



Soundscape

VOLUME 1, NUMBER 2, WINTER 2000

*Silence, Noise,
and the Public Domain*

The Journal of Acoustic Ecology

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Soundscape is a biannual English language publication of the World Forum for Acoustic Ecology (WFAE). It is conceived as a place of communication and discussion about interdisciplinary research and practice in the field of Acoustic Ecology, focussing on the inter-relationship between sound, nature, and society. The publication seeks to balance its content between scholarly writings, research, and an active engagement in current soundscape issues.

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The World Forum for Acoustic Ecology, founded in 1993, is an international association of affiliated organizations and individuals, who share a common concern for the state of the world's soundscapes. Our members represent a multi-disciplinary spectrum of individuals engaged in the study of the social, cultural, and ecological aspects of the sonic environment.

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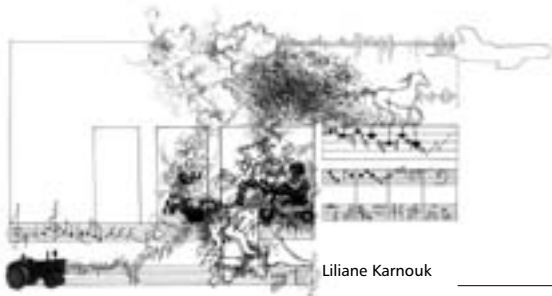
Ideas for journal themes, proposals for new sections, as well as visual materials, are welcomed. You may submit either a proposal or a complete manuscript of a potential article to *Soundscape*. The Editorial Committee would generally prefer to communicate with you regarding your idea for an article, or receive a proposal, or an abstract first (contact information below). Please also download our *Guide to Contributors: Instructions for the Preparation of Materials for Submission to Soundscape* (PDF) on the WFAE Website at: <http://interact.uoregon.edu/MediaLit/WFAEHomePage>.

Upcoming Issue: The Blind Listening Experience. **Future themes:** The Ecology of Underwater Sound; Sound and the Sacred; Economics and Acoustic Ecology; Education and Acoustic Ecology; Sound Design and Acoustic Ecology.

Submissions. Please send articles, letters, and materials for the following sections in this journal:

Feature Articles; Research in Acoustic Ecology: a section devoted to a summary of current research within the field; **Dialogue:** an opportunity for editorial comment by the membership; **Sound Bites:** a summary of acoustic ecology issues found in the press; **Sound Journals:** personal reflections on listening to the soundscape; **Soundwalks** from around the world; **Reviews:** a section devoted to the review of books, CDs, videos, web sites, and other media addressing the theme of Acoustic Ecology (please send your CDs, tapes, books, etc.); **Reports, articles, essays, letters** from Students and/or Children; **Announcements** of Acoustic Ecology related events and opportunities; **Quotes:** sound and listening related quotations from literature, articles, correspondence, etc.; **Random Noise:** a section that explores creative solutions to noise problems.

Please send correspondence and submissions to: Soundscape—The Journal of Acoustic Ecology School of Communication, Simon Fraser University, Burnaby, B.C., V5A 1S6 Canada. Email: jwfae@sfu.ca. **Submission Deadline for Spring 2001 Issue: March 31, 2001.**



Liliane Karnouk

Soundscape

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EDITORIAL

We would like to welcome you to the second issue of *Soundscape*, and to thank you for the warm reception of our first effort. We have expanded this issue to 40 pages, which has enabled us to add a new section, “Dialogue,” where we will publish your thoughts and criticisms (p. 8), and a space for contributions from young people and/or students (p. 22). Again the content of *Soundscape* reflects the multi-disciplinary nature and vitality of our acoustic ecology community. We hope you find the material interesting, and perhaps at times, challenging.

This issue focuses on the soundscape as a public domain—as the commons—which in the *social* sense, has come to mean shared public spaces, not just publicly owned parks, or squares. The commons in the *ecological* sense has come to mean the larger natural environment upon which we all depend. The former is a subset of the latter.

The theme of our first issue centred around the activity that lies at the heart of all work in acoustic ecology—the daily practice of *listening*. A chief byproduct of careful listening, at least in the urban settings, is

The contributors for this issue build on our empirical knowledge base, while making a case for continued change in our thinking. They offer suggestions aimed at strengthening our voice, as well as taking positive actions toward making the WFAE a more effective instrument for change.

Three notable themes in this issue are: (1) a quieter soundscape is a healthier soundscape, for mind, body and soul; (2) to effect change, awareness of acoustic ecology issues must be raised in the consciousness of both the public and our legislators; and (3) economics (economic self-interest) continues to play a central role in impeding the realization of an ecologically balanced soundscape. These are familiar, core ideas to many of us, and in terms of our attempts to bring about change in the quality of the soundscape, they can provide a basis for effective action.

Health: It is relatively straightforward for an individual to come to grips with the essential truth that access to quiet is healthy, and even, as is eloquently argued in these pages, a basic human right. One can usually choose to take pragmatic and effective steps at the personal level to reduce the harmful effects of noise. An individual's aural health regime will certainly contribute to improvements (however small) in the quality of the sound-

Remember, we are in the inevitable tow of ecological gravity, not economic haste. Ecosystems spiral slowly forward in time—evolving—and if they are to survive, economies will have to eventually synchronize with the ecologic tempo.¹ Tom Jay

an increased awareness of the nearly ubiquitous noise. Within our public spaces, noise is often perceived as normal, while in the larger, ecological sense of the commons, the relative quiet of a natural soundscape is the norm.

Many of us possess an understanding of noise and silence as ecological issues, yet it is evident that some of us occasionally feel frustrated by the lack of any real change for the better in the soundscape. One of the main strengths of our multi-disciplinary approach to acoustic ecology is its dynamism. In our rapidly changing times—times that may require a rethinking of the “normal” ideas that have led to our current ecological crisis—this is a strength, not a weakness.

scape—in private, and in public. One can also become an instrument of change by telling someone or showing via one's actions, that much of the noise we make ourselves, and/or endure from others, is unnecessary.

Education: The educators among us will have discovered that it is our students' new awareness of noise, acquired through careful listening, that opens them to the larger issues of soundscape studies. A similar dynamic of awakening (ear cleaning) can be achieved with the lay person, or the general public. On that note, our Affiliates report encouraging regional activities, many of which have been publicly accessible, and that this has led to gains in our membership. It

is this connection within the community that will grow the ranks of the WFAE and keep us healthy and vital as an organization.

More can also be done in our schools. Many of our children are introduced to the central ideas of ecology from a very early age, yet noise and silence as *ecological issues* are rarely on the curriculum. You will also read in this issue, how action to reduce noise within our schools solidly links aural health to the effective education of our children. We are planning to explore this area in a future issue of *Soundscape* with the theme of *Education and Acoustic Ecology*, and we welcome your suggestions, and/or contributions. We also ask that educators send us examples of your students' work, for possible inclusion in our pages.

Economics: Once awareness of the problem of noise in the commons has been awakened, the magnitude of the issue starts to sink in—the work towards an ecologically balanced soundscape seems like a steep uphill battle, especially to the individual. Inevitably, one comes face to face with the dynamic of The Global Economy, where every single thing and activity within its panoptic view is assigned an exchange value. Through the development of the market economy, the land-based, neighbourhood-based integration between ecology and economy has devolved into a relationship that places one at odds with the other.

In a recent European assessment of the damages caused by environmental noise, we read that: "Present economic estimates of the annual damage in the EU due to environmental noise range from EUR 13 billion to 38 billion. Elements that contribute are a reduction of housing prices, medical costs, reduced possibilities of land use and cost of lost labour days. In spite of some uncertainties it seems certain that the damage concerns tens of billions of euro per year."²

However dubious the footing, it may be that economics, tied to health issues, will have to be at the centre of any effective large-scale change to the deteriorating quality of the soundscape. The political will to bring about these changes may have to be motivated by something that is "understandable" within the ideology of The Market. While appealing to economic self-interest does little to address the fundamental faults of the system that created the problem in the first place, it may be our best hope for short term change legislated by predominantly short-sighted politicians. For instance, if they learn that quiet technology equals more profit, through less stressed, healthier workers taking fewer sick days, they may make the investment in that technology, in hopes of a return on that investment.

However, it is important to recognize that this thinking is still essentially, in the long view, reversed or retreating from the reality of our global crisis. The ultimate goal is to live within the biological means of the ecosystems that sustain us all. To that end, economics will have to work its way back to becoming a subset of ecology.*

Robert MacNevin
for the Editorial Committee

*We are planning to explore this area further in *Soundscape*, in a future issue with the theme of *Economics and Acoustic Ecology*. We welcome your suggestions, and/or contributions.

1. From an address to the Northwest Aquatic and Marine Educators, in Port Townsend Washington, August 2, 2000.
2. Proposal for a Directive of The European Parliament and of The Council: Relating to the Assessment and Management of Environmental Noise, presented by the Commission of The European Communities: http://europa.eu.int/comm/environment/docum/00468_en.htm

REPORT FROM THE CHAIR

The past six months have seen continued consolidation for the WFAE. It is particularly pleasing to be able to announce the affiliation of a new organisation, the Finnish Society for Acoustic Ecology (FSAE). The group has taken up a position on the board and we look forward to hearing the voice of their membership, many of whom have a long history with the acoustic ecology movement.

As witnessed in the reports from the Affiliates there is a growing presence for acoustic ecology within communities around the world. Public programmes including a conference, forum series, soundscape research programmes, and local publications provided opportunities for our membership to correspond and interact with the general public.

A natural by-product of any vibrant organisation is a regular change to its personnel. During this last period we have accepted the resignation from duties of two long term members of the WFAE. Since its inception in 1993 Thomas Gerwin and Peter Grant have provided dedicated services to the organisation. Thomas was a member of the restructuring committee and a board member representing our largest Affiliate, FKL. Peter has been the quiet administrative backbone of the WFAE. Peter has maintained the finances and extensive membership database over many years and we all owe him a great debt of gratitude. We wish them well for their respective futures.

The fact that we can recover from the departure of both of these people indicates a certain confidence in our administration. The new committee structure that has been put in place over the past year relies on the assistance and dedication of a growing number of people.

The board would like to note the dedication and competence of the Journal Committee. Our journal *Soundscape* is in its infancy but already we have received much positive feedback on its value to our membership and to others. The Membership Committee, which has representatives from each of the Affiliate Organisations, has now taken responsibility for maintaining the WFAE database.

The new year is upon us and we trust that you will join with us to celebrate what has been a period of solid growth and consolidation, and we look forward to your support and interest during this year.

Nigel Frayne
Chair of the Board, the WFAE.

WFAE—Electronic Contact Information

Website: <http://interact.uoregon.edu/MediaLit/WFAEHomePage>
Home to an extensive collection of Acoustic Ecology related materials—sembled and maintained by Gary Ferrington.
(While you are at the WFAE Website—*Join our Discussion List!*)
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Regional Activity Reports

Australian Forum for Acoustic Ecology (AFAE)

by Lawrence Harvey

The AFAE held its AGM on the 21st of July, 2000. Three main activities over the past few months have kept us quite busy: conference planning, the membership drive and the Resonance forum series.

The conference committee has continued to develop plans for the proposed international conference. A general announcement will be forthcoming.

The membership drive was coupled to the distribution of the WFAE Journal, *Soundscape* which was launched in Melbourne at a gathering of 20 or so invited guests. A mail-out followed with the result that we have now doubled our membership to a modest 17 members. It is expected that this will grow further with the release of *Soundscape* #2 and the reaction to Resonance, our forum series.

Resonance forum series

At the time of writing, the AFAE has completed two of five forums titled Resonance. The purpose of the series is to investigate issues related to listening, the acoustic environment and aural culture. The series is being supported by the School of Architecture and Design, RMIT University, Melbourne, through the provision of staff time for coordination and use of rooms and technical equipment. Each forum is being recorded for future transcription and possible publication. The series, described below, has been designed to present the diverse practices and professions whose focus is an aural one.

1. *Bridging the Gap—Architecture—Acoustics*: Investigating the ways designers make use of acoustic knowledge in the design process. Forum presenters include designer and lecturer Robyn Lines and acoustician Peter Holmes.
2. *Sound sculpture and installations in the public domain*: Melbourne based artists and sound designers present a brief artistic statement about specific works, followed by a panel discussion. Ros Bandt, David Chesworth, Nigel Frayne, Anton Hasell, Neil McLachlan.
3. *Audiology and the acoustic environment of call centre work places*: A recent Australian study has investigated the acoustic requirements of these environments from an audiological perspective.
4. *Indigenous Soundscape—Natural Soundscape*: An introduction to ecological knowledge embedded in the cultural landscape of the indigenous people of the Arafura Wetlands. Particular attention will be given to the way songs describing the travels of ancestral beings draw on sounds to convey powerful images of a country.
5. *Auralization*: Brief presentations and discussions on the use of emerging technologies that make architecture audible during the design phase of planning.

The forums have been an effective way of drawing potential new members to the organisation, and building a dialogue within sound based practices, and between these practices and a wider community. Although unsuccessful attempts were made to have the series funded, we decided to go ahead on a simplified logistic process. For all involved, the series has to date been a stimulating and encouraging experience.

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Canadian Association for Sound Ecology (CASE) Association Canadienne pour l'Écologie Sonore (ACÉS)

Building Foundations in Canada

by Darren Copeland

Activities for the Canadian Association for Sound Ecology (CASE) in the past two years have been very much about building foundations for the growth of acoustic ecology in Canada.

The Toronto Sound Mosaic initiated relations with everyday citizens, particularly with the elderly and with historians, to formulate an understanding of the city's evolving soundscape since the beginning of European settlement. The conversations, archival research, and sound recordings undertaken culminated in the creation of a thirty minute radiophonic portrait of the history of Toronto. This was presented on June 17 & 18, 2000 at an outdoor octophonic diffusion concert called Sound Travels which took place on Toronto Island.

In the process of producing this work the intriguing environs of the Toronto Islands have left a lasting impression. What struck many people I believe was how the vehicle-free ambience of the islands embodies the characteristics of the soundscape we long for in the urban environments of today and tomorrow. CASE hopes to revisit this soundscape more in the future and add to its research to produce educational literature, web materials, and workshops that teach people about acoustic balance, the subjective relativity of noise, and the preservation of meaningful sounds from the past.

It is not possible for the administrative core of CASE in Toronto to know first-hand the needs of every community across the country. In the example of *The Toronto Sound Mosaic* CASE looked to the region where it is based. However, it also set up a partnership with the organizers of the Sound Escape conference that took place at Trent University in Peterborough. A handful of individuals there opened up their community to soundscape researchers from around the world. They created a dialogue that we hope will have repercussions on their town planning and development in the future, while also adding new input to the contemporary soundscape discourse that is evolving in the international academic community.

The productive relations with the conference organizers has left CASE with the desire to establish other regional links around Canada in the future. We expect these regional partnerships to impact the Canadian public on a local "grass roots" level, but also to deepen knowledge on acoustic ecology around the globe. These partnerships can be made through a number of activities small and large, such as soundwalks, lectures, media works, workshops, publications, and so forth.

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Forum Klanglandschaft (FKL)

by Justin Winkler

The Fifth General Assembly of the FKL took place on May 13, 2000 at the Musicology Department, University of Hamburg, kindly hosted by its head, Prof. Helmut Rösing. Auditors Lorenz Schwarz and Henrik Karlsson as well as the assembly approved the financial report and the budget. Treasurer general Claudia Pellegrini and Austrian regional representative Markus Weiler resigned from the committee. Bettina Wanschura, Vienna, was newly elected. Most recently WFAE board representative Thomas Gerwin resigned from the WFAE board. The remaining committee members have been confirmed: Albert Mayr, treasurer Italy; Günter Olias, treasurer Germany; Lorenz Schwarz, webmaster; Justin Winkler, president, treasurer Switzerland, administrator.

The name of Forum für Klanglandschaft was changed to Forum Klanglandschaft. Originally modelled on the *for* of the World Forum for Acoustic Ecology this preposition made no real sense in German.

The assembly welcomed Prof. Günter Olias, Potsdam, on “Lust zum Lernen durch Hören—Klanglandschaften und Auditive Wahrnehmungserziehung heute” (Enjoying to Learn Through Listening—Soundscapes and Education in Aural Perception). For more on this conference see the Forum Klanglandschaft homepage: www.rol3.com/vereine/klanglandschaft.

A lively and interesting debate about soundscape and urban studies with presentations by Prof. Thomas Hengartner (European Ethnology) and Prof. Waltraud Kokot (Ethnology) of Hamburg University shed light on the difficulties in communication between Soundscape Studies and other disciplines. The evening was dedicated to the presentation of artistic sound productions, and Sunday morning saw a dozen people participating in a sound/time urban culture walk through the formerly Jewish university neighbourhood of Hamburg.

Finally and most importantly, the recent departures from the administrative structure of the FKL, mentioned above, necessitate a call for new support to help maintain the organisation at both local and international levels.

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4058 Basel
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www.rol3.com/vereine/klanglandschaft

Web Links to Information on Silence and Noise

WFAE website (Silence and Noise) <http://interact.uoregon.edu/MediaLit/FC/readings/topics/silence.html>

World Health Organization (WHO): <http://www.who.int/pehl/noise/noiseindex.html>

European Commission Future Noise Policy, Green Paper: <http://ioa.essex.ac.uk/ioa/europe/noise-gp.html>

League of the Hard of Hearing: <http://www.lhh.org/noise>

Noise Pollution Clearing House: <http://www.nonoise.org>

The United Kingdom and Ireland Soundscape Community (UKISC)

by Gregg Wagstaff

Since the last Soundscape Journal, Pedro Rebelo and I have been busy producing the UKISC's first publication of *Earshot*. This was recently posted (several weeks later than planned—our apologies) to UKISC members, colleagues and prospective members. *Earshot* will act as a sounding board for regionally related soundscape research and happenings within the UK & Ireland. We also hope this will increase our membership from the thirty or so at present. Our intention is that back issues of *Earshot* will be made available later in PDF format via the UKISC website (under construction). It is possible to order individual issues (see contacts below). The British Library also holds a copy ISSN: 1471-4183.

“Sound Practice — the UK's first conference on sound, culture and environments” draws ever closer (Dartington Hall Centre & Dartington College of Arts, Devon, England. 16-20 February 2001). John Drever has been hard at work organising the event for the UKISC. Watch out for latest conference news on the *Sound Practice* website <<http://www.soundpractice.org.uk>>, and the WFAE discussion list (see the WFAE website for how to join the list). I hope some of you will join me for a crisp and early morning sound walk around the beautiful grounds of Dartington Hall!

With the assistance of Andrew Deakin, the UKISC is planning to devise a short series of Listening and Soundscape oriented seminars and workshops to visit five UK Universities. Andrew already introduces acoustic ecology related modules in his Sonic Arts course at the University of Middlesex, England. Kendall Wrightson also introduces acoustic ecology to students at City University, London.

Our thanks to Ellen Waterman and everyone involved in organising the Sound Escape conference at Trent University, Ontario last June. It was particularly good to meet up with and listen to David Matless and Andrew Leyshon, both geographers from the University of Nottingham, England who brought a much-needed perspective to the ensuing debates. I am glad to see that David has since joined the UKISC and I hope we hear more from them both at *Sound Practice*.

Lastly, but not least, the UKISC welcomes Jony Easterby on to its Management Committee. Jony is an artist living in North Wales, who has recently been very active creating a sound installation for the Grizedale Forrest in Cumbria (featured in the first issue of *Earshot*). The UKISC is also seeking to co-opt a representative from Ireland onto its board. A “welcome” must also be sounded for the Finnish Society for Acoustic Ecology (FSAE)—a great boost for the WFAE. We wish them all well and look forward to the invites to go and spend Finnish mid-summer in an old wooden cottage, beside some lake ... listening!

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Finnish Society for Acoustic Ecology (FSAE)

by Simo Alitalo

The FSAE was established in December 1999 and is approaching its first anniversary. During the first year we have tried to raise funds, broaden our membership base and establish contacts with professionals and interest groups that share our concern with the state of sound environments in Finland. Research scholar Helmi Järviluoma from the Academy of Finland has been the chairperson of the Society. She is currently coordinating the *Acoustic Environments in Change* project. The other members of the FSAE board are Simo Alitalo, Meri Kytö, Petri Kuljuntausta and Heikki Uimonen.

This autumn we started a Studia Generalia lecture series called "Research, Art and Sound Environments." The lecture series has been organized jointly with the Musicology departments of Turku University and Abo Academy (the Swedish-language University in Turku).

The following lectures were held this fall:

October 18: Emeritus Professor Olavi Granö (University of Turku, Academy of Finland) "Sound Environment as a Concept."

October 23: Professor Anahid Kassabian (Fordham University, New York) "Soundscapes of Films."

November 15: Architect/Musician Björn Hellström (Royal Technical University, Stockholm) "Connections between Architecture and Music."

December 13: Research scholar Helmi Järviluoma (Academy of Finland) "Changing Soundscapes."

In October the FSAE received a grant of 10,000 FIM from the Kordelin Foundation that enables us to continue the Studia Generalia lecture series. For the spring semester 2001 we are planning five more lectures to be given by experts from the fields of medicine, sound art, radio, architecture, etc. We are also applying for another grant from the Kordelin Foundation to continue the Studia Generalia series for the remainder of 2001.

Simo Alitalo, a member of the FSAE board, recently exhibited his sound installation *Virtual Forest-Der Virtuelle Wald* at the Klanggalerie of the Sender Freies Berlin (SFB) in Berlin (October 10 to November 24). *Virtual Forest* is based on Finnish nature recordings made during the past five years. A version of *Virtual Forest* hopefully is going to be heard at Sound Practice, the first UKISC conference on sound culture and environments in Dartington, England, February 16 - 20, 2001.

The FSAE has made an initiative to establish a visiting professorship in Soundscape Studies at the University of Turku. As a first step the departments of Musicology and Geography have applied for funds to invite a leading soundscape scholar to Turku during the spring semester 2001.

