## CD II: Soundscape Vancouver 1996

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Documentary: The Changing Soundscape

Documentary: The Changing Soundscape (11:53)

A comparison of the 1973 and 1996 soundscapes of Vancouver, narrated by Barry Truax and Hildegard Westerkamp.

Darren Copeland Sabine Breitsameter Hans Ulrich Werner

RECORDS

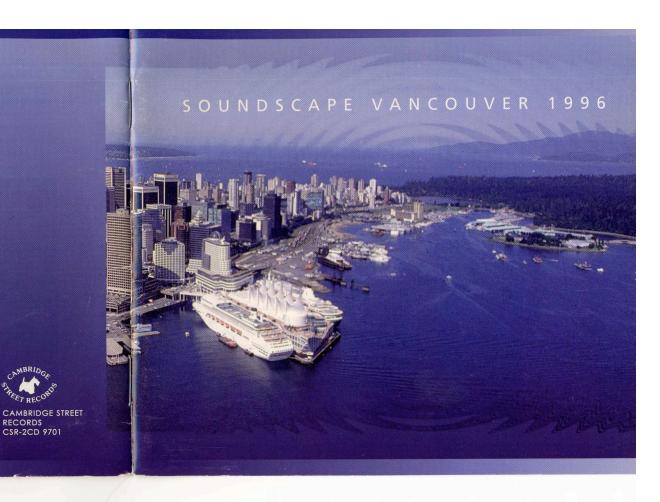
1996. A final concert (June 7, 1996) presented these works to the public. An 8-channel computerized diffusion system, developed by Barry Truax at Simon Fraser University using hardware and software developed by the Harmonic Functions group, transformed the conven-

This concert was part of the International New Music Festival, organized by Vancouver New Music and the CBC. It was also part of a one-day symposium (June 8, 1996) organized by the Goethe Institut Vancouver in conjunction with members of the WFAE, and with the Sonic dence were made possible with the support of the Goethe Institut Vancouver, the two Canadian composers' travel and residence by the Media Arts Section of the Canada

Studio assistance to composers: Susan Frykberg, David Murphy and Chris Rolfe. Graphic design: Jaclynne Campbell, Instructional Media Centre, Simon Fraser University. Introduction and text editing by Hildegard Westerkamp and Barry Truax. Program notes written by the composers. Cover photo courtesy of Tourism Vancouver.

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## CD II: SOUNDSCAPE VANCOUVER 1996

## Introduction

Soundscape Studies is a field that was born in Vancouver through the World Soundscape Project under the direction of R. Murray Schafer in the early seventies. Barry Truax, Hildegard Westerkamp, and recently Susan Frykberg, have continued the legacy of the World Soundscape Project at Simon Fraser University through a program of courses in Acoustic Communication. This work is now known throughout the world by many educators, composers, musicians, architects and people in other disciplines, and much consciousness has been raised towards the quality of the acoustic environment. In fact, in international circles Vancouver is recognized as the original centre for soundscape studies.

This double CD includes most of the original recordings published in 1973 by the World Soundscape Project at Simon Fraser University in its landmark study of the acoustic environment of Vancouver (re-released on CD I), plus new digital recordings and compositions made in the 1990s that show the changes in Vancouver's soundscape in the intervening years. It is an opportunity to listen back into the seventies and to "revisit" the Vancouver Soundscape 20 years later. Vancouver's growth and enormous changes within that time span are reflected in its soundscape. By placing soundscapes from today and the 70s side by side these changes become audible.

Not only have there been enormous changes in the soundscape itself but also in the way the soundscape is documented and thought about. Audio technology and recording equipment can now be used in similarly portable ways as a camera. As a result, the soundscape can be recorded, reproduced, composed and processed by

more people than ever before. This was not possible 20 years ago. The Vancouver Soundscape (CD I) created in the early 70s was an unusual and at that time experimental, adventurous publication. Since then, the activity of "sketching" a city's acoustic image with the use of recorded sounds has fascinated many composers and audio artists around the world. It has become a new forum for speaking about place and environment. Cities like Madrid, Brasilia, Lisbon, Amsterdam, Tokyo, New Delhi and Buenos Aires have been "portrayed" on the radio airwaves and on CDs.

