good stereo microphone. It’s wonderful, although it’s not actually so good for close-up sounds because it’s too sensitive. So, it was a bit difficult because I would have the microphone in one hand and be playing on these objects with the other and had to be very careful not to distort. Or, I had the microphone placed further away, so I could bang on the objects and record from a distance. But this microphone gives you an incredible depth spatially. So, you don’t just...
pick up the foreground sound of the instrument, you also get a strong sense of space. It’s a mountainous area, so you get reverberation, echoing. In that time, I also went to an abandoned children’s camp, a place I had discovered years before. The main house had a piano in it. An old piano was all that was left. It was totally broken. Strings were broken. There were rats’ nests in it. One day, I went there with my tape recorder with the intent to play the piano. This was years ago, in the early 80s. I still have these recordings on cassette. Then I met the pianist Jamie Syer last year. He told me that he was interested in working with me. It turns out that he has a lot of connection to that area: there’s a music camp there now, where he teaches every summer and which didn’t exist in the early days. He knew all about the ghostowns. So, I said, “Look, I have all these recordings of this old piano. Why don’t we do something with that?” So, what I’m doing right now is exactly that. I’m working with the piano sounds I’ve recorded in the abandoned house; I recorded Jamie on his piano at home, and I am using a few excerpts from the installation piece as well. The reason I’m telling you all this in detail is that it’s actually quite important to me to have a connection to the environment, to the place, I record in; to have a story, some content that the recordings already give me. The reason I felt enabled to do a piano piece is because of my connection to this old piano.

I used to play the piano. I used to study classical music, but I’ve never really seen much sense, as a composer, to compose abstract instrumental pieces. It doesn’t inspire me. What would I say with such music?

>Lex: Were you trained as a concert music composer?

>>Hildegard: Well, I wouldn’t say that. Yes, I studied music - piano and flute - in Germany. When I went into music studies, it was because I really loved music. I barely got in, because I wasn’t such a great pianist. I had a horrific experience studying music: I wasn’t ‘up’ for that level of playing at all. And, I wasn’t interested in it - in practicing so much.

When I emigrated, I had had it up to here with music studies, and wasn’t going to continue. Then I came [to Vancouver] and there were no entrance exams at the University of B.C. music department at the time, in 68. I thought, maybe I’ll try again. The atmosphere here on the West Coast was so much softer, so less judgmental, in terms of music-making that I just really loved studying here.

>Lex: The open definition of music here kept you working here?

>>Hildegard: Absolutely.

>Lex: Did you ever make a clear break out of the tradition of music, or has your definition of music expanded to include all that you do?

>>Hildegard: Yeah, well, what happened was that when I was a student, Murray Schafer came to give a lecture here. And that lecture ‘did it’ for me. His lecture was, first of all, very interestingly structured. He had three or four music stands on the stage. One stand was
connected to him talking about his trip to Persia. Another was connected to general sound
scape matters here in Vancouver. Another was connected to music composition and his
own work. Some of it was connected to contemporary composition.

The World Soundscape Project (WSP), at that time, already existed – the research
group. He had placed members of this group into the audience. Every so often, one of them
would get up and ask something like, “How many birds have you heard today”... How many
airplanes have you heard today?” All these questions totally blew my mind. I came out of
this lecture, suddenly hearing absolutely everything. I think at that point, I became aware
that I was always connected through the ears to the world. I hadn’t been aware of it.

Years later, when I was teaching music, I remembered that lecture. Someone told me
that they were working on The Vancouver Soundscape, and Murray Schafer had written the
Book of Noise. As a teacher, I ordered this book for my students. Then, I thought, I really
want to know more about this. I found [Murray Schafer]. At that time, he was working on
The Tuning of the World, at Simon Fraser University.

The book offers an overview, like an anthology almost, of the soundscape in general.
He finished it in 1975. The book covers the natural soundscape, rural soundscapes, city
soundscapes, post-industrial soundscapes. Then, it speaks on music and soundscape, fol-
lowed by the analytical part. In other parts he talks about listening, the acoustic community,
the soniferous garden, silence. He was trying to cover the whole spectrum.