The conference of the International Association for the Study of Popular Music (IASPM) will be held in Turku next summer (July 6-10, 2001). The FSAE will be involved by organizing a panel on soundscape and popular music as well as soundwalks through the surroundings of Turku.

At the moment the FSAE is trying to find funds and partners to launch *Soundscape Studies: Methodological Excursions*, Yearbook of Soundscape Studies, Vol. 2.

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Soundscape Association of Japan (SAJ)

by Shin-ichiro Iwamiya

In accordance with my proposal to commemorate the turning point of 1999 to 2000, the SAJ conducted a Millennium Soundscape Project entitled *The Last Sounds of 1999 and First Sounds of 2000*. The project started within the SAJ community. However, after *Asahi Shimbun*—a major Japanese newspaper—introduced it, the public was invited to participate.

The sound most frequently reported was that of temple bells: as part of a Buddhist ceremony they are rung 108 times at midnight every New Year's Eve in Japan to eliminate the 108 sins and delusions of human beings. This sound was nominated as both the last sound of 1999 and the first sound of 2000. The New Year's Eve Bells are a typical sound in the Japanese tradition.

Countdown events were the second most frequently mentioned sounds. These are new to Japanese culture. The influence of American culture has made countdown events as popular in Japan as MacDonald restaurants. This last New Year's Eve in particular was marked by many big countdown events to celebrate the new millennium throughout the whole country. The soundscape of these events was characterized by countdown voices, crackers, cheers, and fire works.

Watching television was a popular way to await the coming millennium. Many people reported TV sounds. The Red (female singers) vs. White (male singers) Singing Competition (NHK) is the most popular TV programme on New Year's Eve in Japan. Some people's reports referred to this program as the last sounds of 1999.

Voices of families and friends were frequently reported sounds. A girl noted her boyfriend's voice on the telephone as her first sound in 2000. Reports of sounds from computers (keyboards, clicks of mice, and audio signals) and cell phones reflect today's lifestyle. Also, Y2K issues affected the millennium soundscape: in one workplace computer-controlled machines were stopped during the turning point of 1999 to 2000. The silence during this moment was an interesting sound feature reported to the Millennium Soundscape Project. I also received accounts of natural sounds, kitchen sounds, train sounds etc., which gave me a sense of people's personal lives.

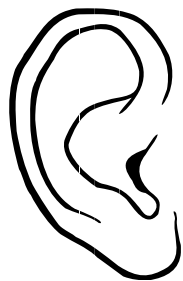
All reports were published on my website and in the SAJ Newsletter and the *Nishinippon*—a local Japanese newspaper—featured our project. Through the Millennium Soundscape Project, we not only gave the public a chance to experience environmental sounds consciously but we also recorded the *types* of sounds that people heard at that particular moment. The millennium soundscape forms a soundmark along the time axis. Hopefully in the far future, someone else will conduct another Millennium Soundscape Project and compare it to ours.

Recently I launched the End-of-Century Soundscape Project: The Symbolic Sounds of the Twentieth Century. Would you like to join us?

Contact:

Department of Acoustic Design, Kyushu Institute of Design,
4-9-1, Shiobaru, Minami-ku, Fukuoka 815-8540, JAPAN
http://www.imasy.or.jp/~touno/saj/index_e.html
Shin-ichiro Iwamiya: iwamiya@kyushu-id.ac.jp

Dialogue



We invite your comments and criticism in response to anything you read in *Soundscape*, including other members' comments, such as those below. Please send your reactions to: jwfae@sfu.ca, or to the mailing address at the bottom of page 2.

Big hurrahs on the journal! It's a wonderful, rich, inspiring blend of direct listening, thoughtful reflections, and in depth reporting on events. With this publication, I hope more people will be inspired to join WFAE and support the networking you and all the rest are doing.

Jim Cummings, Santa Fe, USA

Now I have had some time to look at *Soundscape* a bit more in depth. I think the result is quite a reward for your efforts; it's good to have such a useful instrument. Compliments to Norbert Ruebsaat for the translations; Böhme, for one, is really a toughy.

Albert Mayr, Firenze, Italy

Many thanks indeed for sending me the first issue of the *Sound-scape* journal, and congratulations on such an excellent publication. It's been sitting on my desk a while (until I emerged from under a pile of exam marking) as a special treat to look forward to! I read it this morning from cover to cover, and found the standard of contributions most impressive, and appreciate the hard work you and others have put into this. I'm a member of the UKISC list, and hope to get more involved. Look forward to the next issue.

Dr. Katharine Norman, London, UK

I got the *Soundscape* Journal. Thank you so much. Reading through it has inspired me and I am listening again. I even considered taping the hummingbird events that were going on by our windows in May. They sounded like a hive of bees, there were so many of them. I could hear them through the window when the population was at its peak as there were about 20 of them vying for position on the feeders.

Trish Murray, Saltspring Island, B.C., Canada

Your Journal is *wonderful*. I put down all the other things I was supposed to be reading and went through it, cover to cover. *Very* impressive. Thanks for sending it to us.

Paula Gordon, Atlanta, USA

May I add my thanks to all those involved with *Soundscape*. I enjoyed reading it very much. As a way of finding out what others in this scattered field are thinking and doing it is very valuable. I always appreciate project reports and news from across the globe. Good to see the tradition of the *Soundscape Newsletters* continued in this respect. So to some thoughts on reading it:

Gernot Böhme's writing was quite new to me. I found "Acoustic Atmospheres" very stimulating and original. So much so that it crystallized some of the doubts that I've felt about the soundscape scene in recent times, to the point that I'm writing now. My concern is less to do with what is said than with what isn't.

Where is all the critical debate, lively disagreement, alternative theory, polemic even, which one could expect if ideas are moving forward and breaking new ground? Am I alone in missing this? The basic tenets of soundscape thought, ground-breaking as they were in the '70s, seem these days to be more often repeated than refined. This does concern me. Maybe I'm guilty of liking change for change's sake and that the basic ideas are fine 25 years on. But are they?

- 1) Should we really try to hear the acoustic environment as a musical composition when it clearly isn't? (free improvisation would be a more accurate musical analogy if one is needed). Can the acoustic environment be listened to with the same criteria as one listens to music? What are these criteria anyway?
- 2) Is the hi-fi/lo-fi duality really adequate? For me there are many problems here. I find it:
 - a) too static—taking no account of the fluidity and ever changing nature of soundscapes. Even cityscapes, often cited as lo-fi, have plenty of hi-fi periods and even more varying ones somewhere in the middle.
 - b) mechanistic—dealing only with amounts and types of sound not with what people actually like or dislike—a more important consideration.
 - c) comes with the inbuilt moral assumption that lo-fi = bad and hi-fi = good. How many people agree with this assumption?

Personally I like a good lo-fi cacophony, e.g. the London Underground which is very rich in its sonic detail. I do not mind that my aural space is reduced. Often this brings about an increase in imaginative space. Incidentally the new Jubilee line trains which are smoother and quieter, are not an improvement to me in this respect.

For the past two years I've been asking Londoners what their favourite London sound is. This is not systematic research, just a straw poll for my own curiosity. I now have a couple of hundred replies. The most popular sounds are London transport sounds, mostly the underground. A close second are of the quiet spaces, parks, greens etc. A popular favourite amongst students is the sound of the bass coming through the doors as they queue to get into a club—a sound of anticipation. There are a few whose favourite sound is the traffic, particularly as it roars away when the lights go green. Others have said they have left the city because they cannot stand the noise levels.

Can we really make such sweeping assumptions about people's likes and dislikes?

"Acoustic Atmospheres" excited me particular in that it draws some of the above strands together in quite a different and subtle way. It appears to have more to reveal about city acoustic environments and is very intriguing about the relationship between music and the soundscape. More please.

Peter Cusack, London, UK

The above note from Peter Cusack was originally posted to the Acoustic Ecology e-mail discussion list, and is reprinted with permission.

Announcements

SOUND PRACTICE

The First UKISC Conference on Sound, Culture and Environments

Devon, England
February 16 – 20, 2001

Dartington Hall Centre & Dartington College of Arts

Organised by the UK and Ireland Soundscape Community (UKISC) with the support of the World Forum for Acoustic Ecology, co-sponsored by World Scientific and Engineering Society, University of Plymouth and Dartington College of Arts.

Sound Practice is the first interdisciplinary gathering in the UK bringing together researchers and practitioners from around the world, in order to discuss and experience the soundscape. With more than 100 presentations programmed—including roundtable discussions, fieldwork, performances, workshops, papers, installations, sound walks and listening exercises—Sound Practice will showcase a cross-section of current thinking concerning sound, culture and environments. Invited keynote speakers and performers include Jean-François Augoyard, John M. Hull, Pauline Oliveros, R. Murray Schafer and Hildegard Westerkamp. For up to date information on Sound Practice and a registration form, please see: www.soundpractice.org.uk.

Delegate Registration Information

Conference places are limited, so please register early to avoid disappointment.

Registration Fees for Delegates (all prices include vat)

Standard Student*	£100
Standard Full-Rate:	£200
Standard Day Rate (per day)	£50

* To obtain student fee, delegates (who will have *full-time* Student status in February 2001) must submit either a photocopy of student ID, or an official university letter confirming their status with the registration form. Registration includes access to all the programmed conference events, including transport to field trips and other events off campus.

Accommodation

Before paying for accommodation please check for availability.
Price per night, including breakfast:

	Single	Twin	Double
En-suite bathroom:	£47.00	£76.40	£76.40
Private bathroom:	£41.20	£70.50	£70.50
Shared Bathroom:	£29.40	£58.80	£58.80
Student* (all shared bathroom):	£21.20	£42.40	N/A

Meals (all prices include 17.5% VAT)

Price per meal:

Lunch (2 course): £11.30

Dinner (2 course): £11.30

Methods of Payment

1. Payment in Pounds Sterling (£) payable to "Sound Practice"
Mail to:

John Levack Drever
Sound Practice, Research & Postgraduate Centre
Dartington College of Arts
Totnes, Devon
England
TQ9 6EJ

2. Swift Payment in Pounds Sterling (£)

Bank Address:

HSBC
57 High Street
Totnes, Devon
England
TQ9 5NS

Bank Sort Code: 40 44 24

Account Number: 91207458

3. Bankers Draft in Pounds Sterling (£). Bank details as above.

4. For credit card booking contact: j.drever@dartington.ac.uk

Special Thanks



Photo: Gary Ferrington

Peter Grant has provided the administrative backbone of the WFAE since its inception in 1993. This often thankless task includes managing the WFAE membership and contact database, Newsletter/Journal distribution, financial records and banking. Peter now retires from administrative duties, and the board, on behalf of the entire membership, would like to extend to him our thanks and best wishes. Over and above his workload Peter has also been a concerned and engaged member who has made a significant contribution to the ongoing development of the organisation and we look forward to his continued input and insights as a member at large.

Nigel Frayne - Chair, WFAE Board

The Acoustic Environment as a Public Domain

by Henrik Karlsson

Paper presented at “Sound Escape”—International Conference on Acoustic Ecology, Trent University, Peterborough, Canada, June 28 - July 2, 2000

Scene I: 1898, French countryside

The poets Mallarmé and Valéry are out walking in the country. They pass by a field of golden wheat and Valéry, who knows nothing of agriculture, asks Mallarmé “what kind of grass” it is. Mallarmé replies: “But my dear fellow, it’s wheat.” [Mais, mon cher, c’est du blé] After a while, evidently with the approaching Parisian concert season in mind, he adds: “It’s autumn’s first clash of cymbals” [C’est le premier coup de cymbales de l’automne].

Scene II: 1998, Copenhagen

A World Health Organisation (WHO) official prophesies that, barring major national disasters, mankind will be able to cope with and geographically contain future threats to the environment. But there are two exceptions, two phenomena which are tending to get out of control and to increase exponentially: allergies and noise.

Although I am not very fond of talking about noise only, and definitely do not equate soundscape with noise, questions concerning noise can serve as a *pars pro toto*, for it is through noise that people generally first become aware of the soundscape. Noise, properly used, is a good pedagogical way into the subject.

Summing up what has happened in the soundscape context internationally over the past seven years, since the memorable Banff conference of 1993, isn’t easy. My impression is that concern for a better acoustic environment has grown and is more widespread than before, with more conferences, more websites and artistic projects, more books. And yet—very few concrete results, at both national and international levels. We meet and present our new projects in yet another show-and-tell happening. This conference is no exception. The principal players are much the same as in 1993.

We are still more or less marking time. Is the reason to be found in the world around us or within ourselves?

I would like now to concentrate on a number of barriers, which prevent us from achieving visible results. What we have to do is to devise strategies for winning allies *within* these areas or, quite simply, break down the barriers in order to go further.

1. The political barrier

Noise questions do not have high priority among environmentalists or politicians, nor within national bureaucracies or environmental organisations like Greenpeace. Neither has noise been “part of an integrated urban strategy” (EU Commissioner Ritt Bjerregaard, 1998).¹ In fact, the acoustic environment has roughly the same low status in environmental policy as cultural affairs in a government or

local authority. Why is it that noise problems are increasing and apparently getting out of control?

There are several reasons for this:

(1) *Noise is not regarded as a serious health problem.* It does not figure on the health agenda, which may seem odd. This is due to noise being regarded primarily as a *physical* problem, to be dealt with on the local level. Consequently noise never rates a specific mention when the European Science Foundation (ESF), the EU and the WHO are listing the most acute health problems in a global perspective.²

Still, the negative impact of noise on health has been amply documented for several decades past.

Instead of repeating the known effects, I can refer to the WHO’s “Guidelines for Community Noise”, which can be downloaded from the WHO home page <www.who.int/peh/noise/noiseindex.html>.

Another field has been added recently, namely a leisure consumption which is tending to become a new occupational injury. *The sound level at concerts*—and not just pop music and discos—has become so high that both musicians and listeners are liable to sustain temporary or permanent hearing damage. We are approaching the absurd situation where it is considered normal or at least expected that both audience and musicians should wear yellow ear plugs for protection.

By way of comparison, this is really the same thing as looking at art or seeing a film through sunglasses!

(2) In contrast to this paralysis, inaction or rigidity characterising law and administration, we have *the citizens’ perception of sound and noise*. If you raise this subject, no matter to whom you are talking, the odds are that before long they will mention some sound that they can’t stand. Dealing with noise problems for real would be like opening a Pandora’s box, which may be the real reason why politicians dare not or cannot address these issues. (In fact, it affects every citizen).

(3) Lastly, noise abatement always means *collisions with economic interests*.

I shall be returning to this point later.

We must:

- adhere to a wider definition of sound, noise and silence than is represented both by the anti-noise organisations on the one hand and the music community on the other,
- increase our numbers within more powerful pressure groups,
- work for changes locally and gradually build up networks with other localities, regions and nations.

2. The bureaucratic barrier

Present-day management of the acoustic environment is based on *fragmented, inchoate legislation* emanating from a pre-electronic acoustic world which is receding further and further into the past. Legislation is not keeping up with technology.

In a word, there is no holistic view or overarching system for dealing with questions of the acoustic environment. When a new sound or new nuisances crop up, a new statutory provision is provisionally arranged—a new desk drawer is opened, or a new reel of red tape unwound. In Sweden as in many other countries, some 20 different authorities are responsible for different parts of the soundscape, and the rules are a labyrinth to citizens and civil servants alike. France, to the best of my knowledge, is the only country with a national acoustic environment council (*Conseil national du bruit* in Paris).

Sound and noise cannot be treated in the same way as geographically limited, physical environmental hazards if they are viewed from the standpoint of the individual citizen and not in the perspective of bureaucracy.

Presently I will have my own proposal to make for a new approach.

3. The economic barrier

How can we accept such a state of affairs? One explanation is that sounds are accessories in social interaction connected with territory, power and economics. Ultimately, noise problems are always a matter of *who controls a certain area, who can assume the right to probe or exceed geographic limits, and who can afford to pay*. There are very powerful economic interests involved here—not only local and national ones but also transnational corporations like the aviation, transport and tourist industries.

Some concrete examples, from mischief to economic imperialism:

1. Toy shops are stocking more and more products which generate sound, not mechanically, like the old-time rattle, but electronically. Often the sound levels are inoffensive. But there are also telephones for girls and machine guns for boys which can be downright harmful. In a test of five cap-pistols, all five had a detonation of 140 dB (C) or more at a distance of 50 cm from the ear. If children foolishly fire a pistol like this still closer to someone's ear, the bang corresponds to 162 dB (C), which is the same sound level as a real Mauser.³
2. A Frenchman riding a motorbike with no silencer straight through Paris at 3 o'clock in the morning can wake 250,000 sleeping people.⁴ What power! With my machine I can control a quarter of a million people. I'm the boss.
3. In many countries, aerial advertising is permitted in the form of banners flown from aircraft circulating at the minimum permissible altitude. This is relatively harmless, because the aircraft keeps moving. But what does it feel like if instead the advertising firm uses a helicopter or an airship which hovers, for example, over a football pitch or a concert platform where people have paid money to listen to something else and now have to put up with engine noise for hours on end?
4. The market economy features a massive trial of strength between the public and private sectors. Stockholm business interests are demanding a new airport very close to Stockholm and threat-

ening otherwise to transfer their offices to London. In the country at large, local firms are demanding that jet aircraft still be permitted to land at the nearest airport after 11 at night. This would mean thousands of people being woken up or having their sleep disturbed every night in order for a handful of executives to get home to bed from a business trip to the capital.

5. The skiing resorts of the Alps and the Nordic countries are attractive, not only for sport and amusement but also for tranquillity and silence. But the demand for economic gain and entertainment is nibbling at the edges of these silent areas. In order, for example, for a helicopter rescue crew to be kept on standby, the pilots have to be able to make extra money by flying tourists to the mountain peaks so that they do not have to use the ski lift. Result: day-long helicopter noise.
6. Everyone predicts a huge expansion of air traffic in the next few decades. Most of the big airports in the centre of Europe have already hit the ceiling, but there is great pressure from package tour companies and the tourist industry to increase the number of flights. How can this be resolved?

Basically there are three ways of expanding air traffic:

- (1) by building new runways (or new airports),
- (2) by building bigger aircraft,
- (3) by permitting air traffic at night.

All three alternatives, inevitably, mean *more noise* for local residents!

- What local authorities, private individuals and organisations have the power to resist transnational corporations with high funding resources for lobbying?
- What local authority doesn't want to receive tourists?
- What local authority wants to oppose business interests?

An inevitable and annoying question must sooner or later be raised: for how long can an uncontrolled expansion of air traffic and tourism be accepted from an ecological point of view, an expansion which basically is due to more and more people being rich enough to spend their holidays and leisure time on other continents?

More and more, the acoustic environment is becoming a question of power, and of money with which to buy silence. More and more it is becoming a matter of luxury consumption, perverted forms of which also afflict the poor. In the big cities of Central Europe, the areas located nearest to railway lines and motorways are inhabited by the poorest—immigrants and dropouts—because the noise there makes flats less attractive and, consequently, cheaper.

Compare this with the declaration adopted by all member countries of WHO: "*We recognize that the improvement of the health and well-being of people is the ultimate aim of social and economic development.*"

That's what it says. *Not*: that the aim of economic development is to make the rich even richer, so that they can ruin the health of the poor without let or hindrance—which, *de facto*, is what is still happening. All over the world.

Last of all, the big opponents to a healthy acoustic environment are not individual citizens or even individual nations but neo-liberalism as an ideology and the globalisation of the economy. Capital moves where the profits are biggest and where the environmental stipulations are lowest and cheapest.

4. The educational barrier

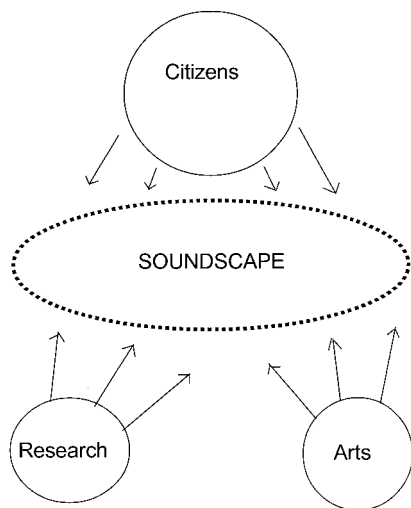


Figure 1

Figures 1 and 2 above show a simplified model of the principal players—leaving aside the politicians for the moment. In not one single country is there one big pressure group for a better acoustic environment. Researchers and artists do what they can in their several fields, but they often lack the common touch and are not always good teachers.

What is needed is help from information, educational and media experts—dedicated writers, journalists, broadcasters and teachers who can combine research with artistic forms of presentation and modern information technology.

In our circles there is an optimistic belief that art and science can cross-pollinate each other to the general good. Sometimes they do, but often what occurs is an encounter between representatives of two highly ego-tripping sectors, neither of them very interested in pedagogics.

5. The academic barrier

For a long time now, at least 20 different disciplines have been occupying themselves, directly or indirectly, with acoustic environments (Figure 3, next page). In each discipline, as we know, significant research findings have been achieved, but those findings are seldom spread beyond the confines of the discipline or profession concerned. Methodology and theory are not compatible even between closely related disciplines. The pieces of the jigsaw won't fit together, and there is no common pattern either.

In a supremely relevant article, Greg Waggstaff has discussed the relation of acoustic ecology to ecology generally (and, like me, is sceptical of the very term “acoustic ecology”).⁵ He argues that the acoustic ecologists must keep abreast of the latest developments in ecology, which is generally nothing like as “phonocentric” as we like to believe. He also takes issue with a view of things which has been something of a lodestar ever since the World Soundscape Project began, namely that it should be possible to use structures and models from musical compositions to make a society's acoustic environment more balanced and health-giving.