This document is not only meant to expand the listener's horizon towards Vancouver's soundscape and raise consciousness about its quality, but it also wants to raise questions such as: how do we listen and behave acoustically in everyday life; how can we acquire a "sense of place" and belonging from our soundscapes; are there ways to design livable soundscapes in urban environments? At the same time it offers an artistic interpretation of the acoustic environment of Vancouver and presents the city as a "sounding" place.



Soundscape Vancouver '96 participants. Left to right (back row): Dr. Werner Wolf (Goethe Institut), Bob MacNevin, Barry Truax, Hans Ulrich Werner, Susan Frykberg: (front row): Hildegard Westerkamp, Darren Copeland, Claude Schryer, Sabine Breitsameter.

Soundscape Vancouver '96 occurred during May/June of 1996 and consisted of a four week composition workshop with symposium and concluding concert (May 6 - June 8, 1996). It was organized by the World Forum for Acoustic Ecology (Vancouver) in close collaboration with the Goethe Institut (Vancouver), the Sonic Research Studio in the School of Communication at Simon Fraser University, the Vancouver New Music Society, and the CBC.

Two German and two Canadian radio artists/composers were invited during the month of May to create sound works about Vancouver, utilizing the extensive environmental sound archive at Simon Fraser University as well as their own recordings. The artists (from Germany: Sabine Breitsameter and Hans-Ulrich Werner; from Canada: Darren Copeland and Claude Schryer) have created personal sound portraits of our city, musical glimpses into their experience of listening to Vancouver (IDs 2,3,4,6).

Harbour Ambience (ID 1) and the documentary The Changing Soundscape (ID 15) form parallels to the corresponding early documents on CD I and have been created by Barry Truax and Hildegard Westerkamp for the purpose of this document. Pacific Fanfare (ID 5) by Barry Truax can be perceived as bridging the changes not only in the sound-scape itself, but also in the technological developments that have had a direct influence on soundscape documentation and composition.

#### [1] HARBOUR AMBIENCE

This is a compilation of contemporary harbour sounds designed as a sequel to the 1973 recording (CD I, ID 4). Many of the sounds are similar, such as seaplanes (0:17, 1:24) and a helicopter (2:45), as well as the various seagulls, boat horns (0:05, 2:03) and distant train whistle (0:42). Others, such as the horn of the Seabus (1:56) which crosses the harbour throughout the day, and the O Canada Horn (3:26), relocated to Canada Place, are newer additions. Throughout the sequence a creaking wharf and lapping waves provide a unifying ambience.

#### [2] RECHARTING THE SENSES

#### Darren Copeland

Recharting the Senses is derived from a one hour soundscape documentary about blindness entitled Life Unseen. The Blind community perceive details of life that sighted people can not easily access. In my experience, I find that seeing restrains the degree to which I can tune in my listening to the sounds of my common everyday environment. I never have to find a doorway by listening to the rhythmic changes of people walking down the corridor. Nor do I have to pay attention to changes in acoustic reflections or air temperature as I pass from one corridor to the next. Therefore, my non-visual senses miss many subtle nuances of my environment, simply because my vision supplies me with everything that I need to know in order to make it safely down the corridor.

Blind people have taught me that there is more to sensitive listening than hunting for the fleeting traces of musicality existing in the sonic environment. Built inside the sounds of everyday life are many layers of human experience. Composers using soundscape recordings need to listen more deeply beyond the sonic environment's latent musicality. If one listens to the sonic environment, one can in fact discover evidence that paints a picture about a specific time and place. There are many questions one can ask when listening to a soundscape recording. What languages are being spoken? Are the people audible in the recording all adults or are many of them children? Is there any nearby vehicle traffic, and if so, how close is it, and how quickly and densely does it move? What kind of shoes are people wearing and what surfaces are they walking on? By asking these rather mundane questions one can begin to form an image of this sound-scape as a record of a society. A record that can later allow historians to gain insight into the fabric of our society. Or in the near future, a record that can be helpful in introducing positive social changes.