I eventually gave up teaching and became a member of the World Soundscape Project.
I was hired to do research for the book, and never turned back. It was so fascinating for
me to get to know the world through the ear. As an emigrant from Germany, this was par-
ticularly interesting. I think I had been here for four years by the time I met him. It opened
up this Vancouver world and the Canadian, North American world in a different way. I just
loved it: to listen with a musician’s ear to the world.

Murray suggested at the time to listen to the world as if it were a composition, and to
analyse it with a musician’s ear – analyse the instruments with which this world makes its
sounds. He took it very much from that aesthetic point of view, and that’s sometimes where
he gets criticised these days.

>Lex: Do you find that aesthetic approach limiting ever?

>>Hildegard: I definitely found at a certain point that I had to expand my language. That
was when I went into communications. I was also involved with a local group here organised
to fight noise, so I was a bit of an activist. There, it was interesting, because the listening
sensitivity didn’t seem to fit into the activist mode at all. It was difficult. The environmental
activist is not necessarily a listener. There is a political agenda to get rid of noise. To ask
noise activists to stop and listen and to include the information that comes from listening
into their activist mode – that often is too much of a jump to make for them. To me, it’s not
a jump. There’s continuity there. We had this noise workshop here in town. We invited the
City Council. The Mayor and quite a few council members came. We had them all blind-
folded, took them on a soundwalk, and also had them listen to a recording we had made,
with basic messages about noise.
When you get everyone to listen to the actuality of what's happening, it adds a whole dimension to the political work. We were fighting the expansion of the airport, and were moving to improve the city noise by-law. To ask people to go on a soundwalk, and listen to the environment while they're frantically trying to put out petitions and do all this activist stuff: it's difficult, because it asks people to stop. Just for an hour, put your mind out of this and just listen. Just take in what is.

Also at that time, we had the experience of starting a community radio station, Vancouver Co-Operative Radio. At the time when we started it, VCR gave us an outlet for the recordings we were producing. We could broadcast our soundwalks and environmental recordings. The combination of all those things at that time really created the energy of a cultural activism that was very fascinating for me, for us. Interestingly, it got me into composing. What happened was that, my colleague Barry Truax - a composer and musician, coming like me from the University of British Columbia - was very connected with the European scene, the studios and the classical techniques of the ‘traditional’ electronic music studio. I didn't know much about those things.

Lex: They were already considered classical techniques by then?

Hildegard: Yes, in a way. Stockhausen in Cologne and Pierre Schaeffer in Paris, at GRM, which is now producing GRM Tools. These are very good by the way, because they're so subtle in terms of processing possibilities. They are based on the studio techniques that were developed at GRM around the sound object. Except that in the old sound object approach, the French were not interested at all in keeping the sound source recognisable.

Lex: What is the sound object approach?

Hildegard: Pierre Schaeffer developed a whole treatise on what he called l'objet sonore, which had to do with processing recorded sounds, as opposed to Stockhausen who was generating electronic sounds. The sound object is a small unit of recorded sound. Schaeffer developed a theoretical framework of how to categorise sound – a complex task, literally a type of objectification of sounds, given that he was dealing with very much alive, recorded sounds. What was so interesting, from the soundscape perspective, was that Schaeffer did NOT want the listener to recognise the original sound source. It was meant to be musical material for their abstract compositional purposes. When we began to record here, and create, for example, a portrait of Vancouver called The Vancouver Soundscape, we made probably the first attempts to process sounds slightly, not in order to obscure but to bring out certain aspects of the sounds which were attractive.

That really interested me, because on the one hand you have the real sound, and on the other you have the processed sound, which is exactly what happens in listening. Your interpretation, your imagination changes and processes sound. Like where you are sitting near a creek, and the sound is so busy that you start hearing voices in it, you imagine sounds. There's an acoustic imagination. Processing sounds has always taken me into that abstract arena of the imagination. That's the edge with which I like working.
Lex: What kind of equipment were you using in the 70s?