This has also been noted by Alexander Lorenz, in his doctoral thesis “Klangalltag—Alltagsklang”⁶. He maintains that acoustic ecology, judging by its projects, and despite its alleged interdisciplinarity, has been dominated by aesthetic-artistic rather than social scientific

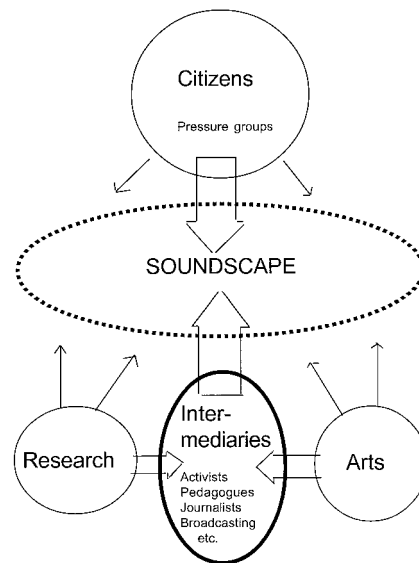


Figure 2

attitudes, and this has impeded a development of theory and methodology. The reason is that it is mainly composers, musicians and pictorial artists who have busied themselves with acoustic themes—and broadcasting producers, one might add.

Almost without exception, the instruments used are of a *qualitative* nature and comprise everything from expert and lay opinions to quasi-experimental field studies, many of them (such as ear-cleaning exercises and soundwalks) aimed at greater sensitising, says Lorenz.

Relations to established sciences such as music psychology and environmental psychology, i.e. those which specifically study the impact of sound on man, have not been looked for, even though they ought to have fruitful synergies to offer. Another aspect of the aesthetic dominance is that the consumers' (or the recipients') perspective is ignored. “The experiencing subject must adopt a bodily, concrete and relevant standpoint. The soundscape, therefore, is not an objectively existing fact but a cultural landscape constituted by human perception.”⁷

Everyone can readily appreciate that this clashes with the main thrust of acoustic ecology hitherto and with most of the projects which have been presented. For there it is the views and aesthetic criteria of the producer that predominate.

In order for acoustic environment research to acquire an academic platform and be accepted as a special field of research, we will have to concern ourselves far more with questions of theory and method. Here as in all new research fields, we will have to be prepared for compact opposition from the established disciplines when they scent competition—just as music sociology, music ethnology and popular music research came in for criticism to begin with.

Some points to bear in mind:

- (1) Instead of a utopian interdisciplinary approach, I believe that a cautiously *multidisciplinary* one is to be preferred. This means, prior to each individual project, agreeing with colleagues on exact topics of inquiry for a concrete assignment and the best pragmatical method, instead of starting off with visionary theoretical models. There are interesting openings to be obtained from

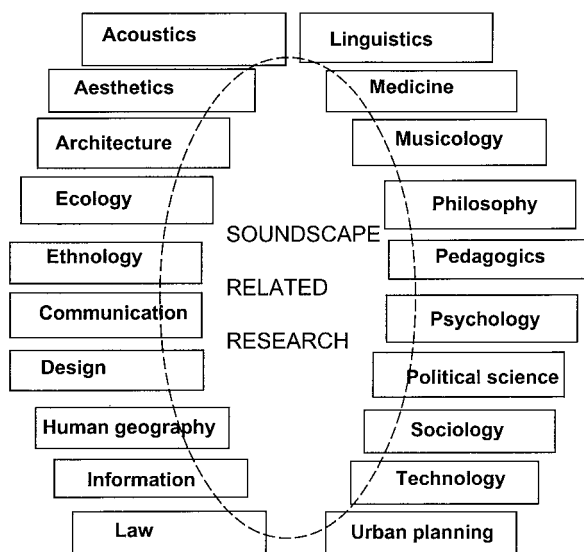


Figure 3

Quality Research and Action Research, which are in the focus of attention at present with a number of new handbooks. We are not yet competent to construct major systems and should thus beware of delving too deeply into ecosophy, semiotics, and philosophy at the present stage of things.

- (2) All research (be it primary research or action research) must be kept separate from educational activities, political actions and artistic presentations. These can *per se* coexist within the same projects, but this is something which the intended sponsors of such arrangements do not understand.
- (3) Clear boundaries need to be drawn in relation to esoterics, nature-romantic fundamentalism and normative aesthetics, as was observed by the philosopher Gernot Böhme⁸. To be frank, all associations with New Age philosophies or religion should be kept private and not hinted at in applications for funding at least.
- (4) In my opinion, the name “acoustic ecology” has shown itself inappropriate and I would like the term to be replaced and the World Forum given a change of name.

4. Conclusion

As a contrast to all technocratic approaches, I would recommend an *anthropocentric model*.

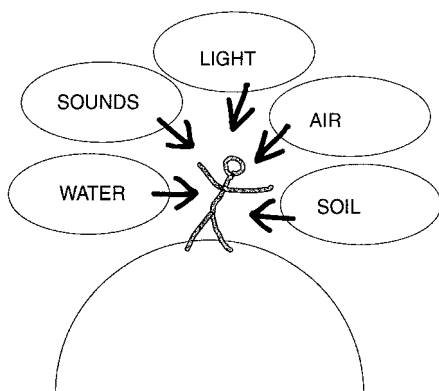


Figure 4

Sound and a good acoustic environment must be equated with a number of other “elements” of vital importance for good and healthy living. Without fresh *air*, uncontaminated *soil*, clean *water* and *light*, there can be no organic life. Even though sounds are of a different, temporary category, the acoustic world should be added as a fifth element of the same dignity.

One of the central ideas in the German philosopher Gernot Böhme’s “ecological aesthetic of nature” is that the human being, in relation to the environment, is primarily, not a rational but a *corporeal* being—we live in and with nature because air, water and soil literally pass through our bodies.⁹ And the same is true of sound! Compare this, once again, with the WHO definition of health: “*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.*”

Only with this way of looking at things will a healthy, unspoiled acoustic environment become something of a *common right*—a *public domain*—to which all citizens should have free access, no matter where they live. The acoustic environment will then become something which nobody can sabotage for others or privatise for personal gain. The focus of attention will then be on the individual citizen and his needs, not on product development or other economic interests, whether individual or transnational.

An anthropocentric model of this kind, I am convinced, is the only feasible way of regarding, restoring and preserving the acoustic environment. But this also means that the technocentric model must be abandoned, which has until now dominated legislation, administration and scientific research.

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Born in 1940, **Henrik Karlsson** is a musicologist, who graduated from Gothenburg University in 1988 with a thesis on music and nationalism. He is research secretary at the Royal Swedish Academy of Music in Stockholm since 1990, and initiator of its extensive soundscape programme, starting with the “Manifesto for a better environment of sound” in 1995.

Notes

1. Ritt Bjerregaard : “The EU’s new noise policy and its relevance to our urban environment”. Speech/98/167 Copenhagen, 7 September 1998.
2. See “Health 21 – health for all in the 21st Century. An introduction to the health for all policy framework for the WHO European Region.” Copenhagen 1998.
3. Tests carried out by The Swedish Consumer Agency in 1998, reported in *Råd & Rön* No. 12, 1998 [Swedish].
4. Fabien Gruhier & Michel de Pracontal: “Le bruit, ennemi public numéro un,” *Le Nouvel Observateur*, No. 1727, December 1997.
5. Gregg Wagstaff, “What is acoustic ecology’s ecology?” *Drift*. Three days of sound art + acoustic ecology across Glasgow 12-13-14 November 1999. [Programme book] New Media Scotland, Glasgow 1999 (p. 21-26). Also in *The New Soundscape Newsletter* No. 9, p. 4.
6. Alexander Lorenz: *Klangalltag – Alltagsklang. Evaluation der Schweizer Klanglandschaft anhand einer Repräsentativbefragung der Bevölkerung*. Zentralstelle der Studentenschaft. Zürich 2000.
7. *Ibid*, p. 72.
8. Gernot Böhme: Speech at the symposium “Akustische Ökologie und ökologische Ästhetik,” Wiesbaden June 6th, 1999.
9. Gernot Böhme: *Atmosphäre. Essays zur neuen Ästhetik*. Frankfurt am Main 1995, p. 14.

Silence and the Notion of the Commons

by Dr. Ursula Franklin

This lecture was given in Banff, August 11, 1993, as part of The First International Conference on Acoustic Ecology, "The Tuning of the World." It has been transcribed and edited by Gayle Young with the assistance of Dr. Franklin.

INTRODUCTION

In a technological world where the acoustic environment is largely artificial, silence takes on new dimensions, be it in terms of the human need for silence (perhaps a person's right to be free of acoustic assaults), in terms of communication, or as the intentional modification of the environment.

This discussion consists of two separate but interrelated parts: 1) Silence as Spiritual Experience, drawing largely but not exclusively on the Quaker tradition of religious worship, and 2) Silence as a Common Good. The notion of silence will be examined in terms of the general patterns of the social impact of modern technology. Silence possesses striking similarities with those aspects of life and community such as unpolluted water, air or soil, that were once taken as normal and given, but have become special and precious in technologically mediated environments.

Silence and the Notion of the Commons

I would like to thank everyone involved in this conference, and the organizers in particular, for inviting me to deliver this talk. I am very obviously an outsider and wish to come to this group to talk about something that is central to all the work that you people are doing. And so I come in a way as a friend and colleague, in a field where I am fully aware that silence has been the subject of many publications. I know the chapters on silence in Murray Schafer's *The Tuning of the World*, I know that John Cage and others have written books on silence, and if I had my senses about myself I would have taken as a title for this talk something much more like "The Anatomy of a Soundscape," dissecting silence. Because what I really want to do is see how our concept, as well as our practice, of silence has been influenced by all the other things that have changed as our world has become what Jacques Ellul calls a *technological milieu*, a world that is increasingly mediated in all its facets by technology.

Let me then, give you an idea of what I hope to do during this hour with you. I will find it necessary to first of all very briefly say something about sound and the technological system. I want to spend the bulk of my time talking about silence, to define it and analyze it. (I had a bit of a problem with the gender but I decided to say her attributes.) I hope to be able to show you that we are faced with two domains in which silence is important and I want, as I describe how those two domains impinge upon each other, to talk about the notion of the commons, common needs, and our common heritage. I want very quickly, if I have the time and discipline myself not to be verbose, to talk about technology as practice because this has something to do with the last point: "What Now?" If in fact I am able to convince you that there is an issue, what might

we do? I don't ask you to agree, though I ask you to follow me for that hour, to accept my definitions and assumptions. I am happy if you question them, but just for that hour we will take them in and see what evolves from them. Let me begin to talk about sound and the technological system.

Before we had a technologically mediated society, before we had electronics and electromagnetic devices, sound was rightly seen as being ephemeral, sound was coupled to its source, and lasted only a very short time. This is very different from what we see in a landscape: however much we feel that the landscape might be modified, however much we feel that there is a horrible building somewhere in front of a beautiful mountain, on the scale of the soundscape, the landscape is permanent. What is put up is there. That's very different from the traditional soundscape. What modern technology has brought to sound is the possibility of doing two things: to separate the sound from the source and to make the sound permanent. In addition, modern devices make it possible to decompose, recompose, analyze, and mix sounds, to change the initial magnitude and sustainability of sound, as well as to change all the characteristics that link the sound with its source. Murray Schafer called this *schizophonia*, separating the sound from the source. We now have easy access to the multitude of opportunities that result from overcoming that coupling.

These techniques are pretty important when you think about the social impact of technology, because prior to these developments there was a limitation to sound and sound penetration. Even if you heard a bag pipe band there was a limit to the amount of time a bag pipe band would play; you could patiently wait until eventually the players got exhausted. On the other hand if you heard a recording of a bag pipe band, you are out of luck. It's never going to be exhausted. So in terms of the social and civic impact of technology, electronics make an awful lot of difference and change the modern soundscape. Modern technology is a source of joy for modern composing and the opening of many doors for expression. Modern technologies are also the source of a good number of problems related to the soundscapes, and to the way society as a whole adjusts, copes with and possibly ameliorates sounds. And in there sits the tale of what occupies us.

But then there is not only sound, there is silence. Silence is affected by the same technological developments, the same factors that make it possible to separate the sound and the source and to overcome the ephemeral nature of any soundscape. I said that I would try to define silence and to analyze the attributes that we would keep in mind, related to the value of silence. I struggled with the definition because defining silence as the absence of external or artificially generated sound is fine but it's a little bit shallow. You can say: *so what, silence is the absence of sound* but silence in many ways is very much more than the absence of sound. I feel that one comes to the root of the meaning and practice of silence only when

one asks: *why is it that we address, that we value, that we try to establish, silence?* Then, absence of sound is a necessary but it is not a sufficient condition to define what we mean by silence. The second attribute, the second parameter, from my point of view, comes out of the question: *why is it that we worry about silence?* Because silence is an enabling environment. When one thinks about the concept of silence, one notices the fact that there has to be somebody who listens before one can say there is silence. Silence or the absence of sound is defined by a listener, by hearing.

In a way, the modern soundscape and the modern understanding of silence divides itself into two domains. It divides itself into the domain that we have traditionally associated with silence, *the enabling condition in which unprogrammed and unprogrammable events can take place*. That is the silence of contemplation; it is the silence when people get in touch with themselves; it is the silence of meditation and worship. What makes this domain distinct, is that silence is an enabling condition that opens up the possibility of unprogrammed, unplanned and unprogrammable happenings.

In this light we understand why, as Christians, traditional Quakers found it necessary in the seventeenth century, when they were surrounded by all the pomp and circumstance of the church of England, to reject it. We understand why they felt any ritual, in the sense of its programmed nature and predictability, to be a straight jacket rather than a comfort, and why they said to the amazement of their contemporaries: *we worship God in silence*. They justified the practice of silence because they required silence in order to hear God's voice. Beyond the individual's centering, beyond the individual effort of meditation, there was the need for *collective* silence. Collective silence is an enormously powerful

event; there are contemporary accounts of Quaker meetings under heavy persecution in England when thousands of people met silently on a hillside. Then out of the silence, one person, unappointed, unordained, unexpected and unprogrammed, might *speak*, to say: *out of the silence there can come a ministry*. It is not essentially within that person, constructed in their intellect, but the message comes out of the silence to them. This isn't just history and theory. I think that if any one of you attended a Quaker meeting, particularly on a regular basis, you would find that suddenly out of the silence somebody speaks about something that had just entered *your* mind. It's an uncanny thing, but the strength of collective silence is probably one of the most powerful spiritual forces.

Now in order for something like this to happen a lot of things are required. There is what Quakers call: *to be with heart and mind prepared*. But there is also the collective decision to be silent. And to be silent in order to let the unforeseen, unforeseeable and unprogrammed happen. Such silence, I repeat, is the environment that enables the unprogrammed. I feel it is very much at risk. I will

elaborate on this but first I want to say: there is another silence. There is the silence that enables a programmed, a planned, event to take place. There is the silence in which you courteously engage so that I might be heard, in order for one to be heard all the others have to be silent. And in many cases the silence is not taken on voluntarily. This is the false silence that I am afraid of. It is not only the silence of the padded cell, the silence of the solitary confinement, but it is also the silencing that comes when there is the megaphone, the boom box, the PA system, and any variation in which other sounds and voices are silenced so that a planned event can take place.

There is a critical juncture that, I hope, you will keep in mind between the planned and the unplanned, the programmed and the "unplannable." I feel very strongly that our present technological trends drive us toward a decrease in the space—be it in the soundscape, in the landscape, and in the mindscape—for the unplanned and unplannable to happen. Yet silence has to remain available in the soundscape, in the landscape, and in the mindscape. Allowing openness to the unplannable, to the unprogrammed, is the core of the strength of silence. It is also the core of our sanity, not only individually, but collectively. I extend that to the collectivity because as a community, as a people, we are just as much, if not more, threatened by the impingement of the programmed over the silent, the

enabling of the unprogrammed. I think, much of the impingement happens unnoticed, un commented upon, and in some ways much less obviously than an intrusion of a structure into the landscape. While we may not win all battles at City Hall to preserve our trees, at least there is now a semi-consciousness that this type of struggle is important.

Where could one go to get away from

the dangers of even the gentle presence of programmed music, or Muzak, in our public buildings? Where do I protest that entering any place—from the shoe store to the restaurant—deprives me of the opportunity to be quiet? Who has asked my permission to put that slop into an elevator that I may have to use every day umpteen times. Many of such *background* activities are intentionally manipulative. They are not just noise that can be dealt with in terms of noise abatement. There are two aspects that I want to stress in this context. One is that the elimination of silence is done without anybody's consent. The second is that one really has to stop and think and analyze in order to see just how manipulative these interventions can be.

For instance, in the Toronto Skydome, friends tell me that the sound environment is coupled and geared to the game: if the goalie misses, there are mournful and distressing sounds and when the home team scores there is the sort of athletic equivalent of the Hallelujah Chorus. Again, the visitor has no choice, the programmed soundscape is part of the event. You cannot be present at the game



Photo © 1999 Florence Debeugny

without being subjected to that mood manipulation. I am just wondering whether music will soon be piped into the voter's booth, maybe an upbeat, slightly military tune: *get on with it, get the votes in*. Joking aside, soundscape manipulation is a pretty serious issue. In any case, who on earth has given anybody the right to manipulate the sound environment?

Now I want to come back to the definition of silence and introduce the notion of the commons because the soundscape essentially doesn't belong to anyone in particular. What we are hearing, I feel, is very much the privatization of the soundscape, in the same manner in which, in Britain, the enclosure laws destroyed the commons of old. There was a time when in fact there was in every community what was called "the commons," an area that belonged to everybody where sheep could graze, a place important to all, belonging to all. The notion of the commons is deeply embedded in our social mind as something that all share. There are many "commons" that we take for granted. Millennia have taken clean air and clean water as a norm. Because of the ephemeral nature of sound, silence was not considered part of the commons in the past. Today the technology to preserve and multiply sound and separate it from its source has resulted in our sudden awareness that silence, too, is a common good. Silence, that we need so that unprogrammed and unprogrammable things can take place, is taken out of common availability without much fuss and civic bother. It is being "privatized," if you allow that expression.

This is another illustration of an often-observed occurrence related to the impact of technology. Things considered normal or ordinary in the past become rare or extra-ordinary, while those things once considered rare and unusual become normal and routine because of the impact of modern technology. Flying is no longer a big deal, but a handmade dress or a home-cooked meal may well be special. We consider polluted water now essentially as normal and people who can afford it drink bottled water. It is hard to have bottled silence. But money still can buy distance from sound. Today, when there is civic anger, it is with respect to "noise" like airport noise, etc. It is not yet with respect to the manipulative elimination of silence from the soundscape.

And this is I think where we come in, having acknowledged and seen the deterioration of the commons as far as silence is concerned, having seen that the soundscape is not only polluted by noise, so that one has to look for laws related to noise abatement, but also that the soundscape has become increasingly polluted by the private use of sound in the manipulative dimension of setting and programming moods and conditions. There is a desperate need to be aware of this, and to be aware of it in terms of the collectivity rather than only in terms of individual needs. I feel very much that this is a time for civic anger. This is a time when one has to say: *town planning is constrained by bylaws on height, density, and this and that, what does town planning have to say about silence?* You may ask, what would I suggest? First of all, the insistence that as human beings in a society we have a right to silence. Just as we feel we have the right to walk down the street without being physically assaulted by people, preferably without being visually assaulted by ugly outdoor advertising, we also have the right not to be assaulted by sound, and in particular, not to be assaulted by sound that is there solely for the purpose of profit. Now is the time for civic rage, as well as civic education, but also the time for some action. Think of the amount of care that goes into the regulation of parking, so that our good, precious, and necessary cars have a place to be well and safe. That's very important to society. I have yet (beyond hospitals) to see a public

building that has a quiet room. Is not our sanity at least as important as the safety of our cars? I think one should begin to think: are there places, even in conferences like this, that are designed to have hassle-free, quiet spaces, where people can go? There were times when one could say to a kid: "Where did you go?"—"Out"—"What did you do?"—"Nothing"—that sort of blessed time is past. The kid is programmed. We are programmed. And we don't even ask for a quiet space anymore.

One possibility relatively close at hand is to set aside in those buildings over which we have some influence, as a normal matter of human rights, a quiet room. Further, I would highly recommend to start the inevitable committee meetings with just two minutes of silence, and to end them with a few minutes of silence, too. I sit on committees that have this practice; it not only can expedite the business before the committee, but it also contributes to a certain amount of peacefulness, and sanity. One can start a lecture with a few minutes of silence, and can close a lecture in silence. There can be a few minutes of silence before a shared meal. Such things help, even if they help only in a small way. I do think even small initiatives make silence "visible" as an ever-present part of life. I now invite you to have two minutes of silence before we go on into the question period. Let us be quiet together.

Questions from the Audience

Q: School libraries have become very noisy: aside from a general disrespect for knowledge, why do you think this has come about?

UF: I have always thought that libraries are and must be places in which there is quietness. The automation of the libraries is largely responsible for the current, increasing noise level. As long as you had a sizable number of librarians around, when you talked to them, asking: where do I find something? their voices would moderate your voice. But when you sit in front of some catalogue on a computer and it says: "error message 23," you will ask one of your chums: What's error message 23?, and she might call across the room: Jeanne, do you know what error message 23 is? And there goes the silence of the library. I think the absence of knowledgeable and caring people is frequently at the root of that sort of problem. The moment there is a substantial reduction in staff there is noise.

In other cultures there are openings for silence. Can you suggest an opening for silence in western culture?

I would possibly begin by correcting the word culture, that you used in terms of western culture, because the lack of opportunity for silence comes from our *non-culture*, our *not* caring for human beings. But we have to create that space beginning with small things, like a bit of silence before a meeting. I think I am developing a considerable suspicion of grand designs and plans. I think we are at a stage where in a sense we are taken over by the occupation force of the programme. And so it is the small things that one can do, the small things that are at a reasonably local level. But also our own awareness that we have rights; we are not just bags of potatoes. The change has to come first from seeing injustice as injustice. I think it is an unwarranted intrusion in my life to be programmed by people who have not asked my consent. Why should I be subject to that? Part of the obligation of government in terms of being the guardian of the commons is to not let citizens be assaulted. We have no problem to defend that on the street. Why do we have problems to defend not only the assault on our ear, but the assault on our mind?