The process of examining contemporary society through sound recording and acute listening sensitivity should logically enough be lead by the blind community. However, they remain absent from such discourse and inquiry, which places a serious limitation on

the research accumulated thus far. There is more to the soundscape than latent music. There is more to repetitions and patterns of sound events than mere rhythm. The eyes may tell a great deal, but the ears and the other senses are also filling up with many insightful details about people and society. In the black audio canvas stretched between your two speakers, lies a side of life still largely unnoticed and unexplained.

There is a cast of generous contributors to whom I am very thankful: Alex Bulmer, interviewer; John Lyon, Linda Evans, Michelle Creedy, Allan Morgan, Theresa Andrews, Gary Steevens, Nora Sarsons, Peg Mercer, Monty Lilburn, and Shawn Kirkpatrick, persons interviewed; Patricia Worrell, CNIB liaison; Chris Miller, print transcription. Also, many thanks to Hildegard Westerkamp, Barry Truax, Dr. Werner Wolf, Claude Schryer, Sabine Breitsameter, and Hans Ulrich Werner for providing critical insight and positive encouragement. And to Daniel Jans, Norman Armour, Deborah Dunn, and Rita Bozi for offering spare beds and providing a positive spin to the time spent in Vancouver.

Recharting the Senses was made possible by an Audio Production Grant from the Media Arts Section of the Canada Council.

#### [3] THE HIDDEN TUNE

#### Sabine Breitsameter

- 1. Prelude
- 2. After the Silence
- 3. Interference
- 4. The Song of this Place

## Compositional Process:

Stage 1: At home in Berlin: Imagining to create a sonic piece about Vancouver from a distance of more than 5000 miles! Sound memories of a short but intense visit some years

ago: crowds of cars inhibiting my ears to hear the vast open spaces of the city which are so obvious to the eye. The tune of Vancouver is so similar to the tuning of the metropoles all over the world. Doubt emerges: how can one create significance out of the insignificant? Even in their social, political and aesthetic contradictions all big cities of the Western world resemble each other. Searching for the oases in the garbage, redefining the ugly as beautiful?

There is a solemn stillness in the woodland, and but a few bird-voices. Only an occasional crow breaks the stillness ... Reading an old text about Vancouver from the turn of the century. Imagining the sonic appearance of this place from a distance of almost one hundred years. Imagining sounds of the past. Hear me and make my ears sharp. Going back 500 years, 5000 years. Listening into the future and trying to hear the sounds of the place from a distance of 50 years, 500 years, 5000 years. After the silence I learnt to love silences. The sounds behind the sounds. This is where it sparkled, the creative space for my Vancouver sound work: between two places in time, between the fact of the given "here and now" and the fiction of the "once-upon-a-time".

Stage 2: The actuality of sound. Finding the objects. Listening to excerpts sent to me in Berlin from the World Soundscape Project's environmental sound collection - sounds detached from their sources and no occasion to go out to visit their original place. Listening to the sounds of Vancouver from a distance of 5000 miles.

Listening in this way, sound is no longer a representation of its source. It reveals its *Eigenleben*, its own inner life and vitality. The physical aspects of the sounds become apparent, sound as material, space, shape and movement. I now hear them as three dimensional entities - sculptures - in motion. I stop asking for the fact behind every sound event. Facts have become artifacts. Artifacts become processes. The experience of time changes: from the immediacy of a semantic approach to the duration of an overall dramaturgical approach.

Stage 3: Back to the origin. Re-transplantation, coagulation. Arriving in Vancouver and composing with the selected materials in the studio at Simon Fraser University: putting my perception back into the original place of the sounds, into the way people talk and think about them here, into the situation itself. The compositional task: to create a sonic impression of Vancouver in the nineties. I don't know the song of this place, admitted the sound conscious British Columbia artist Emily Carr fifty years ago. And what about me, a mere visitor, a stranger to this town? Can I know how Vancouver sounds? Big doubts! How can I possibly create a composition about this city?

While wandering from one acoustic space to the other, again and again, while encircling the whole range of sounds and listening to them from all sides, an acoustic imprint gradually appears in my mind: an imprint which can be compared to the image a coin would leave, when it falls on fine sand: an image as blurred and vague and transient as sound. The next wave might change it or erase it. I don't know the song of this place. There might be a hidden tune, the voice of authenticity flashing up for a short moment. An awful force greater in its stillness than the crashing pounding sea.

