

**INTERVIEW WITH HILDEGARD WESTERKAMP:
“ONCE YOU START LISTENING TO THE WORLD
YOU ARE DEALING WITH ALL OF LIFE”**

**ENTREVISTA COM HILDEGARD WESTERKAMP: “QUANDO COMEÇAMOS
A OUVIR O MUNDO ESTAMOS A TRATAR DA VIDA TODA”**

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Picture postcards are partly responsible for the visual relationship we still have with urban places today. They used to fix images of villages and cities and draw our attention to what can be seen. Cities are, however, places that can also be experienced and described in aural terms. They are a kind of auditorium, where the noise of traffic combines with birdsong. The experience of conscious listening — which has been analysed more intensively since the 1970s — is a way of getting to know one’s environment, as well as a way of preserving the body’s sentient nature. In this interview — which was recorded in January 2021 as part of the project “AUDIRE. Audio Repository: saving sonic-based memories” — Hildegard Westerkamp explains how original and unique a soundwalk can be and how inspiring or disturbing the urban acoustic experience can be today. The concept of soundscape and the notion of conscious listening are here considered fundamental to understanding our relationship with the environment.

With an academic background in music and communication, Hildegard Westerkamp is a composer, radio artist and sound ecologist. She was born in Germany, but has been based in Canada since 1968. As a researcher she participated in the “World Soundscape Project” team, which was coordinated by R. Murray Schafer. In the mid-1970s, she led the “Noise Abatement Project” of the Society Promoting Environmental Conservation (SPEC) in Vancouver, and a few years later created her pioneering radio programme *Soundwalking* on Vancouver Co-operative Radio. She lectured in acoustic communication at Simon Fraser University for almost a decade, between 1982 and 1991, and was researcher for the “Women in Music” project. Between 1991 and 1995, Hildegard Westerkamp edited *The Soundscape Newsletter* and in 2000 she founded the *Soundscape: The Journal of Acoustic Ecology*, of which she was the chief editor until 2012.

An enthusiastic promoter of soundwalks, which she describes as excursions whose main purpose is listening to the environment, Hildegard Westerkamp is a founding member of the World Forum for Acoustic Ecology. According to the *Canadian Encyclopedia* (Bazzana, 2007), Westerkamp is a member of many associations and several of

her artworks have been awarded and earned recognition at American and European competitions.

Environmental sounds are the "musical" resources of her compositions. As an artist, Hildegard Westerkamp is a kind of sound poet. Her exceptional experience in transforming everyday sounds into artistic practices and her clear but emotive understanding of sound as a language are the reasons why she is today one of the most distinguished references for researchers of sound studies.

Today there is no researcher in the field of sonic studies not referring, in a way or another, to the word *soundscape*. In your opinion, why is this such a unique concept?

When I started working with Schafer in 1973 and the "World Soundscape Project" (WSP), the word *soundscape* was new. Apparently the word was used by someone else beforehand, but Schafer took that concept and really just ran with it.

The simple way of speaking about it is to refer to the word landscape. In the English language, this is a very obvious connection. When we think of landscape, we think of everything from its geography, its vegetation, its inhabitants and its culture content, in other words the interaction between living beings and the specific environment they live in. The same applies to soundscape, which, according to Schafer, is to be understood as a sonic place that communicates to us and that we communicate within. It's a place that is perceived aurally. His interest in soundscape originated in the concern that we were not paying enough attention to it, that we were beginning to have too many sonic problems, especially in the urban environment.

When we talk about soundscape, we are not just talking about the sounds that are occurring in the environment. We are talking also and most importantly about our relationship to it, in fact that of any living being, and how we listen to it and making sound in it. What is the interaction? What are we doing to the sound environment? What voices are we putting into it? And how do the sounds occupy an environment? How does an environment reflect sound back? An environment, a landscape, an urban place, a room will shape any sound through reflections, echoes, and resonances, and will give it its unique characteristics.

There is always a relationship between how an environment receives a sound and how we put sound into it. Very often that kind of ecological relationship that we are talking about here is forgotten when the word *soundscape* is used these days. But historically the term soundscape always implies — and is indeed its essence — that we are speaking about the relationship between living beings and the environment. All too often nowadays, we hear people speak about a soundscape even when they mean a musical piece, a composition, and not even necessarily a composition that uses environmental sound. Indeed, sometimes a piece of music can also be a soundscape. But often in those contexts the emphasis would be on an ecological understanding of this soundscape, how we relate to it, how we listen, what meanings do the sounds carry for us and so on.