What I appreciate most about the Quaker silence is that it is not just the silence, but the witness that comes out of the silence. There is that point when the silent person is called upon to witness but refuses to witness, when it seems to me that silence no longer has this good aura, but becomes recalcitrant silence.

Point very well taken. Silence then becomes quietism, and the importance of the unruffled self takes precedence over the need to witness, that is, to care about the state of silence, of her well being, and of the values that we hold. It is a distinct danger in which we have forgotten to remind each other that silence is an enabling environment, it is not a purpose in itself. It is what *happens* in the silence that makes the difference.

I'm a sound maker and it's my business to make noise. How do you feel the role of sound artists function in finding a balance between silence and sound in public places?

As long as you make or perform your sound on request, that, I think, is the contribution of any artist, any writer, any performer. It is the performance of sound without request that I find problematic. If my consent is that I come to your concert and other people's consent is that they are quiet because they want to hear your art then that is a contribution to the life of the community and there can be nothing better. But it requires, I think, the invitation, and it requires the consent.

How do we apply this call for civic anger against the creeping privatization of the soundscape which has no legal basis, when we have no legal footing?

I think that's where a good deal of thought has to go. I am not sure that we do not have a legal basis. If you look for instance at C. B. Macpherson's book on democratic theory, there is what I consider a very helpful definition of what is public property and what is private property, in which he says private property is the right to exclude others from the use and benefit of something, whereas public property means the right not to be excluded from the use and benefit of something. That I think you can find in law. Now the sound environment in an elevator we would like to be seen as a piece of public property rather than a piece of private property.

How can silence and sound co-exist?

It doesn't have to be in the same place. In the case of beaches I can well see that there is a quiet part of the beach just as there is a low end in the swimming pool. One can certainly respond to the different needs that people have, even that the same person has at different times, by setting aside a part of the park, a part of the beach, to be a quiet section. I don't think that one needs to put oneself in an either/or situation, but on the other hand one cannot be in a situation where certain needs are excluded because other needs are incompatible with them. We are fortunate enough that among ourselves we have enough imagination to think and negotiate ways of coexistence of different needs.

The world lived without elevators as well as without elevator music for quite some time. Where there is a bank of elevators, can you have one quiet elevator? In Toronto we have a very well known and good Jewish hospital and the elevators take into account that orthodox Jews cannot work on the Sabbath, and it is considered

that pushing elevator buttons is work, so there is one elevator that on the Sabbath stops at every floor going up and down. I think that is a very respectful solution for the presence of people who may be a minority, but who must not be disenfranchised. The elevator music is usually in the banks of elevators, in any case, not in the single ones. Negotiate one quiet elevator.

I know many people who are anxious about being quiet, who need sound and music. What would you say could be the essentials of teaching people the appreciation of silence?

I don't think you can do that. I think you can invite them to share silence with you. Quaker children are an example. We take our youngsters to meetings, and they sit there for half or three quarters of an hour. They are fidgety but they manage, they are quiet, and they get quite addicted to it. But the fear of silence, I think, has to be overcome by people themselves. I'm not a great believer in teaching except by the example of friendship, and I would suggest that you simply sit quietly with somebody. Sit with that person who you care about, sit with him or her quietly just with a cup in front of you, for five minutes, and again in a week's time for ten minutes. There's nothing to fear from quiet, and there is no need to fear silence and I have always experienced that people begin to be very grateful for silence and become quite dependent on it, but the only way in which I could see teaching is to be with somebody one cares about and say: *why don't we try it?* I have no other answer.

I was interested in your understanding of silence as leaving room for the unprogrammed and the unexpected, and was thinking about the role of technology in programming. Is it necessary that technology have that role?

I would think that apart from some isolated cocooned individual situations, technology requires conformity. You can be creative only within a set of quite closely defined parameters which includes the computer itself. I think we have to realize that as the world gets more and more structured by technology, the possibility of the unexpected is reduced. The nooks and the niches in which things can happen become more and more constrained. I don't deny in any way that there may be individual detours around that but we have to talk more about it to see whether this is not just a manipulation of an environment, like an umbrella, so that it doesn't rain on you, but it still rains.



Reprinted with permission from the author from "Proceedings, Volume One, The Tuning of the World," August 8-14, 1993, Banff, Canada.

Dr. Ursula Franklin is an internationally respected scientist who has spoken and written on many different topics, dealing with subjects ranging from the social impacts of science and technology, human rights, and women's issues, to Canada as a conserver society, each time emphasizing the integration of and the interrelations among disciplines. She is Professor Emeritus at Massey College, University of Toronto. Her Massey Lectures *The Real World of Technology*, were broadcast by CBC Radio in 1989, and have been published by General Publishing (House of Anansi).

Sound Excursion: P

by Hildegard Westerkamp

In 1994 the Goethe Institut Brasilia had invited me to conduct a soundscape workshop. This sound excursion was one of many activities during the final sound symposium that wrapped up four weeks of intense soundscape explorations of the city of Brasilia. The focus of this workshop had been the creation of soundscape compositions by a dozen or so participants in collaboration with Michael Fahres and Piet Hein van de Poel from NPS, the state radio of the Netherlands.

We decided to do a sound excursion by car rather than a soundwalk, because Brasilia was designed for the car, not for pedestrians. A one-hour long soundwalk would have given us very little acoustic variety, as it is hard to get away from traffic noise. Brasilia is a young city—not yet 40 years old—and was designed according to a master or pilot plan. The crossing of two paths along the basic north-south and east-west directions, initially just a cross drawn in the quiet earth, has grown into two huge traffic arteries with six lanes in all four directions. This contrast is I believe, the basic contrast today in the soundscape of Brasilia and surroundings: on the one hand, there is lots of traffic noise within Plano Piloto, on the other hand one does not have to drive very far to enter a very quiet, natural soundscape.

The part that looks like a bird or an airplane on the map, is the so-called Plano Piloto, pilot plan, designed by Lucio Costa. Oscar Niemeyer was the architect who designed most buildings and Burle Marx was the landscape architect.* The body of the “airplane” is made up of the Monumental Axis—*Eixo Monumental*—along which we find most government institutions, the cathedral, the hospital, commercial, hotel and bank sectors, the TV tower, the military sector and the overland bus and train station. The wings of the airplane, called *Asa Sul* and *Asa Norte*, are made up of the Residential Highway Axis which moves from North to South. This is where most people live in three to six story apartment buildings. Where the two axes meet is the *rodoviaria*, the central bus station. This, ironically,

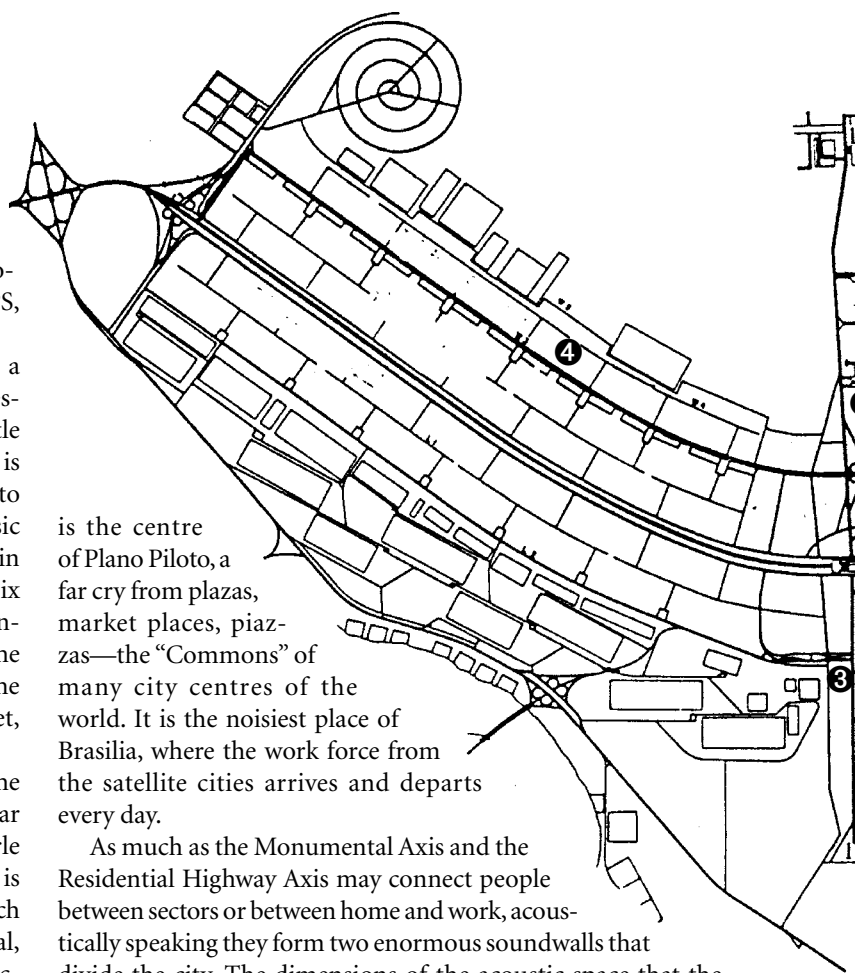
is the centre of Plano Piloto, a far cry from plazas, market places, piazzas—the “Commons” of many city centres of the world. It is the noisiest place of Brasilia, where the work force from the satellite cities arrives and departs every day.

As much as the Monumental Axis and the Residential Highway Axis may connect people between sectors or between home and work, acoustically speaking they form two enormous soundwalls that divide the city. The dimensions of the acoustic space that the traffic on these arteries occupy are much more extensive than their geographical dimensions. The traffic noise travels across the expansive green spaces into hotel rooms, offices, churches, even schools, and many of the living areas. The eyes can see far but the ear cannot hear beyond the acoustic immediacy of the car motor. The Monumental Axis may offer many photo opportunities, but recordings made in the same place will offer little variation from the incessant traffic noise.

Instructions to excursion participants

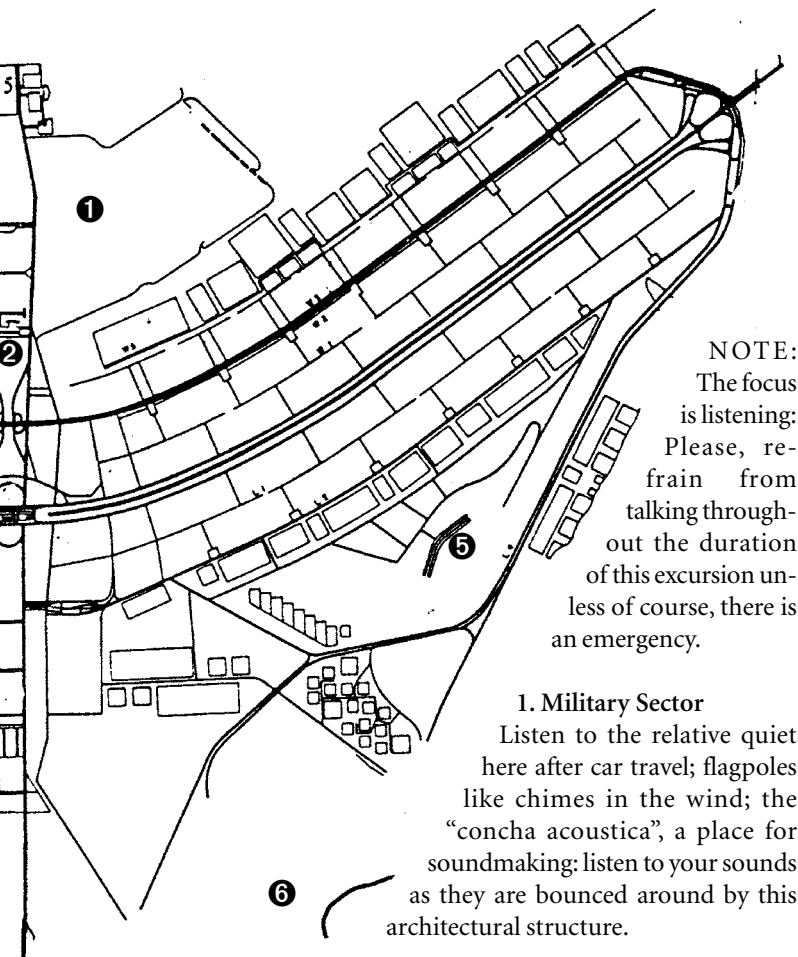
The map above shows six different listening points of interest. Some of these are places where workshop participants have made sound recordings for their compositions.

You will be given ear plugs for this excursion. Please, wear them every time you travel in the car and take them out as soon as we have arrived at a listening point of interest. You will hear a sound signal when it is time to return to the car.



Government Buildings along the Monumental Axis

Plano Pilato, Brasilia



1. Military Sector

Listen to the relative quiet here after car travel; flagpoles like chimes in the wind; the "concha acoustica", a place for soundmaking; listen to your sounds as they are bounced around by this architectural structure.

2. Market under television tower

This is a weekend market. Spend 20 minutes here. Let the sounds and your curious ear determine your route through the market. At the end let your ears be drawn to the fountain just east of the market to meet the group.

3. Cathedral

Here we will split into two groups for the exploration of the whisper gallery. In order to get the full acoustic effect to the whisper gallery, talking, whispering or some kind of soundmaking is required. The aim is to communicate with the other person on the opposite side of the cathedral. You may have to move around a bit to find the optimum spot. You can discuss secrets. No one else in the cathedral will be able to hear you. What other sounds do you hear? *[At this point in the sound excursion one of the workshop participants showed us a round ceremonial space in another part of the cathedral building. As soon as we entered it we spontaneously started to chant long tones.]*

I am convinced that it was the acoustic and visual design of this room that had generated this reaction. We stayed for at least 30 more minutes. No one minded this unplanned delay. Quite the opposite, it heightened our awareness of the soundscape and created new energy for the remainder of the excursion.]

4. Superquadra

This is one of the many designed residential areas in Plano Pilato. Take 20 minutes to explore its soundscape. If you don't want to walk, there are plenty of shady places to sit and listen. What sounds emanate from the apartment blocks? From the lawns, trees and bushes? Think back to your own home and compare soundscapes. Listen to the signal. Meeting place is at the small church.

5. University

Explore the sounds of architectural structures and sculptures.

6. Lake Shore

Spend 10 minutes listening. Bamboo in the wind. Water. Birds. People. The signal will announce the official end of the sound excursion.

**Brasilia now stretches beyond these boundaries into the so-called satellite cities, which have sprouted around its peripheries in the last 30 years as a direct result of the master plan. Generally speaking one can say that anyone or anything that does not fit into the masterplan concept is accommodated in these cities.*

Hildegard Westerkamp is a composer who lectures and writes on topics of listening, environmental sound, and acoustic ecology. She conducts soundscape workshops internationally.

Photos are used with the permission of Alfons Hug, former director of the Goethe Institut Brasilia.



Cathedral and Government Buildings

Silence in the Contemporary Soundscape

by Wreford Miller

The following article is the conclusion to Wreford Miller's thesis of the same title, which was submitted in partial fulfillment of the requirements for his masters degree in Communication at Simon Fraser University, Burnaby, B.C., Canada, in 1993. We encourage you to read the entire thesis, which is available in PDF format (280 KB) on the WFAE website at: <http://interact.uoregon.edu/MediaLit/FC/readings/Thesis.pdf>

Definitions of Silence

The concept, the word, silence, is itself a metaphor: "Of silence, paradoxically, one can only speak" (Tacussel, 16). Ultimately, a word like "silence" is underdetermined and ambiguous outside of a sentence. The sentence locates the meaning of the word. Silence, as a concept to be discussed, is only understandable as the turning point of a sentence, the specific relation of an expression to its fundament. This work has in part traced the way in which the word has become overdetermined with respect to discourse, and ideologically obscured with respect to the soundscape.

Silence as soundlessness doesn't exist, in any absolute sense, as far as we are able to ascertain. Silence as soundlessness relative to audibility and measurability does exist, however. That is, silence in a particular area or communicative portion of the soundscape can exist as soundlessness, which implies that we are not referring to our heart beating, etc., but reducing our hearing or measurement to specific tasks: silence is that which we cannot hear or measure in a situation. Similarly, silence exists as reference to the ambience of a soundscape, so that "quiet" and "silence" become nearly synonymous. With this movement of the concept away from the purely physical to the relational perspective of a listener, 'silence' refers to communication, or rather, non-communication, irrelevance, a non-message. This allows silence to be used to refer to metaphorical situations in discourse, where silence can be construed as an absence of input, reticence, tacit communication, and the like. The silence of omission, the unsaid, and silence as a gag are metaphors which extend from this. As a consequence of silence extending metaphorically to refer to a gap in communication, it becomes an ambiguous condition within discourse (the effects of which, however, may not be so ambiguous).

Uses and Abuses

Communicative silences are based in the sound/silence dynamic. The tendency of metaphorical silences in discourse to move the basis of silence away from sound to the more general dynamics of communication, posits silence as an opposite to communication, and comes as a contradiction to communicative silence in the soundscape. The concept is fraught with tension where these differences and contradictions are unclear.

Nothing makes the full implications of silence as a concept more unclear than logocentrism. The naturalization of print and writing technologies as an epistemological and even ontological model, which is implied by logocentrism, means that wherever we are inclined to invert the systemic relationship between discourse and the

soundscape (discourse occurs within the presence of the soundscape¹) we have obscured the real relations of interdependence, simultaneity and process in favour of linearity and static objects. It becomes difficult to understand how discourse could be differently organized, how truths could be punctuated differently, in favour of the ear, as in oral societies, and not the eye. Logocentrism and the visual bias, along with complementary modes of thought such as atomism and scientific reductionism, when naturalized and internalized as epistemology, alienate us from subject to subject relations with nature, and imbalance our perceptual abilities.² In this way silence is perceived as primarily a matter of discourse. Thus acoustic or ambient silence, as a predominant feature of most wild soundscapes, can signify the lack of discourse and activity which means the absence of humans, or, more accurately, of urban human life. Silence is threatening in common cultural associations of it with death and dissolution, and threatening to the profits of commercialized acoustic media and noise-producing industry. Acoustic silences have thus become too rare.

Silence in discourse becomes heavily ideological when it perpetuates domination, by suppressing the expression, identity, and culture of the oppressed, and by repressing awareness of the real relations of domination through omission. This has been well established. It is less well established how silence as a concept is ideological, but I assert that silence has been tactically redefined or deemphasized in the strategy of capitalist industrial and electronic expansion: as a romantic rural or wild quality of the soundscape to be opposed to the sounds of progress, to be contained and commodified as a condition of exchange value, or to be avoided as a non-state (for example). Thus I argue that the domination of the soundscape is inextricable from domination over the mode of production, and that this domination involves the conceptual marginalization of silence.

As a strategy of empowerment and insurrection, the skillful application of discursive and acoustic silences is also basic to any power struggle, and favours the marginalized. The skillful use of silence is also essential to any personal or collective development of ecological sensibilities, since silence facilitates careful listening. This is evident both in the effects of the loss of such abilities, such as in the numbing effects of "moozak," and in the positive experiences of naturalists or the ecologically sustaining cultures of First Peoples. Silence-positive cultural practice has the strength to build cohesiveness and flexibility in groups, and health and alertness in the individual. Such practices are also the source of cultural innovation, where they are used as the basis of existential inquiry or spiritual expression. The contemplative and the artist serve important roles in asserting the usefulness of silence in our communicative practice and theory.

Commentary and Reflections

When I was asked about my research, if I responded that it was about "silence," almost everyone assumed that I was studying discourse; if I responded that it was about "silence, power, and ecology" the reaction was one of puzzlement, confusion, or disinterest. The motivation

behind this research is to redress this conceptual gap in the formally and otherwise educated general awareness of the interlocked nature of the processes of perception, identity, power, and ecology. Most, if not all, of the fundamental issues of communication exist at a nexus of these processes. I feel that the best place to start integrating these complexities into soundscape studies, and communication studies in general, is with the basic context of communication—silence—in order to understand how we relate to our communicative environment. Theory is a preliminary way to explore such basic communicative concepts in complex formations.

Our understanding of discourse and power needs to incorporate the soundscape and non-discursive communication in order to inform political and philosophical agendas more holistically. I am not arguing for the priority of issues of the soundscape or silence itself over issues of social struggle such as poverty (although in some instances the latter may depend upon the former). Solutions to these problems of social justice, however, will likely include some kind of broad qualitative (thus revolutionary) change in cultural features such as the dominant mode of perception and the sense of how our relations exist within nature (a cosmology). Cosmological revolution is largely a process induced by the products of the labour of intellectuals. This is where theory has its political place: as a participation in the process of sociocultural change, as constraint and impulse to the processes of history. Gramsci argues that the labour of intellectuals places them within the roles of being “functionaries” of the dominant group, organizing consent in civil society and arranging the apparatus of state coercive power; likewise they play a key role in dissent and reorganizing or disrupting hegemony (304–311).