I would like to credit two voices which you are going to hear in *The Hidden Tune*: the voice of Herbert George in a historical recording from the 70s, in which he tells the listener in Squamish how to build a canoe; the voice of Susan Frykberg, a contemporary Vancouver composer, reading quotations and paraphrases of Emily Carr and other writers and artists. I owe Susan all my thanks as she advised and supported me technically and encouraged my work during the whole process of production in the studio.

## [4] VANSCAPE MOTION Hans Ulrich Werner for R. Murray Schafer

loco.
Port Moody, Port Moody.
Vancouver.
VANCOUVER?
You are from Vancouver?
(from: Soundscapes of Canada, 1974)

The first sound grows out of the silence: the horns of the freight train Calgary to Vancouver, echoing and reverberating in the Rockies. They transport us to the city by the sea. Later, the sound collage of *Horns and Whistles*, a quote from the early World Soundscape Project (see CD 1, ID 5). It is a collection of calls which reminds me of Vancouver's transparent acoustic landscape. This short piece has become a tonal layer in my own sound biography.

But the sound of the city has changed, as I have. Like a broadband breath, the growing white noise of Vancouver is the expression of sped-up life rhythms. More people from many more cultures, dense traffic and transportation, the large harbour, industrial projects and audio-visual smog, the drones of jets and sharp snares of seaplanes, the signals and synthetic voices of digital telephone networks. The parks and beaches form vibrant activity zones between nature and city; border zones of the metropole, full of life and human activities.

## VANSCAPE MOTION.

The acoustic flaneur, the sound searcher alone stops for a moment and listens through his microphone. His recorded sound becomes frozen movement, a sound current from inside the city. Like in a dream. Or in a sound memory from the future? The strange whine of the skytrain and the still-like architecture of this trainroute connect and divide the city like a zipper. Voices, dialects, rhythms of movement and communication are momen-

tarily woven into an intricate voiceprint of Vancouver and then dissolve again. Just like the sounds in the tunnels, which increase and decrease musically like large sighs, as if the city speaks in some ancient tongue, resonating, echoing the breath of invisible beings. Trains are songlines of the metropole, arteries between cultures and worlds.

## VANSCAPE MOTION.

From Burnaby Mountain Park one can listen far into the inlets of Port Moody, to the horns of freight trains playing with mountain topographies. Every day, every time sounds different here. The park has its own dawn chorus: students' footsteps cross the wet lawns; a half-tamed coyote, like a shadow, sneaks through the area; a Chinese woman silently practices her Tai Chi in the diffuse morning light; and the city hums to the far-reaching view over inlets and glaciers, the skyline, and the matrix of the streets. Burnaby Mountain Park as a listening experience is, like so many other areas in this city by the sea, an ambivalent zone. Eyes and ears meet the contradiction of nature and city and become curious.

#### VANSCAPE MOTION.

The city is the studio - the studio is the city. That's how Claude Schryer defines my approach to Vancouver's soundscape. Sound design and sound montage in motion. To walk through the city, to see it, to hear it, that is the composition.

The transition from land to water sounds different everywhere in this city by the sea: beach recordings create a dense water curtain; a voluminous boathorn becomes an almost brutal-sounding left-right rhythm (contributed by sound reporter and colleague Michael Rüsenberg; then strangely surreal: two attacking ravens in the harbour, helicopters and seaplanes, virtuosically flown kites by the beach, all seem to signal a city ready for take-off and upward mobility. The train bell near the harbour creates a light groove for other urban sounds: a deep fog horn, the nervous, synthetic percussion loop, the rise and fall of the car races, thrown back by high walls, the sound waves of traffic on Burrard Bridge, city busses, the sky train, impatient car horns.