Probably because of its connotation with sound ecology and natural landscapes, the word is very often used as meaning enjoyable listening...

This is a misunderstanding. I remember when I was in Japan some years ago, we had an intense discussion about exactly that. The term soundscape in Japanese culture then tended to imply a pleasant sound environment, such as the beautiful traditional gardens. No, in the "World Soundscape Project" tradition, we are talking about *any* sound environment. The idea at the time, in the 1970s, of starting to listen consciously to all aspects of the sound environment was very much based in the fact that the sound environment was getting progressively more polluted. And precisely because of that we needed to listen to it, especially since, as Schafer felt, the people involved in fighting noise pollution were not including listening in their anti-noise fights. Lots of measurements were made and noise studies were conducted in order to understand noise pollution and to make changes, but the one thing that was missing was *listening* to noise. Schafer claimed that conscious listening would help us to understand viscerally what is actually going on out there. His idea was that in our study of the whole soundscape we also needed to insert perception into the study of noise, uncomfortable as it may be.

It can in fact be noticeably uncomfortable to listen to the soundscape if a sound-walk leads along a noisy street for a long time. In that context the listening is conscious! You are not just blocking the noise out; you are doing the opposite, you are opening up to it. And that can become very uncomfortable and exhausting. An experience like that is a reality check. It reveals what happens to our bodies and psyche even if we do not pay attention to it. If we block out that sound as we often do in daily life, while we are walking along a street, we are usually also not conscious of what that sound is doing to us. So, the essence of why we would want to listen to soundscapes in that fashion is to understand their impact on ourselves and any living being, especially when we are exposed to this kind of noise in everyday life. What is the reality of that? To supplement the listening experience with measurements and acoustic research was the ideal really behind the work of the "World Soundscape Project". Let's work together with scientists who are studying the sound environment, and bring together the information that comes from both quantitative data and qualitative research. If we combine these approaches, we may get a broader understanding of what we're doing to our sound environments.

However, such a comprehensive approach to studying the sound environment opens up enormous and complex arenas of work. Before I started working with the "World Soundscape Project", when I was still a music student, I had never heard about sound research, noise measurements, environmental acoustics and the like, and certainly had never imagined to get into this field of study. Suddenly you are dealing with quantitative data, you want to understand terms such as the decibel, reverberation, resonance, and so on; you want to understand how environmental conditions influence sound quality, why something is disturbing or not; you learn about the psychology of listening, the physiology of the ear, to name just a few aspects of studying the world of sound. Not only are you entering into multi-disciplines of sound and acoustics, but on a personal

level you are also beginning to understand *how* you listen, what kind of listener yourself are. This is a life task really, to begin to understand how we listen, how we react to sound, why some people are more sensitive to noise and loud sounds than others, why certain cultures are much more sonically expressive and outgoing than others. I always say that Schafer has left us a huge legacy, because once you start listening to the world you are dealing with all of life.

How would you describe our everyday acoustic environments, thinking specially of those people living in cities? You were talking about noise. David Hendy (2013) says that the modernity is noisy. Is this your belief as well?

It is a tricky subject. There has been a resistance to likening city and urban living to noise. It is not a black and white question. Schafer has been criticised for presenting a duality between nature/good/quiet, city/loud/not good. On the surface, yes, that is what one can read in his book [*The Soundscape. Our Sonic Environment and the Tuning of the World*], which was written in the 1970s when noise pollution became a fundamental impetus for him to pay attention to the quality of the soundscape. But when you really read his work in depth, the premise of listening to the world and researching the sound environment reveals deep complexities in how soundscapes are experienced and interpreted. It is never black and white. For example, as people in older cultures know, urban environments can have incredibly beautiful quiet places — the nooks and crannies of small streets, where motorised sounds cannot penetrate. In North America, it is a bit different: cities tend to be sprawling places where broadband sound from traffic can kind of pervade large territories. The low frequency rumble of motorised sounds and of air conditioning from high-rise buildings, for example, can travel far and be all-pervasive.

