Appendix D - Soundscape Works Appearing in Recorded Anthologies of Electroacoustic Music

Abstract
Acknowledgments
Chapter 1
Chapter 2
Chapter 3
Chapter 4
Chapter 5
Chapter 6
Chapter 7
Chapter 8
Chapter 9
Chapter 10
Chapter 11
Appendix A
Appendix B
Appendix C

Appendix D

During the spring of 1997, I listened to every anthology entitled Electroacoustic Music or Electronic Music available through the York University and University of Toronto libraries, and made note of the appearance in them of soundscape pieces. In some cases, these were national collections (Canada, Australia and Sweden). In others, the anthologies were associated with a particular studio, producer or international competition. I noted in each case how many pieces referred to either environmental sounds or processes in liner notes, and how many worked with recognizable environmental sounds in context, in which case I classify them as soundscape compositions. I also listened to several recordings entitled Musique Concr‰te, and specifically associated with the French GRM studio. An annotated discography appears at the end of this appendix.

National Collections

National collections for Australia, Sweden and Canada were all listed under the general title Electroacoustic Music, and produced by national organizations.1 I listened to two Australian anthologies, produced in 1994 and 1996. Each included six pieces by six different composers, all male. A wide range of electroacoustic approaches was represented in each case, including use of digital and analog sound processors, several pieces using the programming language MAX with MIDI instruments, and pieces for tape and instrument. There were no environmental references in the liner notes, and no composer used recognizable environmental sounds.

The Swedish anthology was produced in 1993. Here, there are fourteen composers represented, one of whom is female (Akemi Ishijima). Her piece Urskogen, which uses recorded sounds of musical instruments, includes an environmental reference in the liner notes. Another piece on this anthology, La Disparition de l'Azur, by Erik Mikael Karlsson, uses somewhat recognizable environmental sound sources. The contexts for these sources remain fairly generalized: he uses the terms "a modern city" and "the countryside," so they are not references to specific geographical places. The liner notes state that this piece won the first prize in the Electroacoustic Programme Music category at the 21st International electroacoustic music competition at Bourges. The other pieces on this anthology include algorithmic, acousmatic, and mixed voice and instruments with processing. There are no other environmental references or use of environmental

The Canadian collection was published in 1990. This four-CD set includes compositions by thirty composers. The extensive liner notes include a one-paragraph reference to the work of the World Soundscape Project. Several pieces include environmental references in the liner notes: Francis Dhomont's Th‰me de la Fuite, Bengt Hambraeus's Intrada: 'Calls'; Yves Daoust's Adagio; Marcelle DeschŠnes's Big Bang II, Diana McIntosh's ...and 8:30 in Newfoundland; Ann Southam's Fluke Sound; Jean-Franiois Denis and Eric Brown's FrŸquents Passages. One piece, Hugh Le Caine's Dripsody, uses a recognizable environmental sound a drop of water, taken out of context and re-recorded at different speeds to produce a pentatonic scale. There are several soundscape pieces. Gilles Gobeil's Rivage uses "concrete sounds and noises untouched from our urban environment (traffic, industry, trade) surrounded by electronic sounds" (liner notes, 1990: 38). This piece has won several international prizes. Kevin Austin's Tears of Early Morning Rain and Cat Fade Away is a documentary type recording.

The works in the Canadian anthology which refer most specifically to particular places and situations are Claude Schryer's Chasse and Hildegard Westerkamp's Cricket Voice. Schryer states: "In October 1988, I went hunting with my father Maurice and my oldest brother Richard in Saskatoon, Saskatchewan. I have hunted with them for the last 20 years. This year my gun was a microphone. My target was hunting itself" (liner notes, 41). He dedicates his piece to Luc Ferrari, and it premiered at a concert honouring Ferrari in Paris 1989. The work juxtaposes (French) spoken definitions of hunting with various field recordings of this hunting environment. Westerkamp states: "Cricket Voice is a musical exploration of a cricket, whose song I recorded in the stillness of a Mexican desert region called the 'zone of silence'" (liner notes, 1990: 32). This is one of the more abstract of Westerkamp's works, utilizing the recording of the cricket both in its original form, and at a number of different speeds to create rhythmic textures. It also includes percussive sounds made by playing desert plants. In both cases, the composers note the place of recording and its context. The sounds in each composition are often recognizable, and when they are transformed, they retain a level of recognizability.2

Studio Collections

Several collections are associated with particular studios. Cologne-WDR Early Electronic Music (CD) was published in 1990, and includes music by ten male composers who worked at the WDR in Cologne during the 1950s. Oddly, there are none by Stockhausen. The pieces use electronic sources and the serial method of composition. The liner notes explain the position of the studio at that time, in opposition to that of musique concr‰te.