The acoustic density recedes in a quiet residential area, along 18th Ave., which perhaps sounds like I imagine it was 20 years ago. In the garden of composer Hildegard Westerkamp a small water trickle and a wind chime. A tennis court nearby. Once in a while a siren on the acoustic horizon. But these quiet voices are suddenly pushed out by strange animal sounds, as if untamed nature was audible in the city. A virtual zoo, which is transformed from the time signal of the steam clock in historical Gastown to a rushing organ sound, meant as a futuristic sound world, which then dissolves into the voices of Chinatown and the surreal sound memory of the Royal Hudson steamtrain.

Those who engage with the calls, signals, the noise and the music of the city, change inside this white urban rush, which continuously threatens to devour the ear and then lets it emerge again. Contradictory processes are apparent everywhere, an appearance and disappearance of ear and sound, in nature and city, where growing ecological awareness and economic growth are involved in a bitter clinch. While the environmental movement fights for quiet valleys and forests and the city of Vancouver with its short history only now begins to develop space and niches for urban cultures, both are invaded and changed by the globally influenced growth of the region.

The acoustic flaneur, the sound searcher alone stops for a moment and listens through his microphone. His recorded sound becomes a frozen movement, a sound current from inside the city. Like in a dream. Or in a sound memory from the future?

#### VANSCAPE MOTION.

Vanscape Motion is a co-production between the Sonic Research Studio at Simon Fraser University, Redaktion Musikpassagen WDR Radio 5, and the Studio für Klangdesign of the Westdeutscher Rundfunk (WDR) Hörfunktechnik.

#### [5] PACIFIC FANFARE

#### Barry Truax

Pacific Fanfare was composed to mark the 25th anniversary of both the Vancouver New Music Society and the World Soundscape Project. It is comprised of ten sound-marks recorded by the WSP in the Vancouver area either from the early 1970s or more recently, and thus reflects the changing soundscape of the city. The various sound signals are heard both in their original state, and digitally resonated and time-stretched in order to let them "resonate" in our own memories.

The sounds recorded in 1972-73 are the Point Atkinson Diaphone (0:00), the Nine O'Clock Gun (0:07), the Horseshoe Bay Ferry (0:15), the Holy Rosary Cathedral bells (0:25), the B.C. Sugar Refinery horn (0:43), the O Canada horn (2:29), and a CPR train whistle (2:45); those from the 1990s recording are the Royal Hudson steam train (0:15), the Skytrain (1:14) and the West Coast Express train (2:07).

# [6-14] VANCOUVER SOUNDSCAPE REVISITED Claude Schryer for Hildegard Westerkamp

Vancouver Soundscape Revisited is an impressionistic portrait of the musicality and poetry of the soundscapes of Vancouver using combinations, comparisons and transformations of archival sounds dating from the World Soundscape Project in the early 1970's and from recordings of Vancouver made in the early 1990's. Vancouver Soundscape Revisited is an exploration of the past, present and future of the Vancouver soundscape and a search for meaning on the borders of recognition, abstraction and poetry. My compositional method was to select sequences from the World Soundscape Project collection, edit and catalogue them by spectrum, category, function, pitch and context, and experiment with various combinations and modifications of the material until an interesting "sonic alchemy" was found. I have "orchestrated" my perceptions of the soundscapes of Vancouver in nine parts:

### [6] 1. Eagle 1:52

Forest with bird, music in Chinese shop, close rain, distant rain, distant train whistle, echoes of the 9 o'clock gun.

#### [7] 2. Fire 3:50

Chinese firecrackers, folkdancing, Krishna musicians, baseball game, tennis, mechanical piano, gulls in the harbour, 9 o'clock gun, electronic telephone, Main Street bus, various natural and processed boat horns and sirens.

#### [8] 3. DroneSong 1:27

Boats drones, drunken singer and chorus, distant gulls, fog and ship horns.

#### [9] 4. Noise 1:30

Asian man's complaint, Skytrain departing, traffic, lawnmower, processed 9 o'clock gun, train bells, industrial machine, old fire engine siren, gate and bridge thumps, bus, car and trucks passing.

#### [10] 5. Walk 0:41

Quiet footsteps in the forest.

## [11] 6. Industry 2:11

Processed seaplane, ocean at French Beach, tree falling, 9 o'clock gun, sawmill, screaming men in market and the Stock Exchange, elevator door, supermarket announcement, door closing, pulse from ventilation system.