In contrast, in my own hometown in Germany it was decided in the 1970s, I think — I had already emigrated —, to empty the old town centre of all motorized traffic. It is the most beautiful urban space that I can imagine, because all you hear is footsteps, musicians and voices, basically. The buildings don't have air conditioning outlets like so many in North American cities. Of course you can experience this in many other cultures, in which one can find this interesting combination of a quiet soundscape (devoid of motorised sounds) and yet socially a very lively atmosphere — beautiful urban environments that can be much quieter than some parts of the country side where one hears agricultural machines or major traffic arteries. If we really begin to listen to all those details in the soundscape, then we can no longer insist on dualistic interpretations of the sound environment.

Authorities are also becoming more sensitive to the acoustic quality of cities and buildings...

Exactly. Peter Cusack recently wrote a book entitled *Berlin Sonic Places. A Brief Guide* in which he highlights how, when we move through a city, we "pass through a continual succession of soundscapes that merge, often unnoticed, from one to the next". Every

part of the city has its own sonic characteristics. When the "World Soundscape Project" was studying the soundscape of Vancouver in the early 1970s, this was a very new approach. It had not been done in a comprehensive way before. We were trying to get a sort of global aural "image" — for lack of a better word! — of Vancouver, by recording it, by studying different aspects of it. Only in the process of studying it we began to understand how impossible that really is, how complex an urban environment is, how inspiring or also absolutely oppressive it can be. We have beaches in Vancouver and we have beautiful open spaces. That does not mean that we don't hear an urban hum all the time, depending on the weather, the wind, the air pressure. It changes every day. Then we have the opposite, the Downtown East Side. People who live there have to deal with noises that can be frightening, noises that are not just loud traffic, but there are sirens, voices of people who are suffering from addiction and homelessness, and yes, there is traffic continuously, construction, and so on. Between those extremes, we have everything else, including the more glitzy financial, commercial centre of downtown with its high rises.

During the beginning months of covid we suddenly had very little traffic. It was particularly interesting to go into those high-rise areas when traffic had pretty much come to a stand still. Suddenly you could really hear the acoustic parameters of a place like that. You walk through those now empty streets ringed by concrete and glass, high walls, hard surfaces and you realise when you make a single sound in there it reverberates strongly or even echoes. But when these same streets are filled with continuous traffic sound, it is very hard to discern how much that sound gets amplified and reverberated by those glass walls. Downtown streets are basically acoustic tunnels of amplified motor sounds. It's called the canyon effect. Covid has highlighted many such soundscape characteristics and ideally may encourage and enable changes in urban sound design in future city planning.

Is it a challenge to experience the polyphonic nature of cities?

Polyphony to me represents a coming together of many voices interacting with each other, and in an ideal way you hear all aspects of it. In a four-part fugue by Johann Sebastian Bach you hear every note. When you are in a North American downtown street, as I have described before, there is one sound that dominates, which is the traffic. Yes, you can hear a polyphony of cars passing, of buses and trucks, and you can hear that clearly. Do you hear the footsteps of the people that are walking along the sidewalk? Do you hear their voices? Do you hear voices across the street? Do you hear the wind in the trees that might be there? Do you hear the birds that are singing at the same time? Yes, you may, but what is the relationship between all that? If you would take away the traffic, you would hear those quieter sounds clearly. When the traffic is there, you might still hear aspects of it but you don't have the same transparency and clarity as you would have in a truly polyphonically balanced soundscape where all voices are clearly discernible. The traffic creates a sound wall, as Schafer called it, that prevents us from listening into the distance or to the subtleties in humans' voices. In a conversation walking along a noisy

street, do you hear the subtle intonation of the person speaking with you? Do we have to speak louder because of the traffic and what does that do to our intonation? Some bird species have become louder because of traffic sound. So, we can hear them, and we can hear them because they occupy a higher frequency range than the traffic. The high frequencies still come through but are they hearing each other clearly enough? Why have they become louder? In order to hear each other. For survival.