While the global ecological crisis is manifest in many catastrophic threats such as biodiversity collapse or the changing composition of the atmosphere, and manifest in many social injustices such as famine or toxic dumping, it is also clearly manifest in the soundscape. The origins of the crisis can be found not only in injustices such as disenfranchisement and resource exploitation but in our changing relationship with our environment as “nature,” and fundamentally in the massive desensitization to our ecological requirements. Silence is a key to our personal and cultural sensitivity, both acoustically and socially. If we lack sufficient silence, if we fail to appreciate or understand its ecological and communicative significance, we are likely to lose valuable ecological sensitivity and communicative skill. Communication and ecology theory is an important place to begin the process of integrating a fuller use of the concept of silence. Just as we have struggled in this century to develop an ecological sense of “the environment” in which all human activities are nested and thus dependent upon, it is necessary to understand how discourse is carried out within the soundscape, and to recognize that soundmaking occurs within silence.³

This thesis is political and insurgent in nature because it seeks to advocate a return to sensitivity via silence:

Noise—in the literal sense of a lo-fi soundscape—has become an accepted presence in urban society, something one puts up with. It is no longer recognized as a “weapon.” In fact, noisemaking is generally participated in, in an atmosphere of *mitmachen* as Adorno would call it. In many cases it is, in fact, the only “voice” people have and feel comfortable—even powerful—with: the noise of their machinery and gadgetry. But to participate in that voice means to silence human voices and to silence silence. Not to participate in it, *nicht mitmachen*,

but to listen actively *despite* the noise, to seek out silent soundscapes, and to use one’s own voice for soundmaking, seem to have become oppositional activities. (Westerkamp, 24)

Soundscape ecologists are specialists within the discipline of ecology, and like all specialties their subject of study is intricately bound up with and ultimately dependent on the larger systems of ecology in general. The general political nature of soundscape design is likewise unavoidable. I consider this research to have engendered an unavoidable polemic against the prevailing doctrines of late capitalism and reductionist science. It therefore participates in a broad range of critical discourses which seek to discredit and disassemble the various forms of domination which threaten and oppress us. However, I make no claims to complete and final arguments. As with any research, my own insensitivities, unsubtleties, and innocent or convenient omissions are constrained and defined by the limits of my own awareness. Some of these inevitable errors may themselves be ideological: that is, they may conceal or falsely resolve their own contradictions, depoliticize and dehistoricize the issue at hand, or disguise the interests and values of the argument, etc., and in so doing reproduce dominance.

Because of the paucity of research in this basic area of communication, and the need for an initial broad-based approach, this thesis contains plenty of disjuncture, fractures and gaps. The integration of multiple approaches which I have attempted is only partial and preliminary. But the overwhelming need to connect ecology, the ontological crisis of post-industrial culture, and social justice, must be answered. I have tried to do this through theory centered upon the soundscape, because our perceptual bias is central to our cosmology. I have also tried to avoid a casual syncretism by approaching the separate accounts of silence from within a communicational framework based on the organising principle of the soundscape, and the extension of the metaphors of silence from there.

Silence is the common denominator, the fundament to communication. If silence can be characterized as the ground we communicate on, the basis of listening, expressing, and experiencing, then it has been fractured and disrupted by the capitalist mode of production and all its underpinnings. Communication studies are on shaky ground without addressing this condition.

Wreford Miller named his first-born child Simone, because it means “one who listens intently.” He has been trying to apply theoretical respect for the soundscape in his own life, but his muffler needs repair and he moved to the rural Gulf Islands (British Columbia, Canada) only to find himself under the flight path. He is currently a writer, researcher, administrator, and producer of digital media.

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- Westerkamp, Hildegard. (1988) “Listening and Soundmaking: A Study in Music-as-Environment.” M.A. Thesis, Simon Fraser University.

Notes:

1. but not necessarily constrained by the soundscape—see Chapter One, “systems, constraints and orders of complexity.”
2. This is to be distinguished from the effects of print literacy alone, which are complex and varied and allow for the expansion of social interaction and “interiorization” (Ong, McLuhan, Ashcroft et al.).
3. It could even be said that soundscapes occur within a silencescape.

Living Out Loud

by Vicki Reed

This essay is the first installment in what we hope will be a series of longer contributions to Soundscape by students and younger people. It was originally written as a “Noise Pollution Essay” for Acoustic Dimensions of Communication, CMNS 259, offered through Distance Education, at Simon Fraser University, Burnaby, B.C., Canada.

The term *consumer culture* is thrown about with relative ease these days, but it is our appetite for deconstruction that is most voracious. We have developed a tendency to break the issues of our time—and our time is precious—into the simplest, handiest terms and phrases and ideas. Now, an argument that can fit in your pocket does travel well, but constant snacking on sound bites can leave us with a real mess on our hands, especially when, seeking clarity, we have carved away the nuances of an issue as a whole. Even worse, pockets full, we may forget that we have pulled the world into a puzzle of our own design, and that the cuts, made for the sake of convenience, are actually quite arbitrary. We then may assume that the world falls to pieces of its own accord, and find ourselves standing idly by, wondering at the rumble.

The rumble is getting louder. Sound pollution in the commons is growing, but such growth is not an event borne of nature, it is merely the culmination of the choices we have made. To find the place where we chose to make noise, we must look at the hidden decisions and assumptions that mark our ways of understanding and interacting with our environment. First, we should notice how we define our terms.

R. Murray Schafer has stated that *noise* has four main meanings: It is used to refer to “unwanted sound,” “unmusical sound,” “any loud sound,” or “disturbance in any signaling system.”¹ As Susan Frykberg notes, “unwanted sound” is the definition used “most commonly.”² However, as Schafer’s definition indicates, *noise* is also commonly associated with loudness, and *noise pollution* is generally used to refer to sounds that cause ill effects, both physiological and psychological, because of that aspect of their form.

One of the benefits of defining noise pollution as an effect of volume level is that volume level, or intensity, can be accurately measured, and acceptable levels can be clearly and numerically defined. Since “medical science has determined that sounds over 85 decibels, heard continuously over long periods of time, pose a serious threat to hearing,”³ communities can build their by-laws around the sturdy number “85.” Of course, words like ‘continuously,’ as used above, add a problematic touch of gray to numbers’ black and white, but still, volume is the quality of noise that appears most readily quantifiable.

Volume is also the aspect of sound which listeners are most able to perceive as being controllable by them: some radios and television sets have controls for adjusting sound qualities like bass and treble, but all have controls for adjusting volume. We tend to assume that if a sound is made, there must be some way to adjust its volume; the only trick is figuring out where the knob is or who has access to it. When a noise is irritating, then, our first response is to try to “turn it down.” We can “get a handle on” *volume*.

The ability to grasp an issue, to see a clear causal link, is important at many levels of any discussion about noise pollution and its effects. Few people truly attend to what they hear. They are not used to listening for all the components of their soundscape, and all the subtle characteristics of each of those components. And if they do consciously attend to their soundscape, few can translate their impressions into words that can convey the sounds they have experienced to another. Volume is the characteristic that presents numbers we can all understand (even *Spinal Tap*’s “... turn it up to eleven” is coherent).

“Unwanted,” “unmusical,” “loud,” “disturbance”—Schafer’s definitions of *noise* rest on notions that vary with the ears and minds of the beholders; clearly *noise pollution*, even if it is used solely to refer to issues of volume, will be a concept that incurs debate and conjecture, and legal challenge. Further, the “four main physiological effects of noise: hearing loss, stress, fatigue, and sleep disturbance,”⁴ are themselves diagnosed by evidence that is anecdotal: the last three are subjectively reported and unquantifiable; the first can result from a variety of interacting causes, including “occupational noise exposure, aging (or presbycusis), and social noise exposure (or sociocusis).”⁵ So, though noise pollution may be shown to be a factor which possibly contributes to a variety of ill effects, the subjectivities inherent in the argument, and the general lack of experience within the populace for ably conceptualizing and communicating sound qualities, make it difficult to convey the importance of the issue through a community’s by-laws, much less effectively enforce them. Schafer agrees:

I have frequently stated throughout this book that the real value of anti-noise legislation is not the degree of its efficiency—for, at least since the Deluge, it has never been efficient—but rather that it affords us comparative catalogues of sound phobias from different societies and different times.⁶

The ambient noise level of our cities “is continuing to rise, perhaps by as much as 0.5 dB per year.”⁷ Isolating and governing one aspect of the soundscape (i.e. volume) is inefficient and, finally, impossible. The aural world will not allow itself to be so neatly packaged.

Perhaps the only way to fully address the problem is to allow *noise pollution* to return to its place as a subset of *sound pollution*. Barry Truax has defined sound pollution as: “An imbalance in a soundscape caused by intruding or disrupting sound of any kind. Such an intrusion need not necessarily be excessively loud ... but rather it needs only to have characteristics which disturb the perceived balance of the soundscape.”⁸ Sound pollution, then, is admittedly and emphatically in the mind of the beholder.

One of the most interesting aspects of sound pollution is that the complainant is, in a not-too-broad sense, also the perpetrator: the community is annoying itself. We know that there are certain volume/duration thresholds at which measurable physical damage is done to the listener. Why are we steadily moving towards our threshold, rather than making a *concerted* effort to keep our overall

sound volume levels as low as possible? Why are we choosing to get louder?

I think there is, in this culture, a tendency to equate strength and power with loudness. The king of the jungle roars. And, when other forms of expression of power are discouraged, or outnumbered and drowned in the tumult of too many lions sounding at once, the dominant mode for expression of power becomes the only accepted, and hence the only effective, one. We could learn again to appreciate the subtleties of the sonic world; our aural decline is the result of disuse. But this would involve a move to a new emphasis in education and in focus, and ours is a society that likes to embrace the easiest answer, the simplest paradigm, the clearest outline.

This tendency to reduce meaning to its least nuanced form is found throughout our culture. Having been away from television for a while, I was struck by the way the medium is being used to transmit a message with a single tone broken into succinct sound bites; the dominant culture has the tonal pulse of a dump truck backing up. I was watching the coverage of the massacre at Columbine High School on the American television stations. Each clip was brief, speakers were forced to voice their opinions within a few seconds; if they dallyed they were cut-off, or the camera moved to another subject, or a commercial was run—each new element presented with the same level of emphasis, of importance, of volume; each allowed the same amount of airtime, status, and impact. The tragedy was as tightly packaged as the coffee it was used to sell, and it carried a strong jolt of the familiar. As Noam Chomsky has observed, the short sound bite al-



Image © Gabriel Guzman

lows only confirmation of the dominant theme; counter-arguments need factual support, and when there is not enough time for such support to be given, all counter-arguments, and all new arguments, are reduced to meaningless babble—short, staccato, mono-toned, monotonous. The dominant message, then, becomes the single, shallow, endlessly repeated tone of the culture.

If the dissenting voice is rendered silent, then the only way to be heard in the crowd is to be the loudest. Power is expressed not through being *different*, but through being *more*. The only direction then is up, more, faster, louder. And *more* becomes the emblem of strength and individuality, the means of personal achievement and identity. Many analysts of the Columbine tragedy commented on the assailants' "need to be heard," to "get attention and stand out." When words, opinions, and concepts are everywhere abstracted into a homogenous whole, the fight for identity becomes a matter of the survival of the loudest, and we are left not only with a culture of sonic and social one-up-man-ship, but also a populace that no longer realizes that it has a myriad of other options.

Schafer again: "I insisted that the only realistic way to approach the noise pollution problem was to study the total soundscape as a prelude to comprehensive acoustic design."⁹ Schafer highlights the

necessity of retaining a full "view" of the total soundscape when addressing the problem of noise pollution. Similarly, the complex issue of noise pollution cannot be reduced to an issue of volume. Volume, when replaced into a broader context, is revealed to be no less complex than noise pollution, than sound pollution, than the soundscape, than the community as a whole.

When the soundscape is reduced to the sum of its pieces, it is easy to lose sight of the complexity of the puzzle. What seem like natural abstractions of a whole into parts are really arbitrary splits—and the hand on the controls is indeed our own. When we can grasp this, we will be more able to make the adjustments we need. If we forget, our culture will bleat like a garbage truck. We are the dreamer, not the dreamed, and we can re-imagine our world in any way we choose.

Which is not to say that the volume issue is an aural red herring, or a waste of the efforts to quantify and regulate it. A commons that is "too noisy to hear oneself think" is not a place that will support the insights and ideas that contribute to a healthy community, and any means to "keep the ruckus down to a dull roar"¹⁰ should be used. But the best way to control noise pollution may be to utilize the

subjectivity inherent in the concept of sound pollution—address the choices and assumptions made when defining the problem, as well as the problem itself. We have ample evidence that sound pollution is a detriment to both community well-being and individual health, still, we are becoming louder. The facts and figures fade into the din, and our clamour to be heard rises insistently, insinuating itself into both our outer world and our way of

understanding it. If we can bring our knowledge of the facts together with a knowledge of ourselves, we may be able to speak in a voice we will hear. And choose to listen.

Vicki Reed has recently completed her studies in linguistics and cognitive science, rejoining the noisier world at large. She is working in film and continuing to explore her main interests—working with, and writing about, sound. She is currently fascinated by the role of sound in the sacred, and the innate sacredness of sound. Contact: vpreed@sfu.ca

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10. Mom.

Acoustic Ecologists and Environmental Psychologists: Working Toward a Quieter and Healthier Soundscape

by Arline L. Bronzaft, Ph.D.

The acoustic ecologist and the environmental psychologist have much in common; both are concerned with the role of sound in people's lives. However, due to different educational backgrounds and experiences, the acoustic ecologist focuses to a greater extent on listening as a way to know and understand the sounds in the environment; the environmental psychologist is more interested in learning how these sounds affect people, especially those that are labeled noise. Despite their differences, acoustic ecologists and environmental psychologists would agree that the sounds around us have grown more unpleasant. Both would also concur that the health and well-being of all people depend on eliminating the harsh and piercing sounds which are dominating our aural environment. Acoustic ecologists and environmental psychologists should join forces in educating people about the dangers of these sounds and the fact that—as a result of noise—so many natural, beautiful and useful sounds have been cast into the background of our perception. This collaboration could go far in fostering a healthier soundscape for all of us. To paraphrase R. Murray Schafer: If the acoustic environment is a musical composition, then it is up to us to create a beautiful one.

Environmental Psychologists Work In the Field

Before such a collaboration can be forged, it would be important for environmental psychologists and acoustic ecologists to learn more about each other's educational perspectives. For those readers of *Soundscape* who are already familiar with acoustic ecology, some information about the field of environmental psychology should prove worthwhile. Hopefully, an acoustic ecologist will be afforded a similar opportunity to write for an environmental psychology journal.

In order to examine the effects of a specific place on the individual, environmental psychologists frequently work in the field—e.g. playgrounds, housing projects, transportation centers, classrooms—rather than in the laboratory. They examine actual problems such as air pollution, overcrowding, noise, energy conservation. While committed to developing and testing out theories as they conduct their research, environmental psychologists are also interested in having their research findings applied to improve the human condition.

Environmental psychologists frequently work with researchers in other disciplines, such as urban design, architecture and geography. As a result their research findings are disseminated more widely and in addition they often are used by lawmakers and other administrative officials in the formulation of public policies. For example, research that demonstrated a relationship between increased vegetation and reduced crime in a Chicago public housing project led the Housing and Urban Development agency to promote “green public housing.”

Selecting Noise as a Research Issue

As an environmental psychologist living in New York City, I decided to focus my attention on a problem that has been identified by the Police Quality of Life Hotline as the number one complaint—NOISE. Congested highways, crowded high-rises, and a subway that thunders past the homes of hundreds of thousands of people make New York City a noisy place to live in. Can't we do something to lessen the noise of the subways, limit the numbers of cars on our roads, and pass zoning laws to stop the proliferation of high-rise buildings in overdeveloped communities?

Pondering the fact that the noise of New York City was harmful to its inhabitants, especially the children, I gave serious thought to conducting a study on the effects of elevated train noise on children's learning. The opportunity to carry out such a study was provided by a school principal. He believed that the students in his school who attended classrooms lying adjacent to elevated train tracks were being adversely affected by train noise. What made this school an ideal site for research was the presence of a group of classrooms on the other side of the building that did not face the tracks.

Comparing the reading scores for these two groups of children, one on the noisy side and the other on the quiet side, I discovered that by the sixth grade, the children on the noisy side were about one year behind in reading (Bronzaft and McCarthy, 1975).

Translating Research into Activism

Not content with merely publishing my findings in an academic journal, I asked the principal, the press and public officials, to assist me in convincing the Board of Education and the Transit Authority to do something about the noise. Much to our surprise the Board of Education installed acoustic ceilings in the noisiest classrooms and the Transit Authority selected the track near the school as the testing site for new rail seat fasteners that were supposed to lower the noise on tracks. When these two noise abatement procedures were in place, a visit to the school demonstrated that the noise in the classrooms facing the tracks was considerably lessened. More importantly, when the reading scores of the two groups of children—those in classrooms facing the tracks and those on the other side—were compared, both groups of children were reading at the same level (Bronzaft, 1981). Yes, something can be done about noise and when the noise is abated, children's reading scores are improved. This study was helpful in getting the Transit Authority to install rubber rail fasteners throughout the system, lessening the din for the other public and private schools near their tracks as well as for the many residents who live near the elevated structure. Furthermore, the findings of both studies were used by parents in demanding noise abatement materials for schools lying within the paths of overhead jets.

My experience that research can be used to improve the learning environment for children who attend schools near noisy sources transformed me into a noise activist. Since then I have continued to work toward lowering the din in New York City and elsewhere, while still doing research and writing articles.

The Noise/Health Link

Although more research is called for to solidify the noise/health link, studies strongly suggest that noise is indeed hazardous to health (Passchier-Vermeer and Passchier, 2000; Evans and Lepore, 1993; Fay, 1991). It has generally been accepted that loud noises may impair hearing. With respect to other physiological and psychological effects of noise, there are enough data to support the issuing of warnings by government agencies that noise could slow down children’s cognition, language and learning skills; that it could bring about cardiovascular ailments mediated by stress; that it disturbs sleep, and diminishes one’s quality of life.

Noise disturbs millions of people around the world and cannot be dismissed as an annoyance with which one has to learn to live. In a study on the effects of aircraft noise on individuals living near a major international airport (Bronzaft, et al. 1998), we learned that their “quality of life” is seriously impaired. These residents cannot sit in their back yards, open their windows, watch television, listen to the radio or converse with others in their homes without intrusive aircraft noises. They are not yet made ill by the noise but they are not enjoying a “healthy quality of life” either.

Government’s Responsibility in Noise Abatement

There is a United States agency charged with protecting workers’ hearing in industrial settings, but there is no official agency dedicated to alerting citizens to the dangers of community noises. Thirty years ago there was one. In the 1970s the government’s *Office of Noise Abatement and Control* distributed reading materials identifying noise as a health hazard and encouraged its abatement. There was an awareness that noise was a health pollutant. However, in 1982 then President Ronald Reagan closed this office. Without this overseeing federal agency to support noise education and abatement, city and state agencies lacked the support to continue their initiatives in this area. Benefitting from this change of policy were the noise-makers, especially the aircraft manufacturers, who no longer had a government agency looking over their shoulders. Thus, they could work at their own “slow pace” in quieting planes, engines, tools, and even children’s toys.

During the past twenty years, the United States has become even noisier and the federal government has largely ignored the issue, despite legislation passed in 1970 to protect its citizens from harmful effects of noise. Although some efforts have been made on the international level—especially through the *World Health Organization*—to identify the impacts of community noise, governments worldwide still pay too little attention to the issue. This is true at the federal level as well as the local level.

Citizen Coalitions Battling Noise Pollution

Recognizing that governments, for the most part, are failing them in reducing community noises and as a result are robbing them of a decent quality of life, citizens have formed coalitions such as *Sane Aviation for Everyone* in Queens, New York and *Noise Network* in London. These groups have become knowledgeable about many aspects of noise, such as measurements, health impacts, and existing legislation. They are assisted by organizations such as *The League for the Hard of Hearing* (New York City) and the *Noise Pollution Clearinghouse* (Montpelier, Vermont). Professionals from a variety of fields also have contributed their expertise to anti-noise groups, especially by providing testimony at hearings, or writing responses to environmental impact statements. The anti-noise groups, the professionals and the organizations cited above have been urging legislators to pass bills to curb noise. They recognize that activism is essential if we are to bring about a quieter, healthier soundscape.

Noise Drowns Out the Pleasant Sounds Around Us

The individual who is stressed out by overhead jets or the person who can’t enjoy her waterside home because of her neighbor’s noisy windmill, may join neighborhood coalitions, like those mentioned above, to quiet the din or they may work on their own to lessen the noise. Much of their energy is focused on *reducing the noise* that has intruded upon their lives. However, both these individuals, if they were given time to think about it, might also acknowledge that the noises have drowned out some very *pleasant sounds* in their environment. In Queens, New York, a mother living in a very lovely neighbor-hood comments that when the planes are not above she pays attention to the singing of the birds in her backyard. The woman who was bothered by the windmill spoke of how she missed listening to the waves breaking against the shore. Apparently, the horrendous sounds have made it difficult for them to tune in to the more subtle sounds that surround them.

Even I, who live in Manhattan, can enjoy birds singing early in the morning before the blaring traffic sounds and the construction crew’s tools invade my apartment. Once the jackhammers start, I no longer can enjoy the gentle rain falling on my windowsill nor can I play my stereo at a level that is soft and enjoyable. Hopefully, the jackhammers will stop when the repair job next door is completed and I can listen once more to music as I read, rest, or write. The best I can do about the traffic is to advocate for better public transportation and to offer testimony at public hearings that our community does not need additional tall buildings, which will only bring in more traffic to our neighborhood.

A Quiet Home Promotes Academic Success

My interest in sound also includes times of quiet or silence. In my book *Top of the Class* (1996) I queried over 2,000 high academic achievers—most over the age of fifty years and all members of the Phi Beta Kappa honor society—to learn how they fared professionally

Threshold of Hearing	0 dB(A)	Teacher's Voice (average)	65 - 70 dB
Normal Breathing	20 dB	Inside car	70 dB
Quiet Whisper (1 m)	30 dB	School computer rooms	73 - 79 dB
Classroom (recommended for effective learning*)	35 dB	Subway (inside)	94 dB
Quiet Home	40 dB	Diesel truck (10 m)	100 dB
Quiet Street	50 dB	Elevated train (30 m)	120 dB
Typical classroom	55 - 75 dB	Amplified Rock Music (2 m)	120 dB
Normal Conversation	60 dB	Jet plane (30 m)	130 dB

Decibel Table: dB(A) levels of some relevant sounds¹

and personally later on in life. Asked about their childhood homes through questionnaires and interviews, they reported that their parents respected quiet in their homes, providing them with quiet places in which to study, read and reflect. This undoubtedly contributed to their academic, professional and personal success. Discipline also was quieter; not with shouts and raised voices but generally done with stern looks and soft voices. Television sets and radios did not blast away in the background when the family was at the dinner table, allowing parents and children to converse and exchange information on the day's happenings.