### [12] 7. Horn 2:08

Bells and Canada Place horn from afar, processed O Canada horn, close Canada Place horns, solo squirrels in park.

#### [13] 8. Beans 2:28

Chinese bean store, voice on Grouse mountain gondola, shipyard construction, seaplane passing, modern fire engine siren, truck brakes, train with bell passing, Main Street bus, ice cream vendor, children's swings, backup beeper of truck, bicycle passing, 9 o'clock gun solo.

#### [14] 9. Blowin' 1:32

Windy Forest, "Blowin in the wind" buskers, geese, frogs, distant squirrel, quiet rain.

The production of *Vancouver Soundscape Revisited* was supported by a Media Arts Audio Production Grant from the Canada Council and a travel grant from the Conseil des arts et des lettres du Québec. I thank all of the participants in this composition, many of whom have been recorded without their knowledge. In particular I thank Bob MacNevin for his original and imaginative recordings of the Vancouver soundscape in the early 1990s and Barry Truax for his remarkable contributions to the field of acoustic

ecology and electroacoustic soundscape composition at SFU. I would also like to thank my Soundscape Vancouver '96 colleagues Darren Copeland (Toronto), Hans U. Werner (Cologne) and Sabine Breitsameter (Berlin) for their support and encouragement. Thanks to the School of Communication at SFU (Barry Truax, Dave Murphy, Chris Rolfe and Sue Frykberg), the Goethe Institut (Vancouver) and the Vancouver New Music Society. A special thanks to Hildegard Westerkamp, to whom this piece is dedicated. Hildi was the heart and soul of Soundscape Vancouver '96 and helped me bring the piece, and my perception of Vancouver, to life.

## [15] THE CHANGING SOUNDSCAPE

A talk by Barry Truax and Hildegard Westerkamp on the changing soundscape of Vancouver. The sounds introduced as examples are:

- 1) CPR station and outdoor ambience, recorded in 1973;
- 2) Seabus terminal and outdoor ambience, recorded in 1993;
- 3) Royal Hudson steam train, North Vancouver;
- Steam Clock, Gastown;
- 5) Three foghorns at Point Atkinson: diaphone, two-tone air horn, electronic
- 6) Skytrain (Automated Light Rapid Transit system);
- 7) Molson Indy carrace, B.C. Place Stadium;
- 8) Seabus interior, Vancouver harbour;
- Ventilation exhaust, Canada Place;
- 10) Museum of Anthropology, UBC;
- 11) Granville Island ambience, False Creek.

## **Biographies**

**Darren Copeland** is an electro-acoustic composer whose phonograms for the media of Acousmatic Tape, Theatre, Dance, and Radio explore the imagistic properties of environmental sounds. His principle teachers have included Barry Truax, Martin Bartlett and Jonty Harrison. His acousmatic compositions have received mentions from the Vancouver Young Composers Competition and the Luigi Russolo International Competition for Electroacoustic Music by Young Composers.

Life Unseen is a follow up to Residence Elsewhere, which explored the theme of blindness and listening through the writings of John M. Hull in Touching The Rock. An excerpt of that work is included on the Radius CD series distributed by Nonsequitur in New Mexico. For an extended discussion on the issues raised in the program notes, refer to Darren's essay "Cruising for a Fixing - in this Art of Fixed Sounds" in Musicworks #61. Other works by Darren Copeland can be heard on the compilations Storm of Drones produced by Asphoedel, and DiscContact 1 and 2 produced by the Canadian Electroacoustic Community.

Sabine Breitsameter was born in Bavaria in 1960 and is now based in Berlin and Frankfurt. She completed studies in journalism, musicology, literature and ethnology with a thesis about the borderline of radio drama and avantgarde music. Extensive travels have led her through Africa, the Middle East, India and South East Asia. She has been working in ARD public radio doing cultural programming, as Ars Acustica Expert and as author/director of original sound documentaries. In 1995 she organized KlangUmwetten, a three day symposium on sound at the Akademie der Künste in Berlin. Since September 1993 she has been curating a weekly one-hour radio art program at Sender Freies Berlin. Since October 1996 she is working for the Hessische Rundfunk in Frankfurt, preparing a symposium on the topic of acoustic awareness, which shall take place in September 1997 in Kassel, parallel to the Documenta.