Yes, there is a polyphony of many voices in dense urban environments. This can be very inspiring, can be exhilarating, as in a market environment, where there is a lot going on, where we hear vendors and many lively voices. And right now during the pandemic we all crave to hear a bunch of voices in the streets again, hear the life of the people in the city. That is a positive experience of people living in a community together and that type of social polyphony needs to be examined: is there a balance of voices in terms of their sonic power? If the traffic dominates, as I said earlier, then the actual human and animal communication is not as clearly decipherable. If urban planners could go on soundwalks, especially now during these pandemic times, then the conscious listening that happens on any soundwalk, would reveal new information useful for urban acoustic design and significantly different from that which is derived from noise measurements. But sadly that consciousness of listening is mostly still lacking in much of urban planning.

Our culture and learning systems are very much visual-based (digital screens-based). Our experience of urban places is also probably much more visual than acoustic. At least the way we register this experience. How could a sonic-based experience of urban places be promoted? And what can a sonic experience offer us that cannot be seen?

First of all, I would claim that the experience has become more visual because of the noisy environments that we are in. An environment that is dense with motorised and broadband sounds — sounds that cover the whole frequency spectrum and are often continuous sounds, such as air-conditioning, vehicular traffic, etc. — environments like that do not encourage listening, because they quickly become uninteresting. When a soundscape becomes seemingly too familiar and doesn't carry new information, it becomes a background sound that seemingly does not require our attention, but it also does not give us any cues for orientation in our movements. It is a natural aspect of our aural perception that we block out what doesn't interest us. Yet, when we are in conversation with someone while walking along a noisy street our ears have to strain to hear the words and it becomes the role of our eyes to make sure we cross the street safely, for example. Under such conditions, it has become our habit to orient ourselves mostly visually. The only people who have to rely on their aural acuity even in noisy environments are blind people. But for them it's very difficult, because they have to decipher acoustic information from traffic's ebb and flow, and from within the broadband density of the traffic sounds.

Covid has taught us something, I believe. When the world became quiet so suddenly in March 2020, that broadband sound was largely missing and our ears woke up to a new neighbourhood ambience. We heard more clearly what was always there, the quiet itself. Suddenly one could hear the entire envelope of a car passing from the very beginning of its appearance to the very end of its disappearance — a very rare sonic experience in the city. You could hear individual voices communicating with each other, people speaking across the street from each other. You could hear many more birds, which probably had always been there, but we didn't notice them before. Because that noise bed of the city was gone, we could hear all the subtler sounds with more clarity. It became a pleasure to hear people communicating from their balconies. For many months, here in Vancouver, every evening at 7 o'clock, people would come out on their balconies and make sounds and noises of gratitude for the health workers who were working hard in hospitals and care homes. I remember going out into different parts of the city recording those 7 o'clock events. Every neighbourhood sounded different! The beginning of covid-19 was an aural wake up moment for everybody in the world. But now the novelty has worn off. It is precisely at this moment that we need to stay awake aurally and become conscious of what we might learn from this experience for the future of urban soundscape design.

The contrast of coming from a noisy to a quiet environment, if it is experienced consciously, is the same kind of wake up call. If we drive in a car for hours our hearing acuity will be reduced. Our ears will have been inundated with hours of motor sound. So we will experience a temporary threshold shift, that is, we will be slightly deaf. When we arrive and get out of the car we will experience a sudden quiet. It will take some hours for our ears to recover from the noise induced shift in our hearing and gradually the subtle sounds in the quieter environment will come to our attention, especially if we can experience this transition consciously.

Many people don't know — there is a lack of education — that we experience what is called a temporary threshold shift, where we temporarily lose some of our hearing. Physiologically the hair cells in our inner ear have been bent by the continuous motor sound that we have been experiencing. If we are lucky enough to be exposed to a quiet environment long enough after such an exposure — which could be as much as twice as much time of the noise exposure, depending on the decibel level — the hair cells will return to their healthy upright position and we regain our original hearing acuity. If we understand this physical process, then we know that quiet is necessary for the recovery from such a temporary threshold shift and we can try to give ourselves that time. If we do, we will be able to connect to the quiet sounds of the environment, to their richness. Going into a desert or going into the mountains has that same impact. But if we don't have that opportunity, if we are always surrounded by a wall of higher sound levels, we don't have the comparison. In such a situation, if we have the luck to be exposed to somebody who offers soundwalks or opportunities for some sort of environmental listening, that can give us experiences of acoustic contrasts even within the urban environment, then we begin to notice all these subtleties that are implied by listening consciously to the environment.