Noise Pollution and the Soundscape

Although my work is still centered on noise, more recently, largely due to the friendships I have made with acoustic ecologists, I feel strongly that people must be taught to become more aware of the sounds in their environment. It is not enough to rid the environment of ear-shattering noises. One must also understand that sounds can contribute significantly to the enjoyment of life. I agree with Hildegard Westerkamp (2000, 4) that the "focus should not be limited to 'fighting noise' but on gaining knowledge and understanding of the soundscape as a whole, its meanings, its behavior, and all living beings' behavior within it." It is here that I believe acoustic ecologists and environmental psychologists can work well together. The ecologists are adept at attending and listening to the soundscape; the psychologists are skilled in assessing the impacts of sounds on people as well as measuring their interests in and attitudes towards different sounds. Working together they could provide greater knowledge of the soundscape and its effects on people, as well as the information helpful in fostering a more harmonious and healthier sound environment.

Noise pollution must be placed within the context of the larger sonic environment. Disturbing sounds would not only be seen as disruptions to ongoing activities but also as obstacles to our involvement with the wonderful soundworld around us. As R. Murray Schafer proposed in his book *The Tuning of the World* (1977), the study of sound should be a positive undertaking rather than the negative one now employed in the exclusive study of noise. Acoustic ecologists could engage environmental psychologists in exploring how sounds influence our attitudes, interests and behaviors. Such research, in placing the emphasis on the worthiness of studying sounds and their influence on human health and well-being, would by its very nature create greater demands to curtail those intrusive and disturbing sounds, precisely because they prevent us from using our ear and mind and perceiving the worthy sounds around us.

Kendall Wrightson (2000) bemoaned the fact that R. Murray Schafer's philosophy, that served as the underpinning of acoustic ecology, was unknown to the general public as well as acoustic environmentalists. The work of acoustic ecologists could gain greater recognition and respect in their collaboration with environmental psychologists who have traditionally interacted with a wide network of professionals from different fields. Gernot Böhme (2000) asked for the abandonment of the narrow approach which studies noise as a function of decibels rather than examining the "... type of acoustic character the spaces in which we live should have." By learning more about the area of environmental psychology, acoustic ecologists will discover that psychologists do not merely study noise as a "function of decibels" but rather as a way to advocate for an acoustic environment that will benefit humans. This might serve to encourage the ecologists to become activists.

Acoustic Ecologists as Activists

At the acoustic ecology conference in Stockholm in 1998, *From Awareness to Action*, a resolution called for the creation and enforcement of legislation to protect the acoustic environment and the public health. Such legislation, which undoubtedly would include efforts to ameliorate noise, can only come about by educating public officials and citizens about the dangers of noise. Through these efforts, the value of a healthy soundscape could also be promoted. Claude Schryer (1999, 14) referring to the above resolution and three others passed, asked: "Will these resolutions change the world?" My answer is I don't know, but of one thing I am certain. They can only make an impact if people other than the delegates to the Stockholm conference are aware of them. Since the resolution was passed in 1998, how many attendees to that conference have worked to enact the legislation to protect the acoustic environment? If the answer is "very few," then fostering a relationship with environmental psychologists, who have experience in working with citizen groups, policymakers, and the press would most assuredly aid acoustic ecologists in giving the Stockholm resolutions greater profile. Ultimately these resolutions may help to initiate legislation that will create a safer and more beautiful acoustic environment.

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1. Table data Sources: Truax, *Handbook for Acoustic Ecology* CD-ROM; League for the Hard of Hearing <<http://www.lhh.org/>>; and *Acoustical Society of America's Response to Federal Access Board's Request for Information on Classroom Acoustics <http://www.nonoise.org/quietnet/qc/other/letters.htm>

Sound Journals

Silence

by Anthony DeLorenzo*

Yellowknife, Northwest Territories, 2000

I am walking home from a friend's house at two o'clock in the morning on a clear, still Monday night, absorbed in my own thoughts. Pausing at the top of a hill, the silence registers in me.

Not one car can be seen or heard anywhere. Listening closely, I hear a slight, high-pitched ringing in my ears ... an acoasma?* Perhaps, although some of my readings on silence have described this as the sound of the nervous system. Nothing is moving, stirring, or sounding anywhere. I pause for a few minutes, savouring the moment, before I set off down the hill. The small rocks displaced as I scramble down the steep hillside sound like boulders as they crash down. For fun, as I walk beside the road, I tromp on the once-mushy snow that has re-frozen for the night. It crackles crisply and sharply under my shoes, a sound so loud I wonder if the entire neighbourhood will awake. Zippers, keys, and change all add a merry jingling accompaniment as I stomp mightily along the silent road. For a brief time, I am master of my own soundscape. Inevitably, a truck starts up nearby with a thunderous roar. It is an absurdly loud vehicle without any kind of muffler, and tonight it seems particularly deafening as the driver gnashes the gears and mashes the accelerator. The silence is shattered, and I feel chastened as I continue my walk home.

* Acoasma or Acousma: A nonverbal auditory hallucination, such as a ringing, buzzing or hissing—Truax, *Handbook for Acoustic Ecology*.

Just Sitting

by Gregg Wagstaff

Scotland, August 2000

How privileged I felt this evening just sitting in wonderment—listening and watching the world go by, witnessing the unfolding events: I was having dinner, around 8:30 pm, sitting in the garden of the farm cottage I rent.

The evening is warm, very little wind, and the sun is setting most spectacularly: orange, greys, golds, silvers and blues—changing every minute. The farmers are working late, harvesting the rape seed and barley whilst it is still dry. They drive around in a large, dusty and noisy combine. Earlier they cropped the rape right in front of the cottage. Now they are on a further barley field and I can hear the threshing and engine noise in the distance. The harvesting, the warmth and stillness of wind has caused insects to rise high into the sky. Swarms of swallows are chasing and feeding on the insects, diving and turning at heights up to 70 metres or so. The sky is sounding full of their pin-point calls. Small field mice flee the path of the combine and the garden becomes a small island of salvation. I see one run from hedge to hedge under my window and I hear at least two more from another hedge. A small bird of prey—a kestrel, I think in this half-light—drops into the stripped rape field, presumably preying on those mice which can't make it to the grassy verges, or into this garden. A bat leaves the eaves of my roof and heads for the woods. Then another two, through the sounding, setting sky.

"Be silent!"

by Jacqueline M. Massey*

Sister Anne and the other nuns would admonish us with these words. They would spit them out. Their voices would sound threatening. You could tell they meant business. There would be consequences.

What they really meant was: "Be obedient. Don't ask questions. Do and think as we tell you. Conform to our wishes. Be 'good children.' Be subservient."

Their attitude towards children reflected the prevalent one at the time and, unfortunately, one that is still upheld in many places today. Children were to be "seen but not heard." They were praised when they were quiet and submissive.

I could never accept this passive state. I refused to bend to the will of the nuns and so rejected their doctrine and teachings. I vowed never to be silenced by force or threat of force. I promised myself that my children would enjoy the same freedom. Today, we home-school and, like their mother before them, my children are not silent.

Stockholm Clamour, 1879

by August Strindberg

Far below him rose the clamour of the newly awakened town; down in the harbour the steam cranes whirled, the bars rattled in the iron weighing-machine, the lock-keepers' whistles shrilled, the steamers at the quayside steamed; the Kungsback omnibuses rattled over the cobblestones; hue and cry in the fish market, sails and flags fluttering on the water, screams of seagulls, bugle-calls from Skeppsholm, military commands from Södermalmstorg. Workmen in wooden shoes clattered down Glasbruksgatan, and all this gave impression of life and movement....

From: *The Red Room*, by August Strindberg, trans. Elizabeth Sprigge, J. M. Dent & Son, 1967 (Everyman Edition), p. 2.

Sweet Music

by Jacqueline M. Massey*

I hear it at night in my home when all is still. It is the sound of silence. I welcome it in and luxuriate in its tranquillity. I close my eyes and let it possess me. It arrives late at the end of another lively day. It sneaks in once the last child, fighting sleep, has finally succumbed. It fills the room and nudges me lightly, playfully. Its approach is accompanied by the rhythmic breathing of my slumbering daughters, the snoring of the cat, the creaking of the floorboards. It is not marred by these sounds. It remains pure and serene, a regenerative energy that I gladly savour.

* Student journal author. These entries were originally written in the context of an assignment for *Acoustic Dimensions of Communication*, CMNS 259, available through Distance Education, Simon Fraser University, Burnaby, B.C., Canada: <http://www.sfu.ca/cde/courses/cmns/cmns259.htm>

For more Sound Journals, please see page 33

Soundwalking Blue Montréal

A project proposal by Andra McCartney

A. Context and Significance

Soundwalk recording is an approach to the ethnography of place which focuses on listening as a way towards understanding the communications of a sounding environment. Soundwalk recordists are often associated with the interdiscipline of sound ecology, which brings together sonic research in acoustics, communication studies, sound recording and production, music, and audio art with an emphasis on the relationships between the sound environment (or “soundscape,” a term coined by composer and communications researcher R. Murray Schafer, 1977) and the sound producers inhabiting that environment (Truax 1984; Westerkamp 1988; Waterman 2000). This project, by juxtaposing sound recordings of the Lachine Canal (near my home, just outside of Montréal) over several years with other representations of this place garnered from text and imagery as well as other sonic sources, will draw out the varying ways in which perspectives on this particular environment are framed by different representations of it, in different media and from varying sources. The dissemination plans, including a website and local gallery installation, aim to play these sounds back to people who live and work in the area, inviting them to consider their own relations to the sounding environment, and to include their commentary and reflections on the project for others to hear and see. My dialogue with these commentaries and reflections will contribute to contemporary discourse on sound and place through conference presentations and scholarly publications.

The World Soundscape Project (WSP), which was established at Simon Fraser University in British Columbia in the early 1970s under the directorship of R. Murray Schafer, undertook ethnographic research projects to map the soundscapes of several communities, from an historical and contemporary survey of the Vancouver Soundscape (1974), to Five Village Soundscapes (fieldwork in 1975, published 1977b). The Vancouver project forms a precursor of my study in its focus on one community over time. My project is unique in its association with a particular federal and civic urban renewal program, the Montréal waterways project. This correlation will give me many opportunities to discuss different perspectives on the meanings of urban waterways, through the rhetoric and imagery used in various media reports on this project as it happens. Also, while the WSP aimed to gather archival recordings, in most cases using still microphones that minimized the sounding presence of the researcher, my approach will be based in soundwalks, reflecting my engagement with new approaches to ethnography that emphasize the relationship of the ethnographer to the subjects of her research (Denzin 1997).

B. Problematic

The Lachine Canal urban renewal project plans to re-invent a post-industrial landscape as a recreational parkland, a process that is happening in many urban areas in North America and Europe. My research focuses attention on this process, and uses sound as an index of how this work is taking place and what effects it has on the sur-

rounding community. Unlike visual representations of the place, sound recordings do not frame particular buildings or scenes, but indicate relationships among different sources such as auto and boating traffic, cyclists, construction machines and pedestrians. By tracing the movements of sounds through the area over several years, I will be able to create condensed sonic images that follow urban change and comment on it. By playing these sounds back to people who live and work in the area, I aim to bring their attention to what is happening through sound, and allow them to reflect on their relationships to the sounds of this place.

Theoretical Orientation and Objectives

My theoretical orientation to soundscape research combines a recording approach based on receptive dialogue and critical subjectivity, studio work with generative themes derived from the materials, and a consideration of the sociopolitical relations of the place of study.

Dialogic Subjectivity

My approach to soundscape research is based on a receptive dialogue and a commitment to critical subjectivity. I aim to gather recordings that reflect a variety of sonic activities in the chosen place, focusing on daily activities rather than on staged interviews. I do not set up a recording, but instead go to a place at a specific time, and allow the place to “speak” to me as I listen. In my research on Hildegard Westerkamp, who uses a similar approach to soundscape work, I noted that this kind of receptive dialogic approach is related to the research approaches of several women scientists, as described by epistemologist Lorraine Code (1991). For instance, Barbara McClintock, a geneticist, speaks of “letting the material tell you,” (quoted in Keller 1983: 179) and developing a “feeling for the organism” that shows a respect for her research subjects, and a focus on their particular situation rather than on a prescribed theory, that resonates with the way that I do research.

Critical Subjectivity

I do not attempt to efface my presence as recordist, but rather intend to include this as part of the dialogue. During my recording sessions, I move through a site with the microphone, allowing my attention to be drawn by sounds as they happen, and moving the microphone in response to these shifts. My movements, and thus my presence, remain obvious in the final mix. This approach has been called “realworld composing” by Katharine Norman (1994). Because my presence remains obvious, I become a mediator for the audience, a teller of tales.

Murmurs of Everyday Life

My approach focuses on the “murmurs of everyday life” (“les murmures de la vie quotidienne,” de Certeau 1984), which is predicated on an ethics of place. Like de Certeau, I aim to focus attention on the everyday activities of people, that are often overlooked or inaudible, but become more present through attention to them. At the same time, because of my respect for others’ privacy, passing conversations remain murmurs in my recordings. I do not seek to expose others, but to record their activities from a respectful distance.

Generative Themes

My approach to studio work with the sound materials is based on listening to the materials, and searching for “generative themes” (a term borrowed from Paulo Freire’s [1983] approach to listening in education which I apply in listening to sound recordings) that arise from the recordings more than from preconceived theories about the place of recording. I listen to the recordings repeatedly over a period of months or years, documenting points of sonic interest and how they reflect sociopolitical issues. I find Donna Haraway’s conception of “situated knowledges” (1991) useful in her focus on the agency of research subjects, and her suggestion that the production of knowledge be considered as a conversation between researcher and subjects. My subject of research is the area surrounding the Lachine Canal. My intention is to listen closely to what is happening in this area, and to continue a conversation with it, posting the results of this conversation online for inhabitants of that area to respond, and thus continue the dialogue.

Sociopolitical Relations

My strategy in this project of juxtaposing soundwalks that I have recorded with more public media accounts is an attempt to articulate the ways in which this place is less a reflection of a common history and more a shifting constellation of social, political and technological relations (Massey 1993; Allor 1998). Through the soundwalks, I intend to explore the ways in which the sonic resonances of these sociopolitical relations wash through the waterways region, reflecting, contesting and shaping the discourses surrounding this project. How does this area sound as the cradle of Canadian industry (partly in relation to how it might have sounded when it was new)? What resonances remain of the fur trade, and early relations of Europeans with aboriginal inhabitants? What are the sonic traces of its newer incarnation as bicycle path and pedestrian walkway? What flows can I hear from minute to minute and month to month? What are the dominant and recessive sounds in this area, and how do they reflect or contest media rhetoric about its social roles?

Andra McCartney is a soundscape artist who teaches Sound in Media for the Communication Studies department at Concordia University.

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Travelling the World Soundscape Project Upstream: From Cembra to Vancouver

by Noora Vikman

Editor’s Note: When Noora Vikman first came from Finland to Vancouver a few months ago, I was fascinated by how she—as visitor—wrote about her first sound impressions of the city in which I live. I also knew that she was involved in Acoustic Environments in Change (AEC)—Five Village Soundscapes Revisited and had come to do research here on the original Five European Village Soundscapes project of the World Soundscape Project. I asked her whether she would like to combine her personal impressions from both, the villages and Vancouver, with her ethnographic research. She took up the challenge despite the fact that she had to write in a foreign language. In addition she knew that the task to define the boundaries between personal impressions/observations and scientific methodologies in such a research project is rather complex. Through many conversations and e-mails we experimented with ideas and the result is the following text which rides the edge between the description of her research project and the writing of a sound journal. The writing style itself is meant to mirror the complexities in ethnographic research: the meeting between the researcher’s observing stance as outsider and her personal impressions while living inside the “field” to be studied, as well as the inevitable influence that her presence has on the people and their perceptions of the place in which they live and which is to be researched. HW

In the first issue of *Soundscape* you could read about the research project in which I am currently involved: *Acoustic Environments in Change* (AEC)—*Five Village Soundscapes Revisited* (p. 25). The title of this project is analogous to my own involvement with it and its historical connection to the *World Soundscape Project* (WSP), whose members undertook the first *Five European Villages* research in the mid-seventies.

In a letter home I described the field work as travelling upstream inside the forthcoming Spring season in Europe. The longer we travelled the more we seemed to move against the seasonal cycle: blooming fruit trees and cooing doves in each village (from Southern Sweden, to Southern Germany, to Northern Italy, Western France, Southern Scotland, to South-Western Finland). We experienced six villages, five Spring times, five new beginnings, during one Spring.

My role in the project is to build an ethnography of the sounds of Cembra. That is why I stayed in the North Italian mountain village of Cembra longer than the rest of the group: for a month last Spring, two months in Autumn 1999 and one week in Spring 1999. I concentrated on creating a sound image of the place by interviewing local people, recording the sounds, observing and listening, utilizing different methods that had been established for the project. (Details on methodological approaches can be found in the upcoming *Yearbook of Soundscape Studies*, Vol. 2, to be published in early 2001).

Within this context my aim is also to consider seriously the ecological aspects of the village, understanding its environment as a shared space, a Common—not a meaningless place one has to face on the way between people's different privacies, but one, where its inhabitants have a *relationship* to everything that they can touch, taste, see, smell and hear, to everything that creates connections between them and their environment.

Building an ethnography presumes that the people of a community share certain aspects of their lives. But the final definition of what this commonality is, does not emerge until after the analysis of the gathered materials. By collecting their stories I am interested in finding out how ecologically conscious people are, *how* they do and do not care about their place, how and why they adapt to changes in their sound environment. My specific interests are in the gap between what people *say* and how they *act*; how they define their ideals and know the reality; why their ideals are often not realized or fulfilled; and how these individual stories of adaptation tell something about the ways in which local environmental changes are reflected in the soundscape.

The AEC's aim: to involve the village people in our work, even create feelings of pride among them about their village. Although a much more complex approach to research, it does allow us to step out of the safe world of fascinating theoretical manifestos and avoid its pitfalls. With participatory research, both people's appreciation of their own place and researchers' assumptions as outsiders will be provoked. During our field work in the villages we also wrote sound diaries and sent incidental news from there to the rest of the world via the Internet (www.6villages.tpu.fi). In Cembra our efforts culminated in an evening at City Hall (Municipio), where all involved people were brought together. Recorded sounds, slides, serious discussions, boisterous comments from local residents, all came together under the main topic: the acoustic issues of the village.

This autumn I travelled more deeply into the roots of the village research and ended up in multicultural Vancouver. Here at Simon Fraser University, the WSP's historical archives are feeding my imagination and giving me a concrete sense of how my work and that of the AEC are part of a historical development in soundscape studies. The many forms, facts, ideas, and plans I find, give a concrete impression of how the initial group of researchers acted in the field and provided a basis for developing our own research.

Barry Truax shows me a book *City Noise* written in New York in 1930 and comments laughingly how people have been grappling with these issues for ages. At the same time I listen to Hildegard Westerkamp's stories about Vancouver in the seventies, when the WSP was active, when noise workshops were held and first courses in Soundscape Studies and Acoustic Communication were taught. Watching the shores of Vancouver today, I try to imagine how it looked and sounded 30 years ago. I was just a newborn baby at the highpoint of their activity, still an innocent listener. But now, parallel to my own village research here, I have decided to write my somewhat fragmented sound impressions of present-day Vancouver. How do they compare to those of the inhabitants, I wonder.

Vancouver, October 2000, 7:15 a.m. Whistles in a quiet residential area. Long—long—short—long. A train? A ship? Vancouverites might know what it means.* Once in a while distant, hazy alarm sirens. I am inside the Hill Street Blues! Big sounds telling us about small, sad and frightening stories somewhere out there.

Hill Street Blues. This is how I described my first impressions of Vancouver to my friends in Finland. Hill Street Blues, something

that we have in common—the famous TV-series that has run forever on Finnish TV and whose soundtrack everyone of my age remembers.

I have been in big cities before, but this is the first time of my life in North America. I am downtown, listening from the bottom of the urban giants, the shiny skyscrapers reaching up and up against the blue sky.

One evening I get stuck on the balcony of a downtown condominium building contemplating the contrast between standing among skyscrapers and seeing water everywhere. The huge jungle of lights is multiplied as reflections in the water, and the soundscape is huge. But compared to the speed of the cars above, on the bridge, and the brightness of these thousands of lights, the hum is so soft!

Sunday. A Holiday. Tourists swarming on the promenade of the brave new, shiny white building called Canada Place, hearing a huge pile driver ramming huge posts into the bottom of the harbour. Sign boards tell about Vancouver's acoustic history—about the 9 O'clock Gun, the Salvation Army Band, about how the pilots starting and ending their flights in the harbour are advised to avoid passing areas of the West Coast with fragile ecosystems. Have the authorities been reading *The Vancouver Soundscape*? Have they been listening to it?

Residential area. On Wednesday mornings the garbage trucks arrive early to pick up the bags left on the grass in front of the single family houses. I am told that even earlier, before the trucks, one can hear the shopping carts of the rubbish collectors rattling along the asphalt, hoping to find empty cans and bottles. But now, the strike of the city has silenced these activities.

The closeness of nature in Vancouver remains an expectation until I see a group of Canada geese near Queen Elizabeth Park stopping the traffic as they walk without hurry along the middle of the street. It is their time to start migrating south. Amazingly—I notice later—the sounds of these tiny black spots in the sky, of a wedge of geese “honking,” can be heard clearly from down here.

At the moment Cembra seems far away, behind language and electronic communication barriers. The people there cannot be involved at this moment but they are part of the soundscape history. I continue to look for connectedness to place—even now while writing about Cembra from my Vancouver basement room.

Hopefully, another connection will be made while here: Heikki Uimonen, also a member of the AEC project, and myself—two people from Finland—want to follow the tracks of a Finnish idealist community, Sointula, who settled on Malcolm Island, on the North West Coast of British Columbia, at the beginning of the 20th century.

* Signal when a train approaches a train crossing. Also, the rhythm of the first four notes of *O Canada*.