## Hans U Werner . Studio für KlangDesign im WDR

SoundScape @ Music

Technology

Communication

RadioProduction

TeleVision

Design

Text

Composition

Flowing Silence. Fliessende Stille

- 1991 Akustische Landschaften (PhD)
- 1992 Studs Terkel/Sound of Chicago (Radio-TV)
- 1993 KlangRäume RaumKlänge, Kassel University
- 1994 Klangwege, CD/Book-Publication
- 1995 MetaSon Madrid /Lisboa CDs ZwergProduktion
- 1996 Vanscape Motion . Vancouver Soundscape Project Inside Outside Distance . Chicago Soundscape Project Hörbare Landschaften . WDR Radio 5, HR2 und ORB
- 1997 SoundscapeDesign: Horzeichen Klangwelten (Book/CD), Akorama Basel.

Claude Schryer's artistic practise focuses on spiritual and musical elements of acoustic ecology in the field of electroacoustic and environmental music. He was raised in the country and city of North Bay, Ontario where he was active as a pianist, clarinetist, hunter and fisherman. He studied composition with Owen Underhill at Wilfrid Laurier University (B Mus, 77-81), interdisciplinary arts and music at The Banff Centre for the Arts (81, 85, 93), and composition with alcides lanza at McGill University (M Mus, 82-89), and

also studied with Denis Smalley and Luc Ferrari. His professional activities are principally in electroacoustics, interdisciplinary production, acoustic ecology and the media arts: Artistic Director of the Inter-Arts program at The Banff Centre for the Arts (1988-90); Cofounder of the media arts production group DIFFUSION i MéDIA with Jean-François Denis (1989-92); Artistic Director of the 7e Printemps électroacoustique Festival of ACREQ (1990-92); Collaborator with the FM network of Radio-Canada and Musicworks Magazine (1990-); Active member of the World Forum for Acoustic Ecology (1993-); Assistant program director of ISEA 95 Montréal (1995); Sound editor for the Alterciné documentary film Chronicle of a Genocide Foretold (1996); Collaborator in the production of R. Murray Schafer's Winter Diary for the WDR. He has received commissions from the North Bay Symphony Orchestra (Ontario), la Muse en circuit (Paris), the Music Gallery (Toronto), Société Radio-Canada (Montréal), Shauna Rolston (Banff) and Trevor Tureski (Toronto). He has been artist in residence at GRAME (Lyon), Muse en circuit (Paris), Brahmshaus (Baden-Baden), the Groupe de musique expérimentale de Marseille (GMEM) (Marseille) and Simon Fraser University (Vancouver). As a composer he was awarded 2nd prize (ex-aequo) at the 1986 Bourges International Electroacoustic Music Competition for a kindred spirit (1986); 1st Prize (documentary section) at the 1996 Phonurgia Nova International Radio Art Competition for Marche sonore I (Le matin du monde) and shared with Hélène Prévost the 1996 Prix de la création radiophonique of Radio-Canada for Autour d'une musique portuaire.

**Barry Truax** is a Professor in both the School of Communication and the School for the Contemporary Arts at Simon Fraser University where he teaches courses in acoustic communication and electroacoustic music. He has worked with the World Soundscape Project, editing its Handbook for Acoustic Ecology, and has published a book Acoustic Communication dealing with all aspects of sound and technology. As a composer, Truax is best known for his work with the PODX computer music system which he has used for tape solo works and those which combine tape with live performers or com-

puter graphics. A selection of these pieces may be heard on the recording Sequence of Earlier Heaven, and the Compact Discs Digital Soundscapes, Pacific Rim, Song of Songs, and Inside, all on the Cambridge Street Records label. In 1991 his work, Riverrun, was awarded the Magisterium at the International Competition of Electroacoustic Music in Bourges, France, a category open only to electroacoustic composers of 20 or more years experience.



Hildegard Westerkamp speaking at the Soundscape Vancouver '96 Symposium at the Goethe Institute, Vancouver.