Hildegard: My very first piece, called *Whisper Study* - we did not even have a mixer then! I don't know if mixers existed, but we didn't have one. We edited by cutting tape. We had three very good, very big, Ampex reel-to-reel stereo tape recorders. They were 1/4", but half-track, not quarter-track, so that the two tracks covered the whole tape. We had one machine that had four tracks, which used 1/2" tape. There we could do some multi-tracking, with four tracks! That's probably how I ended up doing the piece, with various stages of multi-tracking on to the four-track. The tricky part was that you built up noise, tape-hiss, with every dub. And because the piece was based on silence and whispering, it was a tricky situation.

Which was good, because it was my first experience in the studio, and I was forced to pay attention to how to make it as clean as possible. So, I learned all about best possible dubbing and recording - to record as loudly as possible without distortion, which then allowed me to reduce the overall level of the piece and in doing so reduce the noise. In that way I learned all about clean, analogue studio work. But sometimes it was hard to avoid building up noise.

Editing and mixing, filtering, looping and delayed feedback were the basic studio techniques. And, we had this lovely machine that one of the technicians had made, to do what is now called pitch shifting. It was a speed changer, connected to one of the tape machines; so you didn't just have 15 ips (inches per second) and 7.5 ips and 3.75 ips as the tape machine speeds. With this you could fine-tune the speed, and over four or five octaves, from very slow to very fast. And, one knob did the whole thing! I have never seen a machine like that, ever again. It finally broke, in the 80s, I think. But, now you have all the pitch shifting you want in the digital software.

I didn't get into computers until the mid-90s. Because, for my ways of working there was never enough memory. The technology was just not ready for fairly large sound files. I always use long recordings, with small sound objects at the same time. Finally, when there was enough memory and enough power/speed, I went straight into the PowerMac about seven years ago. Up to that point, I either worked in other studios that had the equipment, or I worked analogue.

Lex: How was it when you first made the shift into digital?

Hildegard: It was weird. The choices are different. Conceptually, when you edited analogue tape, you had a recording, and you took out what you didn't want. You dealt with a whole thing and you took out. With the digital, you have your recording, and you put into the digital domain that which you want. To me, that was a big switch, because I like to work with a whole recording and then come into the detail of it from the large perspective.

Also, with digital, you have to select at an earlier stage. That's not so much a problem now, as it was earlier, when the computer couldn't take big files, and you really had to make choices, early on. I found that confusing, quite difficult actually. But, now it's not so much of an issue.
Lex: And what about the nature of time? That you have so much control over time in the digital environment, whereas with tape it’s flowing?

Hildegard: Actually, there’s a different problem. Time moves aurally in the analogue domain. You don’t see the sound waves; you work through your ears. All the editing that happens isn’t visual: you make an edit because it sounds right, not because you see a smooth connection on the screen between soundwaves.

That is a huge problem, I think; people working in ProTools, for example, are often not aware to what extent they are working visually. I tend to encourage people to make a dub of what they’ve just done and play it back in a different environment. In fact, play it back some weeks later when the inner visual image of the mix on the screen is gone. Listen to it: hear whether the work makes any sense from the purely aural perspective. Because in my own experience I find myself so busy with these visual details on the screen that I think I’ve done a lot. I think that’s the biggest danger, and I think the danger is that we end up with a lot of very flat work that isn’t all that complex, or interesting aurally. Because the composer is in a mind space of visual busy-ness.

So, time passes visually when you compose in the digital domain. You can’t help it. Visual time passing and aural time passing are very different, quite antithetical. That’s the one big shift from the analogue to the digital sound-processing domain.

Lex: For a very different historical question, how has the soundscape changed since you were doing your early soundscape work? Here in Vancouver, or in the world?

Hildegard: Certainly, one thing that has increased enormously is the sound of media, the sound of music in the environment. The “schizophonic soundscape” – this is a term that Schafer coined – has changed. A schizophonic sound is any sound that comes out of a loudspeaker, where the source of the sound does not occur in the same place as the reproduced sound. If you hear an orchestra playing through a loudspeaker, the source was somewhere totally different in time and place. That’s where the ‘schizo’, the split, comes from.

Whatever we hear through a loudspeaker is not of this place, ever. To us, now, and to young people in general, it is quite natural to perceive the loudspeaker as the place of the sound source. But, when you think about it, of course it isn’t. A loudspeaker introduces something quite foreign into an environment, something that does not naturally belong there.