Noora Vikman completed her MA in ethnomusicology at the University of Tampere, Finland. Her current research, working towards a Ph.D., is connected to the *Acoustic Environments in Change* project (AEC), studying the changing soundscapes of six European villages and building an ethnography of sounds of one of the villages: Cembra in Northern Italy. During her current four months stay at Simon Fraser University in Vancouver she is studying the archives of the World Soundscape Project. She is a member of the Finnish Society for Acoustic Ecology (FSAE).



The Acoustic World of Early Modern England: Attending to the O-Factor

Bruce R. Smith
University of Chicago Press,
\$21.00 US

Reviewed by Douglas Kahn

There is a way to listen between lines, to hear the sonorous voice emanating from between the black teeth, as the blocky letters of print were called at the time of Rabelais. There is a way to let the gaze, that is the focus of scholarly attention, drift behind the limits of peripheral vision to hear the surround sounds that produce a more rounded picture. It requires a prodigious effort and a huge amount of material to tease a squeak out of the reticent rows of the library. It requires a combination of disciplinary rigour and, simultaneously, a willingness to go beyond the disciplinary fences that sounds, naturally, float over. But that is precisely what is occurring in recent studies of auditory culture.

One of the most exemplary is Bruce R. Smith's *The Acoustic World of Early Modern England*. An investigation of every little whisper and tremour made during the 16th century, this book is indispensable to anyone interested in Shakespeare and English culture, or indeed any aspect of auditory culture. It is no mistake that the very first word in Smith's acknowledgments is the nearly pre-guttural "Huh?" which was a sound he commonly heard when he described to others what he was researching. It was obviously too late for him to be swayed by this odd echo; he was too intent on understanding Shakespeare's world as it related to the sonorous realm of performance. Complemented by an established practise as an amateur musician and a love of performance, Smith's interest in Shakespeare began when he attended a performance of the Royal Shakespeare Company. Now one of America's foremost Shakespeare scholars his dissatisfaction, or rather boredom, with how certain theoretical approaches trapped Shakespeare on the page fueled his desire to *hear* history. Referring to a book by Walter Ong, the good Jesuit scholar of orality and straw dog for anyone arguing for a primacy of writing over voice, Smith writes, "Secure in their viewing tower, scholars writing under the imperative [of textual studies] may see this project as another futile exercise in logocentrism. If it is Presence that this book is after, it is not the Presence of the Word, but of sound. Of sound in the larynx, in the mouth, in the bones, tissues, and cavities of the skull. Of sound in the ear and in the gut."

This is one of the big problems for anyone writing about sound and aurality. Because some of the more powerful and widely adopted

cultural theories are of little utility, one has to look elsewhere. Smith works up an approach he describes as an "historical phenomenology" with its main auditive components found in the ideas of speech communities (Dell Hymes), soundscape studies (Barry Truax and R. Murray Schafer), and acoustemology (Steven Feld), the latter being a geography where, in Feld's words, "as place is sensed, senses are placed; as places make sense, senses make place." The result is sound that is embodied, located, is uttered and heard by people in specific social, cultural situations and natural settings. He emphasises "the materialism of the human body, of sound waves, of plaster, lath, and thatch, of quill pens, ink, and paper, of lead type," as a hedge against metaphysics, which is commendable because the immateriality of sound has among some writers prompted a connoisseurship of the ephemeral, where a delectation of sonic vapours is mistaken for the labours of understanding. No labour shortage here; Smith has concentrated a huge, innovative effort into creating a new historiographic mode of listening.

Lath and plaster come together with sound waves and human bodies in the letter, shape and figure of O, the subtitle of the book being *Attending to the O-Factor*. The O opens the topic of sound and organizes a circumscribed acoustic world of Shakespeare's time. It shapes the wind through the windpipe, forms the emphatic beginning of so many speeches, O the call of the town crier, a clandestine code for thieves, the loudest phoneme in speech, and is a sound easily sustained by the breath, held and held up to be examined. It is also the shape of The Globe and other theatres of the time which, as Daniel Barbaro the 16th-century editor of the Roman Vitruvius' texts on architecture said, should resemble the shape of sound itself, that shape being a sphere. Smith takes recourse to architectural acoustics and the physiology of speech, across a range of historical sources from ancient to modern, to understand how performances might have been heard. For instance, the physical acoustics of the materials and design of The Globe, together with the physiological differences among boys, men and women, produce an acoustically gendered space: "speech sounds gendered male would pervade the wooden O, filling it from side to side; speech sounds gendered as female would be heard as isolated effects within this male matrix." One of the benefits of Smith's book is to introduce us to the thinking about acoustics and architectural acoustics during the period and to do so with political insight.

But for pure entertainment value listen to the chapter "Soundscapes of Early Modern England," a wonderful trek through the natural and social sounds of the city, country and court. Thomas Dekker describes the streets of Westminster, "Yea, in the open streetes is such walking, such talking, such running, such riding, such clapping to of windowes, such rapping at Chamber doores, such crying out for drink, such buying vp of meate, and such calling vpon Shottes, that at euery such time, I verily beleuee I dwell in a Towne of Warre." Horatio Busino's travel log records the sound of etiquette as London diners keep tabs of their hiccups as though to rationalize the high price of their wine and "discharge them in your neighbour's face, provided they be redolent of wine or of choice tobacco." In London we hear the frantic kennels in the background as another pair of dogs are set upon one another in an animal-baiting arena,

while in the country it is recommended in song you “ring out your kettle of purest metal to settle, to settle the swarm of bees.” Instilling fear in the hearts (and other organs) of pigs and sheep is the melodious “Da poop! Da poop!” of the gelder coming down the road advertising his services. Far from the raucous streets, loose straw dampened the footsteps of the queen, tapestries muted the chiming clocks. The last reminds me that straw was historically the acoustic insulation of choice; Thackeray’s *Vanity Fair* reports how it was strewn on the street to muffle horse hooves and carriage wheels, although the Dadaist Tristan Tzara did recommend in a more modern mood that “everything which might make a sharp sound should be covered with a thin layer of rubber.”

Smith relies heavily on the testimony of foreign visitors to ferret out characteristic sounds of a particular environment—strangers in diaristic mode will always make note of what residents take for granted. The last chapter of the book follows the English as they venture into the strange speeches and customs of Wales, across to Ireland, and much further afield to encounters with Native Americans and Africans, including an account of how the English sounded to others. Here, Smith steers his findings to an examination of the “acoustic difference” in *The Merchant of Venice*, *Othello*, and *The Tempest*, and ends up four centuries later, at a session of the Shakespeare Association of America in 1994 where he encounters the practice of what he calls free listening. Held in Albuquerque, Native American storytellers from the area shared their stories with the academics. Explaining why tape recorders were not allowed to be used during the session one of the speakers said, “What has happened here has happened among us. We have heard one another’s voices. Because you yourself were here, you can tell someone else about what has happened, but a tape recording would not give that person the kind of knowledge that only you can convey.” For Smith free listening (an idea which he liberates from Barthes and psychoanalysis) ecologically senses its place. It is a type of listening that needs to be developed in a cacophonous world where media and transportation have made so many more people foreign visitors to ever shifting places. Against the idea that the world has been turned into one big radio with everyone sporting an aerial, Smith argues for an ecological viability based on an ability “to look, to listen, and to know the difference.”

The important part is that the author senses an imperative to comprehend the auditory culture of an earlier time as a way to understand the present day. By leapfrogging historical epochs he brings attention to a stubborn problem posed in studying auditory culture: how to understand the profound auditory shift taking place in the late-19th and early-20th centuries? This too is an historical exercise but of an auditory epoch we happen to still occupy, one characterized most overtly by the noisy machines and motors of the internal combustion engine and electricity, ever increasing their preponderance to the point where there isn’t enough straw or political will to go around. The most unique development in modernism, however, is the onslaught of auditive communications technologies beginning in the 1870s which in the 20th-century was amplified to the intimate din we know today. How the media modify an entire auditory cultures requires powerful analytical gear, in part provided by exactly this kind of historical account.

Douglas Kahn is Associate Professor of Media Arts at University of Technology, Sydney; author of *Noise, Water, Meat: A History of Sound in the Arts* (MIT Press, 1999) and coeditor of *Wireless Imagination: Sound, Radio and the Avant-garde* (MIT Press, 1992/2001).

Guy S. Métraux

1918-2000

It must have been in 1972 that I first came into contact with the Swiss ethnologist and historian Guy Métraux. At that time he was editor of the UNESCO journal *Cahiers de l'Histoire mondiale* (subsequently retitled *Cultures*). It was for him that I wrote an article entitled “The Music of the Environment,” the first formulation of what was to become *The Tuning of the World*, and it was the beginning of a very pleasant and fruitful exchange of ideas and information.

When I sent Guy the just-completed Vancouver Soundscape he wrote back enthusiastically that for the first time in his life he had made the acquaintance of a city from sounds rather than maps and images and found the experience exhilarating.

When we were gathering information on the incidence of car horns in the major cities of the world and I reported that the hourly rate of horns in Paris averaged 460, he wrote back in much indignation that we must be mistaken: there were no car horns in Paris since they were prohibited.

Frequently he sent sound quotes from French authors several of which were used in *The Tuning of the World*; and I remember especially a description of the wind from Victor Hugo’s *Les Travailleurs de la mer* that he read out loud to me in Paris and I later used as a text for *Once on a Windy Night*.

After his retirement from UNESCO he returned to Switzerland where he wrote the definitive story of the *Ranz des vaches*¹ (the famous Swiss alphorns). Our last encounter was at a soundscape meeting convened by Justin Winkler. His wife had passed away shortly before. He was in grief, but was as dignified in appearance and manner as he had always been and was delighted to see the foundation of a soundscape group in his native Switzerland. He was really the first person in Europe to champion soundscape research. Guy S. Métraux died in Lutry in February, 2000.

R. Murray Schafer

1. *La ranz des vaches*, Editions 24 Heures, 1984.

In the attitude of silence the soul finds the path in a clearer light, and what is elusive and deceptive resolves itself into crystal clearness. Our life is a long and arduous quest after Truth.
Mahatma Gandhi

Noisy Neighbours

by Duncan Marshall, Scotland



Holidays in Menorca, Spain, July 2000

Because it was so warm all windows were open all the time, which meant that sounds from inside and outside mingled much more freely than at home in Scotland.

For the first week of our stay we were woken at around 7am each morning by the sound of the Spanish man next door starting his car, a noisy decaying Peugeot 205. It generally started on the third or fourth attempt after much choking, clattering and revving of the engine.

After our initial *how-dare-he* annoyance, this daily ritual became our wake-up call and worked better than any rooster or alarm clock. However, the car seemed to become less and less enthusiastic about getting going each morning and the three or four attempts needed to start it became more and more protracted. Eventually, by the end of the week it refused to start. On the Saturday, the three or four attempts became six or seven, each longer than the one before, the car's starter motor growing more moribund and the unhappy owner more agitated. We huddled in our beds, biting the sheets and giggling convulsively as the spluttering and gasping of the motor gave way to a torrent of profanities accompanied by the sounds of violence being inflicted on the car's bodywork. The sound of a lively domestic dispute followed after which both, man and car, mysteriously disappeared, never to be heard from again.

A memory: while I was at university I lived in a house next door to two men who ran a vacuum cleaner repair business from their garage. One sunny Saturday morning they hauled their TV out into the driveway and placed it on a chair to watch while they were working. I was lying in bed above them with the window open, and the TV was turned up loud. I found myself listening to a Tom and Jerry cartoon reverberating up and down the narrow gap that separated the two houses and realised I was laughing out loud at the cartoon without being able to see it—the familiar aural cues from its demented soundscape were enough.

Fortingall Moment

by Andra McCartney

Visiting Fortingall, Perthshire, Scotland. August 3, 2000.

I weep with relief to hear the birds, now that I have arrived in Perthshire.

My aunt Sheila's apartment in Fleetwood where I visited last week, was close to the tram tracks. There I became fascinated by the different sound signatures of single-deckers, double-deckers and open tourist trams. And I was distressed by the sound of too many seagulls, too far from shore. Aunt Sheila says they have been moving further inland looking for food in the last few years, since the fishery declined. I didn't hear a single other kind of bird for the first three days of listening, and only a few sparrows and starlings on the last day, their voices constantly dominated by the gulls.

In Lancaster, as well, there had been fewer sparrows, finches and swallows than I had expected around the grassy and wooded margins of the large University campus. A week later, a newspaper article confirmed what I had heard. Birds in rural areas have declined in England by 60% to 80% in the last thirty years, because of the emphasis on monoculture, with large areas of land devoted to one crop. According to the article, the government is planning to subsidize

farmers' return to mixed farming techniques to attempt to improve bird habitats and populations.

Here I sit, finally, in Perthshire, Scotland. The "planting dukes" of Atholl planted 27 million trees, mainly larches, here in the nineteenth century, and I can hear robins, sparrows, swallows and many other birds that I don't recognize. I am sitting in a stone-walled enclosure surrounding an ancient tree, the Fortingall yew, which is said to be the oldest piece of vegetation in Europe and has inhabited this valley since long before Pontius Pilate was supposedly born here. My batteries run out. I can't record any more, except with my pen.

A horse and rider move by. In the distance I hear the voices of grazing cattle and sheep echoing off the hills. Sounds are very clearly delineated in this small village, surrounded by steep hills. I remember how odd the sheep looked in a field near Lancaster, when I could not hear their sounds. Were they silent, or masked by the omnipresent M6? Were they silent *because* they were masked?

We walk out into a farmer's field towards three groups of three ancient standing stones, arranged in a triangle. Did the Picts (Ancient people in Northern Britain) who moved these stones to this location, listen to the echoes in the deep bowl of this valley? Did they also sit under that yew? I can feel a gathering here. The parking lot has been filling up. Three more cars arrive, attracted by stories of the ancient yew. Another car door slams.

My companion walks out through a barley field to the cairn where victims of the Black Death are buried. This is where the plague stopped, says the stone marker. Two more cars arrive.

The healing bell of the Picts stands mute, behind bars by the altar of the church. A car arrives, turns and drives away again. The parking lot is full. We climb slowly up the hill, listening.

Frozen Darkness

by Jacqueline M. Massey*

Fort Macleod, Alberta, Canada

I remember the thermometer outside my mom's window reading minus 38 degrees. This was back when we still measured cold in Fahrenheit.

I'd pull on my scratchy underwear, heavy leotards, my thick black wool skirt, a bulky, hand-knitted pullover and my parka. I'd fling my skates over my shoulder and slide out the back door, closing the door silently behind me. I'd gulp in the frozen sharp air and set out on the quarter mile walk to the ice rink. It would still be dark. The streetlights remained on. There was no traffic, nothing stirred. Even the milkman hadn't begun his rounds.

The door of the rink was never locked. I opened it and entered the dark empty cavern. I'd stamp the snow off my boots on the concrete floor. The sound ricocheted around the building.

I deftly laced up my skates and pushed through the swinging doors that lead to the ice. The ice was clean and smooth, shiny and pale blue, ready for the first slice of my skates. I began my figure eights, slowly and methodically. Around and around I skated, tracing the one, first figure I had patterned. My skates glided over the ice silently, my breath rose as my body temperature increased. Even the clock up high in the scoreboard made no sound. It only blinked at me reminding me that my precious time alone would soon be over.

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Sonic Geography—Real and Imaginary Sound Escape—International Confer- ence on Acoustic Ecology Trent University, Peterborough, June 28 – July 2, 2000

by Hans Ulrich Werner

(Sound)Streams

Flowing water images on a large videoscreen draw the viewer into its motions and release our breath. A dancer emerges from the dark stage, her movements extremely slow in the style of the traditional Japanese dance—*nihon buyo*. Interactive sensors and senders throw digital shadows from her hands to the musician behind computer screens and algorithms. Un-accelerated, ancient gestures, learnt through a life time of training, meet newest sound technology. The sound patterns of composer Curtis Bahn come into existence through the motions of dancer and music ethnologist Tommie Hahn. This is improvisation based on years of cooperation and understanding of each others disciplines: music played through the body, a crossroads in virtual space, in image, sound, and algorithm, in motion and stillness.

Hahn's and Bahn's audiovisual choreography was a remarkable part of an eclectic concert evening for soundscapers from 14 countries and their Canadian friends. Michael Cumberland greeted the arriving audience from the roof top of Peterborough's Market Hall with his alphorn sounds. Barry Truax, with his eight-channel composition *Pendlerdrom* (Commuter Dream), transformed the routine of daily train travel into a sonic journey between dream and reality. Matt Rogalsky re-constructed electronic works of David Tudor, we heard Neon-Noise-Sound,

the adventurous "audiovisions" of Michael Waterman, and subtle chamber music by Gayle Young and friends.

This evening was a rare occasion of collective listening and ear cleaning in an otherwise word and text dominated symposium. Trent University's architecture has the charm of a production plant for academic knowledge and forms a strong counterpoint to the natural setting of the adjacent Otonabee river. This contrast would have been an ideal starting point for interesting soundwalks, which are like epicentres of conscious listening within the soundscape movement, and invariably enhance the dialogue between ear, soundscape, and place. Instead, the conference structure was conventional and conservative and lacked the experiential side of soundscape work. It did, however, offer a wide variety of soundscape related topics and encouraged much discussion.

An intense and engaging atmosphere was created by the main conference organizer, professor Ellen Waterman and her team, by connecting cultural studies and the interdisciplinary tradition of this university with the still relatively new field of acoustic ecology. R. Murray Schafer, the pioneer of soundscape ideas, composer, author and visual artist, lives on a farm nearby—a modern Thoreau, without television and telephone, a strong and single "Gestalt" in an expansive landscape, deeply involved in his music and texts. The ideas and thoughts of Schafer's *World Soundscape Project*, a research group in Vancouver in the early '70s, have spread and grown into today's open and nuanced network of the *World Forum for Acoustic Ecology* with members in many parts of the world. Previous important conferences, such as in Banff (1993) or in Stockholm (1998) have contributed greatly to strengthen this in-

ternational network of acoustic ecologists.

Schafer's early soundscape work has always been about the relationship between ear, human being, sound environment and society. But despite many years of writing and research, acoustic ecology has not yet established itself as a stable discipline. The strength of

soundscape studies, in my opinion, lies in its interdisciplinary positioning between art and science, perception and culture. My emphasis is on the word *between* here, or as Potsdam musicologist Günter Olias emphasized: the soundscape concept in the digital age is about the *affinitive* rather than the *definitive* energy of listening.

Sonic Geography

The central theme of the conference—*Sound Escape: Sonic Geography Remembered and Imagined*—resulted in a wide spectrum of perspectives. The range unfolded from self-built instruments to spatial composition, from "awareness and action" to "sound and sign," from the personal sonic Home-Page (Andra McCartney) to schizophonic composition. Cameron Harbidge from Calgary revisited Schafer's critical neologism from the '70s and developed fresh combinations of Calgary's soundscapes and images. His juxtapositions demonstrated both the "erosion" of urban soundscapes and the audience's ability to create new meanings. It also showed one way of redefining soundscape ecology. Another way, encountered at the conference, is that of a careful evolution, where Schafer's texts serve as a sonic *bordun* bass, a conceptual base, onto which new ideas are built. The third way is a "completely different set of values," as Latin researcher Brigido Galvan expressed. E-mail discussions after the conference revealed a need for the latter, and Sabine Breitsameter from Germany spoke at Trent of "extremely critical substreams within the conference" which need to be integrated more directly with what is already considered "mainstream" in a not yet fully established discipline of acoustic ecology.

Ellen Waterman's open concept inspired a wide spectrum of ideas and discussions to co-exist in Trent, spanning from soundscape composition as historic and cultural substance (Darren Copeland for Toronto and Lidia Zielenska for Poland) to a digital view on the internet music business and global culture of sound (Barry Truax). Henrik Karlsson who organized another International Conference on Acoustic Ecology, in Stockholm in 1998, stressed the ear's ecology, where a clear, healthy soundscape is as much a common human right as clean water and air.

Escape from Noise

From the beginning, soundscape thinking—taking the approach of listening to the sound



Helmi Järvioluoma

Sound Escape, final plenary session. Left to right: Carlos Augusto, Gayle Young, Gabriele Proy, Keiko Torigoe, Henrik Karlsson, Justin Winkler (turned away).

environment as if it was a large musical composition—was subversive and critical. Schafer's poetic-systematic text *The Tuning of the World* (1977) has become a classic reference book for anyone interested in soundscape work, emphasizing the strong need for the training of our hearing sense and for improving a noise-ridden soundscape. Sound education is the key. Conscious acoustic design of daily life is its logical extension.

Some of these ideas became apparent in a Public Forum on Noise and Health, a meeting of soundscape experts and the people of Peterborough, chaired by R. Murray Schafer. It happened in the tradition of the political, ecological activism that was always part of the *World Soundscape Project's* work. Other members of the panel were Peterborough's police constable Dan Smith, who takes care of noise complaints in the community; Sangeev Sukumaran, a local audiologist; the courageous noise-psychologist Dr. Arlene Bronzaft from New York, who—thinking of the youngest listeners that are our future—has done important research on noise in schools; and Professor John Marsh who conducted a classical soundscape analysis of Peterborough itself and pointed to problems such as the noise from the race track that invades people's quiet weekends.

It was easy to understand that sound which is part of a lifestyle for some people and therefore acceptable, can be noise to others. Moving beyond lifestyle differences into deeper, culturally influenced attitudes, Brígido Galvan, a researcher of "Racial Soundscapes," pointed out the different sets of values towards noise and sound in different cultures. The discussion, however, was steered away from considering cultural differences as an important issue during this forum, much to the indignation of an Indo-Canadian woman who left the room offended, hoping that "other people of colour would follow." She was the only one who took the Sound Escape title of the conference seriously and acted as a Sound Refugee. This little episode could be brushed off as an amusing interlude, but it really indicates the gap that existed between panel members and some members of the listening public and that the opportunity offered to go beyond the usual discussions about noise was not taken up.