Once you have been on a soundwalk, you don't forget that experience. We can talk about soundwalks, but unless people have actually experienced them, they really don't know what we are talking about. They have to be done. To spend just one hour concentrated on listening and not talking, paying attention to all sounds, is a very refreshing if intense experience. I don't think I have ever been on a soundwalk where people were not inspired afterwards. It is an inspirational experience because your hearing has been opened up in a new way. That happens even when you walk in a noisy environment. It is just a bit more exhausting. In a soundwalk you are connecting to the act of listening in a conscious way, no matter what the sound quality of the environment is. And that is precisely where the source of discovery, new information and inspiration is located.

What have I heard today in my neighbourhood that has always been there but I have never really noticed before? It is the noticing that connects us aurally to place. In a soundwalk you are making the relationship between self and environment conscious on an aural level, which is very different than site seeing. We become conscious that we actually are always inside a soundscape, we are not listening at, as we are looking at something. To know what we are inside of, what that acoustic "room" is that we are inside of all the time, and how its structure and its quality change and affect us or a situation, is very important information, because then we also understand why we are relating to it in certain ways, how we respond to it. To know who we are as listeners in any culture, in any environment, means that we learn to better understand our relationship to it. And that in itself is a first step towards ecological action.

Would you say that the practice of soundwalking enhances our body as a sensorial place in itself?

Yes, totally! We are not just listening through the ear, we are sensing with our entire body. All sound frequencies bring the air into motion and its vibrations touch our bodies. If you think of it purely in terms of the physics of sound, that is the reality. Percussionist and composer Evelyn Glennie [United Kingdom] who lost almost all her hearing at an early age, has taught us how the whole body and not just the ear, really is one sensing unit, how different parts of the body are affected by different frequencies and how the whole body can "hear" that. All of us, who are lucky enough to have healthy ears, have the disadvantage of never really learning how the rest of our body hears, because we don't need to sense the soundscape around us in that way, our ears seem to do the job. Only in very loud situations, such as a nightclub or along a truck route, can we feel the low frequencies vibrating our bodies. People may try to protect their ears in such situations by wearing ear protection, but in reality most of the sound still impacts the rest of our body.

Besides being a way of raising some awareness of the ecological crises, can the practice of soundwalking be understood as a way of improving our condition, balance, and well-being? Can it be a kind of therapy?

Yes, definitively. Usually in the discussions after the soundwalk, there is a sense of enthusiasm that comes from people, an excitement about having noticed sounds that

they had not noticed before. That in itself is therapeutic and inspirational. I often get the feedback that a soundwalk is a meditative experience. If it is a well-composed soundwalk, or if the environment "plays" well with us during a soundwalk, you hope to have a kind of a sound "composition" that is balanced in itself. Participants would experience times of sound stimulation and times of repose, and other such changes in the sound environment alternating in a balanced way.

Sometimes there may be street music, or transitions between indoor and outdoor sounds, traffic, ducks in a pond, or children on the playground, muzak in a mall, anything is possible. Soundwalks can be very magical when they give us those beautiful changes from one soundscape to another. Our ears and whole being is stimulated by such changes when we notice them. In daily life we tend to block out that kind of listening experience. To notice sounds on a soundwalk without reacting or talking about it immediately, by just listening, by just letting it come and go, is in itself calming. In meditation, we notice our thoughts, the noise of our brain, and we learn to acknowledge them and let them pass. In a soundwalk we do something quite similar: we notice the sound, acknowledge it quietly and let it go. At the end of that experience, it can be very healing for people to have an exchange about what they experienced. It often points out how each one of us listens differently and what we have in common in our listening, how we feel about certain sounds, how we react to them.

People get touched in a soundwalk in various ways. That is the immediate effect. Comparing these experiences creates a deeper consciousness about how we listen as a person or as a community and it is an opportunity to explore why we might react in certain ways. There are therapeutic aspects in all of this, especially if one creates soundwalking as an ongoing practice. Here in Vancouver this has been made possible for quite a few people through the establishment of the Vancouver Soundwalk Collective who has offered soundwalks to the public through Vancouver New Music since 2003. For some members this kind of listening has become a practice in their daily lives, similar to a regular meditation practice. It is the regularity of such a practice that has positive and calming effects and encourages a continuous process of deepening, changing and renewing the listening and thus the relationship to the world around us.

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