At that time, in the seventies when the word was first used, the split between sound-source and reproduced-sound was still pretty obvious. When you think about the Muzak Corporation, and how they were trying to manipulate customers into staying in stores for longer or shorter time spans, for buying more, or have staff work harder, or whatever – there you have a strongly manipulative example of that medium. Designing it explicitly so that it is not listened to, a musically designed soundscape is used to somehow manipulate people into changing the pace of their activity, whether it is consuming or working, preferably without them noticing it.
The Muzak Corporation is, in my opinion, one of the most sinister representatives of this type of manipulation of consumers or a work force, where the sound itself is used to increase corporate profit.

At the same time in the seventies, as I mentioned earlier, I was working at Co-op Radio, a radio station that was trying to connect with its listening community - also a schizophrenic medium, but totally at the opposite pole from the Muzak Corporation. Co-op Radio is a medium of connection and conversation with community, to animate conversation, to disperse knowledge, to analyse and understand social processes.

> Lex: To articulate a place through art.

>>> Hildegarde: Exactly. The Muzak Corporation has defined itself as saying that they are creating music NOT to be listened to. They don’t want to connect on a conscious level with their listeners. They in fact want to reach you subconsciously in order to get something from you. It’s a very underhanded capitalist way of getting you to do something that you’re not conscious of, spend more money, work harder. For me, those are the two poles of the spectrum of the schizophrenic environment. And, as you’ve noticed yourself, you’re also engaged with a schizophrenic activity right now. You are in the same place as I am, but you are hearing it through the headphones as you record the interview. That can be very positive, in that it switches your perception: it makes you aware of the environment in a different way because you are hearing it differently. The microphone is your new ear. So, it presents the environment to you quite differently. There again, that is a very positive aspect of sound technology and the recording medium, connecting you to the environment in an awareness-raising way.

If the media sound - radio, TV, whatever - does not do that, that’s when it becomes manipulative, exploitative, when it speaks AT you, and doesn’t want you to speak back.

The presence of such media really has increased. And I think the normality of such sound in our environment is very dangerous, because people grow up with it as if it’s a necessity of daily life, almost like an addiction. People tend to feel that they have to surround themselves with sound and music all the time.

When the Walkman appeared it became apparent that people enjoyed making a personal choice in their listening. Now, the technology is so small that it can be carried around everywhere. With the cell phone we can speak to anyone at any point, or be spoken to at any point. Suddenly, we hear sounds in environments that we never heard before - the phone ringing in the middle of the street downtown was not heard in the 70s or 80s. Now, if someone behind me is saying a loud “Hello?” it’s usually not for me, it’s for someone else somewhere else, right?

Those kinds of voices are emerging in many places, and that loud telephone voice can be very disruptive, very obtrusive. There’s a normalisation going on there: people are accepting it. On trains in Europe for example everyone is talking on their cell phones. You are forced to listen to something that you really aren’t interested in. You get drawn into quite intimate personal emotions because you hear the voice. Not necessarily because you hear the story, but because you hear the voice, the voice quality. That’s usually more than you...
want to experience on a train ride. In fact, it means that it is harder to be in touch with your own inner voices because you're constantly disrupted by other voices. You can't block them out. Muzak, we've learned to block out. Foreground music even, we learn to block out. But, voices! We don't want to block them out. We're social beings. But the cell phone forces us to block out the next person.

This conversation was recorded at Vancouver, British Columbia, June 2002, and prepared for “Sound Generation: Recording - Tradition - Politics” (Chronoplastics, 2003).

Notes
1. Hildegard Westerkamp was born in Osnabrück, Germany in 1946 and emigrated to Canada in 1968. She is a founding member and is currently active on the board of the World Forum for Acoustic Ecology (WFAE), as well as the Canadian Association for Sound Ecology (CASE). Between 1991 and 1995 she was the editor of The Soundscape Newsletter and is now on the editorial committee of Soundscape - The Journal of Acoustic Ecology, publication of the WFAE. Her writings can be accessed at http://www.sfu.ca/~westerka/writings/writings.html
4. The Vancouver Soundscape (http://www.sfu.ca/~truax/vanscape.html).
5. ProTools is an audio production environment for recording, editing and processing in the digital domain (www.digidesign.com).