Hildegard Westerkamp, the important German-Canadian soundscape composer and sound educator, points out that it is precisely in conflict situations of life that listening is important: differences in understanding and perception need to be heard and integrated into an atmosphere of tolerance for new insights and differing views, differing lives. Her

own compositions are a good example of this. Since the 70s she has created pieces that attempt to balance between musical/sonic content and ecological/social messages. In Trent her short sound recording of a camel ride in India became the basis for a simultaneously elegant and critical argument connecting local sound culture with global economic structures.

Author of *Acoustic Communication* and reputed computer composer Barry Truax connects his enthusiasm for digital processing of environmental sound to his interest in transmitting environmental information and exploring the relationship between listening and society. He produces pieces that oscillate between reality and virtuality. Soundscape composition for him is not only a rehearsal for future acoustic design, but is also a recurring opportunity to speak for a balanced interaction between listener and environment, which is a never-completed spiral for sound education and "EarCare." Composer, cellist and deep-listening-educator Anne Bourne spoke in her own poetic voice about listening from moment to moment, about sensing the breath and the aura of ones' co-listeners in the collective space. Her workshop was the other rare opportunity during the conference where the inner experience of listening, not thought and word, had priority.

Acoustic Environment in Change

Helmi Järviuoma from Finland introduced a European Soundscape Project that replicates, continues and transcends the *World Soundscape Project's* early research project of 5 European villages (in Sweden, Germany, Italy, France and Scotland). The groups—then and now—counted traffic and other sounds, wrote sound diaries, conducted interviews, recorded soundwalks and sound memories. Helmi's comparisons illustrated how population

growth and modernization changed the acoustic character of these communities. She emphasized the emergence of new nuances of soundscape ideas among inhabitants and researchers alike. Both are part of a common sonic geography and the researchers as listeners-with-big-microphones influence human interaction, village life and the soundscape itself. In Cembra (Italy) time designer and composer Albert Mayr was Schafer's guide in the '70s and now functioned as consultant in this new, more elaborate research project. The tour of 1975 was approached with curiosity and openness by the travelling research-artists of the *World Soundscape Project*. The study of 2000 replicated aspects of the earlier one, added a sixth village from Finland, attempted a more systematic approach to soundscape research and analysis and enhanced the dialogue between individual and collective listening within the village context. All this with a vision for future action and acoustic design.

In my opinion, these European village studies are like a mirror of the soundscape community and its potential today. The internet has magnified the potential for communication of this network and as a result we could accompany the village project in realtime. On the final day of the conference, the *World Forum for Acoustic Ecology* (WFAE) held its meeting and discussed its future activities and goals. The WFAE was founded in Banff in 1993 and has its own Homepage, Newsletters, Journal and Affiliate Organizations in various parts of the world. Members of the WFAE ideally want to develop acoustic ecology into a discipline in its own right, while at the same time acknowledge its multidisciplinary nature.

The late scientist, Marxist and philosopher David Bohm comes to mind here, as he proposes in his writings how dialogue has to move beyond dispute and hard positioning. He envisioned an energetic exchange that allows



Sound Escape participants and WFAE members listening and soundmaking: (L-R): Gabriele Proy (Austria), Keiko Torigoe (Japan), Gregg Wagstaff (UK).

manifold ideas, chaos and order, resolution and balance, and which in turn, opens up possibilities for an unexpected new direction. Dewight Middleton, who teaches anthropology on the American side of Lake Ontario in Oswego NY, describes three central ideas of his discipline: it is simultaneously a mirror, a bridge and a chasm. As acoustic ecologists we also have the potential to move similarly *between* disciplines, making connections in between, transforming for example the hype of Virtual Audio and Cyberspace into real and direct listening and sensing.

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Full Moon Over Killaloe, 2000

by Victoria Fenner

An Art Camp, sound art which is a creation of human voices, sound effects and human drama—This is how Lloyds of London described this year's *Full Moon Over Killaloe* in the insurance policy that had to be established in case of broken legs, hungry bears or any other peril that can befall people who do audio art. It is too fitting that the only insurance company that would take this on was Lloyds, the venerable institution with the reputation for insuring things that no other insurance company would touch.

Even so, explaining "audio art" to an insurance underwriter was a formidable task, especially in the *Full Moon* context where the emphasis is not so much on existing definitions as it is on creating new ones.

This was the second year that we gathered in Killaloe, Ontario for *Full Moon*. With the assistance of the Canada Council for the Arts, seventeen people of all skills levels lived and worked together for seven days. This year's *Full Moon* took place between August 13th and 20th at the Sticks and Stones Retreat near Killaloe, about a two hour drive (200 KM) west of Ottawa, Ontario, Canada.

Full Moon 2000 was a space to hear and a space to speak. A listening space. A space for creation. Working and living collaboratively with other artists, it was a chance to hear our inner voices, the voices of the wind and the voices of the trees. It was a space to create new sounds through our soundmaking machines—computers, microphones, tape machines, mixers and speakers. A space to create new ways of hearing the world, and to discover

new ways of recreating the sounds we hear as unique artistic expressions. Above all, *Full Moon 2000* was a place for artists to develop their own art, far removed from the daily pressures of ordinary life in busy, noisy cities.

This year's artists in residence were Michael Waterman and Andra McCartney. Michael Waterman is an audio and visual artist living in Peterborough and was a *Full Moon* artist-in-residence in 1999, together with Hildegard Westerkamp. He also curated an audio and visual art exhibition in June as part of *Sound Escape*, the acoustic ecology conference in Peterborough (see report in this section). Andra McCartney is an audio artist living in Montreal, who teaches "sound in media" in the Communication Studies Department at Concordia University. She creates soundscape compositions and multimedia works based on her recordings of sound environments, ranging from video arcades and urban parks, to communication webs and transit lines.

Joining Andra and Michael was an eclectic assortment of artists from all disciplines. It is important to the spirit of *Full Moon* to create a space where new audio artists can work with people who are well established. A wide variety of artistic disciplines was also represented. This year's gathering included several audio artists and radio documentarians, a couple of visual artists and electroacoustic composers, a dramatist, and several writers. Some of the participants had already worked in audio extensively, and some were beginners.

The week's activities included daily soundwalks on the 50 acre site; group discussions to explore issues relating to sound and sound creation; a live remote broadcast from the front porch of Sticks and Stones to the local 50 watt community radio station; chances to work with an extensive array of gear to create new works; and listening sessions that ranged from quiet, personal moments using headphones, to amplified outdoor presentations that blanketed the surrounding woods and camping areas.



Cutting a Track at Killaloe

A lot of activities emerged that were not part of the schedule—things spontaneously happened as participants got to know each other and developed artistic synergies. There were many times when the five production computers were used throughout the night, or when people curled up to sleep on the floor beside them. At last year's *Full Moon*, most of the resulting artworks were composed many months after the fact. This year, a final concert of finished works created on-site was presented at the end of the week.

In addition, an attempt was made at re-working Lloyds of London audio art definition. Here is a new version, by radio artist and dramatist Heather Mejaury:

ART CAMP, Sound art: Compiling voices, beeps, squawks, effects, and human/vegetable/animal/mechanical dramas. Recorded/performed/transformed/improvised in an authentic environment created superficially for such purposes.

The power of sound was most eloquently demonstrated by a non-human *Full Moon* participant, Chanty the Rooster. Sticks and Stones was Chanty's domain, and he never missed an opportunity to remind us of that fact with his loud, continuous crowing as he wandered around the farm beginning at 3 a.m. each morning. Discussions all week centred upon the philosophical question "Is this sound a wanted or an unwanted sound?" The consensus throughout the week moved from "wanted" (because this was Chanty's soundscape with which we did not want to interfere) to "unwanted" (after a particularly raucous night where he wandered over to the campground to vocalize). A compromise was then reached—the grand mascot of *Full Moon* was unceremoniously bundled into a cat cage and put in the garage each night. This did not stop him from crowing, but the muffling effect of the wooden garage altered the volume level so that Chanty sounded like he was crowing from a distant farm.

Next year's *Full Moon Over Killaloe* will be held again at Sticks and Stones from July 29th to August 4th. It will be jointly sponsored by The Canadian Society for Independent Radio Production (CSIRP) and the Canadian Association for Sound Ecology (CASE). Next year's audio artists in residence will be Darren Copeland and Andra McCartney.

Victoria Fenner is a Canadian audio artist, radio producer, and coordinator of *Full Moon Over Killaloe*. Contact: fenner@community-media.com *Full Moon's* website is at www.fmok.org

Shrimp Make Big Noise

A group of European researchers says it has an answer to the underwater drone of snapping shrimp that can be so intense that submarines use the cacophony to hide from sonar. The shrimp make bubbles that collapse with a pop powerful enough to kill small prey. Huge clusters composed of tens of thousands of shrimp can make enough noise "to disturb underwater communications," said Detlef Lohse, a physicist at the University of Twente in the Netherlands. From wire services.

Whistling Will be Taught

Educators on the tiny Spanish mountainous island of Gomera are resurrecting an ancient system of whistling used by rural folk to communicate across canyons. The Canary Island government said that the code of peeps and whirs will be a mandatory course in elementary schools where it originated centuries ago, and as an elective in high school.

US National Park Noise Increases

With increasing rising din of mechanical noise from car alarms echoing off the cliffs, RVs rumbling by, and jets flying high overhead, US National Park Service officials say that noise in natural areas has made them realize that they must manage the parks not just for sights but for the sounds, as well. Wes Henry, a natural resources specialist at the National Park Service is writing a new "Soundscape Preservation" policy that would guide park managers in identifying and reducing bothersome noises. Henry notes that you can get away from the sight of other people but you can't escape human made noise. From wire services.

Noise Study Helps Lead to Snowmobile Ban
National Parks Conservation Association (NPCA) and the Greater Yellowstone Coalition recently collaborated to study snowmobile noise in Yellowstone National Park. Based on its results, the National Park Service had announced that it was seriously considering imposing a ban on snowmobiles in the park. The US national Park Service has now announced that it will move to ban snowmobiles from Yellowstone and Grand Teton national parks over the next three years. NPCA president Thomas Kiernan said "Snowmobiles produce noise pollution and also are the greatest single source of air pollution in Yellowstone. I am glad to hear that the park service recognizes that this park, which harbours herds of bison, elk, deer, and pronghorn antelope as well as grizzlies, black bears, wolves, and other superb wildlife, can be a Mecca for visitors but cannot also be home to snowmobiles." More than 62,500 snowmobiles entered Yellowstone from last December to March, said Yellowstone spokeswoman Marsha Karle. US Republican Senator Conrad Burns of Montana was of the opinion that the Park Service had "chosen to ignore common sense, avoid public input and adopt a radical policy shift." The senator might consider remedial classes on the art of listening. The animals are pleased.

Draft EU Law to Help Curb "Noise Pollution"

The European Commission has presented a proposal for a Directive on the Assessment and Management of Environmental Noise with the aim of providing a basis for a coherent, integrated EU policy on environmental noise. The proposal introduces measures to classify and understand the problems caused by noise, as a necessary step to preparing future concrete measures to reduce noise pollution. The Commission is launching the idea of making EU-wide "noise maps" based on common methods and indicators. These maps should be made available to the public. They should form the basis for development of action plans and strategies at local, national and EU levels to combat noise pollution. The full proposal is available online in PDF format here: http://europa.eu.int/comm/environment/docum/00468_en.htm.

The City of Birmingham England has "A Report on the Production of Noise Maps of the City of Birmingham" along with examples of their "Noise Maps" or Sound Emission Contour Maps on the Internet, please see <http://www.environment.detr.gov.uk/noisemaps/birmingham/report/>.

Is That Traffic Noise, or Your Computer?

An average computer system emits more than 45 dBA, of noise, with newer 800 MHz to 1 GHz PCs from major US manufacturers ranging from 48 to 59.5 dB. Traffic at 30 metres measures around 50 dB.

In welcome news to the computer user's ears, SP North America, announced its "Silent-PC," the 24 dBA computer system, at PC Expo 2000 in New York. The Silent-PC is a computer built around SP's "Pro S" mid-tower case, damping noise at the source and absorbing unavoidable noise from components. The cases are of German design, and ARD, one of the German public TV stations, measured the noise levels at a distance of 1 m (39.4") as 21.5 dBA for operation without hard drive access and 24 dB with hard drive access. This is well below the ambient noise level of most office environments.

For more information, in the US see <http://www.sp-usa.com/>. In Europe, please see http://ourworld.compuserve.com/homepages/sp_edv/. One should note that Apple Computers' iMac and G4 Cube based systems do not require cooling fans, and are therefore very quiet as well.

The Sonoran Desert radio project

Radio station KUAT at the University of Arizona, Tempe features the sounds of the Sonoran Desert of Southern Arizona. The desert offers one of the richest natural sound environments in the world. Each week KUAT radio maps the sounds of the natural world of the desert. Listeners hear stories behind the recorded sounds from scientists, folklorists and others who explain the acoustic ecology of the environment. Sample broadcasts can be heard on the web at: <http://kuat.org/soundscape/>.

EU Study Connects Noise and Heart Disease

German environmental authorities have documented a greater risk of heart attacks among

people exposed to excessive noise, and they are finding new evidence of noise's long-suspected ill effects on sleep and emotional well-being.

Investigation of the lifestyles of German cardiac patients has shown about a 25% greater chance of heart attacks among those whose work or home environments were persistently exposed to noise above 65 decibels, says Hartmut Ising, a researcher with the Federal Environmental Agency's Institute for Water, Soil and Air Hygiene <http://www.umweltbundesamt.de/uba-info-e/e-fach5.htm>. Ising has pioneered inquiries into the physiological effects of noise exposure.

An 11-year research project involving more than 1,000 heart patients found that noise, especially when it disrupts sleep, produces stress hormones that accelerate aging and heart disease, Ising says.

Scientists from all 15 European Union countries who are drafting a common noise policy estimate that excessive racket costs governments as much as 2% of gross domestic product in lowered productivity, increased accidents and more-frequent illness.

"Governments could actually save money if they reduced noise in the most affected areas, but we are a long way from getting politicians to understand this," says Hugo Lyse Nielsen of the Danish Environment and Energy Ministry, which is coordinating the EU noise policy project.

Eighty million people, or about one in four EU residents, suffer noise exposure that affects their job performance, he says, referring to the first results of the working group's research into noise hazards. Another 170 million Europeans live in borderline areas where traffic, construction and aircraft noises only occasionally exceed the accepted 65 decibel "safe" limit. Source *The Times*.

They Dream of Singing

A University of Chicago study has determined that Zebra finches sing in their sleep. To monitor activity, the scientists use a small mechanical screw that advances a small piece of wire into the bird's brain. "If you look at the actual activity patterns when neurons burst during sleep, it is a very good match to the same neuron pattern as when they sing—but it is not an identical match," comments lead researcher Daniel Margoliash. "That is why I think they are dreaming. I think they are dreaming of their song but with variations, just as we dream of everyday experiences but in unusual ways."

Songs of Crickets and Katydid From Japan

The Japanese have a long tradition of enjoying the calls of various Orthoptera, both in the wild and as caged pets. You can hear the sounds of a wide variety of Crickets and Katydid and other insects in Japan at <http://www.asahi-net.or.jp/~un6k-hsmt/English/ENGindex.htm>.

Regal Calm

Her Majesty Queen Elizabeth II has banned cell phone usage by servants in Buckingham Palace. She was not amused by their incessant ringing.

Acoustic Communication, 2nd edition

Greenwood Press, 2000, which includes: Truax, Barry (Ed.) *Handbook for Acoustic Ecology*, Cambridge Street Publishing, 1999 (CD-ROM).

The second edition of Barry Truax's text, *Acoustic Communication*, which originally appeared in 1984, has recently been published by Ablex, an imprint of Greenwood Press. Besides being updated in many areas, including references and discography, the new edition includes the new CD-ROM version of the *Handbook for Acoustic Ecology* with its comprehensive survey of acoustic terminology. Each book chapter includes a list of relevant *Handbook* entries where sound examples can be found, thus expanding its usefulness for both the individual and classroom situations.

Acoustic Communication (2nd ed.) is available from: Ablex Publishing, 88 Post Road West, Westport, CT 06881-5007; telephone: (203)226-3571; fax: (203)222-1502. Online ordering through www.ablexbooks.com. ISBN 1-56750-536-8; ISBN 1-56750-537-6 (pbk.). For more information, see: www.sfu.ca/~truax/ac.html.

Sounding Out the City: Personal Stereos and the Management of Everyday Life

Author: Michael Bull

London: Berg Publishers, 2000. Hb \$52.00 US. Pb \$15.50 US

On buses, trains, and streets over the past decade and more, youths in particular but increasingly older people as well tune into their personal stereos and tune out city sounds. Why? What does the personal stereo mean to these people and to urban culture more generally? Does it heighten reality? Enable people to cope? Isolate? Create a space? Combat boredom? Far too commonplace and enduring to be considered a fashion accessory, the personal stereo has become a potent artefact symbolizing contemporary urban life.

The book opens up a new area of urban studies, the auditory experience of self and place. In doing so, it enhances our understanding of the role of media and technology in everyday life. Urban, cultural and anthropological studies have been dominated by explanations of experiences drawing upon notions of visuality. But culture always has an auditory component that shapes attitudes and behaviour—perhaps nowhere more so than in the city where sound is intensified. This book challenges strictly visual approaches to culture by proposing an auditory understanding of behaviour through an ethnographic analysis of personal stereo use. The author reformulates our understanding of how people through the senses, negotiate central experiences of the urban, such as space, place, time, and the management of everyday experience, and examines the critical role technology plays. Source: promotional flyer.

Inner Earth—a seismsonic symphony

Composer: Kookoon

Traumton Records, Grunewaldstr.9, D-13597 Berlin, Germany
e-mail Traumton@aol.com

Composer Wolfgang Loos (Kookoon), in cooperation with Frank Scherbaum, professor for geophysics at the university in Potsdam, has used as a sound source for this symphony the earth's sound. These earth vibrations include not only the sounds from its surface, but the tremors, vibrations, and waves within the earth itself. The CD is composed exclusively from natural seismic signals, such as earthquakes, microseism, as well as volcanic movements. Sound fragments discovered within the many hours of data which the team explored have been rearranged and recomposed. No additional instruments have been used.

Announcements

Wilderness Britain?

A three day conference on society, policy and the environment 26 - 28th March 2001, University of Leeds. Sponsored by the ESRC and supported by the University of Leeds, RGS/IBG, Environment Agency and Yorkshire Dales National Park Authority.

This conference aims to bring together a critical mass of academics, professionals and users who share a common interest in wilderness, and the wilder areas of Britain in particular. The focus of the conference is on the social and environmental perspectives of the wilderness ideal within the British Isles, with emphasis on generating policy recommendations for recreation and conservation.

Papers are being accepted related to wilderness, and wild areas of Britain. Download the call for papers from the conference web site at: www.geog.leeds.ac.uk/conferences/wildbritain.

2001: A Radiodyssey - Studies in Europe

A conference of interest to academics, broadcasters, and journalists in the UK and the rest of Europe hosted by the Radio Studies Network and the University of Sussex, 19 - 21 July 2001.

The conference will analyze the present state and future prospects of European radio with reference to the historical origins and assumptions that shaped the medium and its place in contemporary European cultures after a decade of deregulation and reconstruction.

Papers are invited on issues that currently engage European broadcasters and academics involved in research and teaching, for whom, from whatever discipline—media studies, cultural studies, economics, history, politics, anthropology, sociology, politics or drama—radio is important. We expect to group papers under three broad headings: Organizing and Producing Radio; Analyzing Radio; and Consuming Radio. Abstracts (300 words maximum) for proposed papers should be sent by 15 January 2001. For information contact Dr. Kate Lacey, Radio Studies Network: School of European Studies, University of Sussex, Falmer, Brighton BN1 3QN.

Telephone: +44 1273 606755 x2088
Fax: +44 1273 623246

QUOTES

Soon silence will have passed into legend. Man has turned his back on silence. Day after day he invents machines and devices that increase noise and distract humanity from the essence of life, contemplation, meditation.... Tooting, howling, screeching, booming, crashing, whistling, grinding, and trilling bolster his ego.

Jean Arp

For twenty-five centuries, Western knowledge has tried to look upon the world. It has failed to understand that the world is not for the beholding. It is for hearing. It is not legible, but audible. Our science has always desired to monitor, measure, abstract, and castrate meaning, forgetting that life is full of noise and that death alone is silent: work noise, noise of man, and noise of beast. Noise bought, sold, or prohibited. Nothing essential happens in the absence of noise.

Jacques Attali

Do not the most moving moments of our lives find us all without words? Marcel Marceau

Accustomed to the veneer of noise, to the shibboleths of promotion, public relations, and market research, society is suspicious of those who value silence.

John Lahr

[T]he problems posed by sonic "invasion" should not obscure the need for human beings to live in an environment rich in differentiated sonic experiences: Too much silence is not more acceptable than too much noise.

Collectif Environnement Sonore,
Paris, May 1996

When the oak is felled the whole forest echoes with its fall, but a hundred acorns are sown in silence by an unnoticed breeze.

Thomas Carlyle

Wise men say nothing in dangerous times.

John Selden (1584-1654)

I have often repented speaking, but never of holding my tongue.

Xenocrates (396-315 B.C.)

To sin by silence when they should protest makes cowards of men.

Abraham Lincoln

Under all speech that is good for anything there lies a silence that is better. Silence is deep as Eternity; speech is shallow as Time.

Thomas Carlyle

Silence is as full of potential wisdom and wit as the unhewn marble of great sculpture. The silent bear no witness against themselves.

Aldous Huxley

It takes more time and effort and delicacy to learn the silence of a people than to learn its sounds.

Ivan Illich

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Hammerstrasse 14, CH-4058 Basel, Switzerland

- **Suomen Akustisen Ekologian Seura**

(Finnish Society for Acoustic Ecology—FSAE)

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those who cannot afford membership, or who come from coun-
tries with disadvantageous exchange rates.



“Le Corbusier remarked that when you find the acoustic centre of a building or a piazza, the point at which all sounds within the given space can best be heard, you have also found the point at which a piece of sculpture should be placed.”

John Berger