The marriage between electroacoustic music and the then rigid principles of serial composition manoeuvred the Cologne studio into opposition to the electroacoustic studio of the French radio RTF, which Pierre Schaeffer founded immediately after the liberation of nazi-occupation. In Schaeffer's "musique concr‰te," which was based on the traditions of 'structuralist' literature, recorded acoustic material from the outer world played

a central role and evoked lots of 'associations' with reality within the listener's mind. In contrast to this, Cologne intended to continue the tradition of 'absolute' music which had dominated most of the European concert music since the late 18th century: a music free of non-musical associations. (liner notes 1990: unpaginated)

Several early LPs published by Editions de la bo-te Í musique represent early work in musique concr‰te at the Paris studio. I reviewed Musique Concr‰te, published in 1960, and Musique Experimentale II, published in 1964. The first includes works by six male composers; the second, works by seven. All include environmental sound sources, for the most part treated acousmatically, to "liberate" the sound from its initial source, so that the sources are unrecognizable. The exceptions are two pieces on the Musique Experimentale II LP. Franïois-Bernard Mîche's Terre de Feu uses recognizable environmental sounds. Philippe Carson's Turmac is a soundscape piece, using recordings of factory machines in Holland which are layered in a montage that retains a strong sense of the factory environment.

The Folkways LP entitled simply Electronic Music (1967) contains works by nine composers who have worked at the University of Toronto studios. Dripsody, by Hugh Le Caine, is included even though it was composed in Ottawa, perhaps because the instruments that he invented were crucial to the establishment of this studio. Most of the works use electronic sound sources and no environmental references. Noesis, by Robert Aitken, includes some recognizable environmental sounds. Pinball, by Jean Ivey, the lone woman composer on this LP, is entirely derived from the sounds of pinball machines, which are quite recognizable throughout the piece.

Producer Collections

In this category I will discuss collections that are not associated with any particular studio, but were collected by record producers or production houses to represent a range of practice in electroacoustic (electronic) music. The first two that I will discuss are Canadian productions. The others were produced in the US.

Electroclips is a CD produced in 1990 by empreintes DIGITALes in MontrŸal. It includes works by twenty five composers from QuŸbec (twelve),3 the rest of Canada (eight), the United States (four) and Mexico (one). Two of the composers are women, both from Canada. Each piece is a three-minute miniature, which is intended to represent the composer's style. Three pieces create virtual narratives using (mostly) mediated sounds: Roxanne Turcotte's MinisŸrie is a playful chase through the macabre world of Hitchcock and Spielberg movies; Christian Calon's Temps Incertains works with radio broadcasts of a demonstration; Dan Lander's I'm Looking At My Hand creates a narrative from recognizable recorded sounds based on experiences with his hands.

Several soundscape pieces are included on this CD. Oiseaux de Bullion, by Claude Schryer, compares two environments: the claustrophobic space of finches singing in a cage in downtown MontrŸal, and a much more expansive recording of Schryer's encounter with the sounds of a train while hiking in the Bow Valley, near Banff. Landlocked, by Laurie Radford, uses Xenakis's graphic stochastic UPIC system to integrate recognizable environmental sounds with less recognizable sources. It is placed "in the center of a vast continent" (1990: liner notes). Christian Calon and Claude Schryer's Prochaine Station is a sound journey through MontrŸal's subway system. Hildegard Westerkamp's Breathing Room situates the piece within and around her own body, as she breathes in all kinds of environmental sounds: "Each breath ... creates a specific place in time. Meanwhile, the heart beats on, propelling time from one breath to the next" (1990: liner notes).

Another collection which is mostly Canadian, but which cannot really be considered a purely national collection because of its inclusion of some international composers, is the Discontact! II CD, produced in 1995 by the Canadian Electroacoustic Community (CEC) to showcase members' works. Of the fifty one pieces in this collection (all under three minutes in length), five are by composers outside Canada who are members of the CEC (US, Japan, Germany and Spain). In this collection, I noted several pieces which used environmental sounds in particular sections, and seemed to move between recognizable soundscape and unrecognizable acousmatic styles, perhaps influenced both by the francophone connection with the GRM acousmatic school, and by the World Soundscape Project. Several soundscape pieces are also included. Some use recognizable environmental sounds and phrases without referring to a specific place, such as Claude Schryer's 3 Radioludes; Chris Meloche's Extensions V (for Ionospheric Sounds, Trombone and Electronics); Fred Semeniuk's Spraying; and Thomas Gerwin's Epilogon. Others refer to the place of recording, either in a general way: "a soundwalk through the classical concert hall and the sports temple" (liner notes, 1995: 15), as in Egils Bebris's Hockey Night in Opera; "sounds recorded by the composer in zoos, parks, etc." (liner notes, 1995: 14), in Pascale Trudel's Le Poisson Qui Cache l'Oiseau; or specifically: "the sounds of Toronto video arcades in the fall of '94," (liner notes, 1995: 19), as in my Arcade '94; and "The recordings used to make this piece were collected on foot in Manhattan, near the clock tower at Herald Square" (liner notes, 1995: 21) in E. C. Woodley's Abide With Me (New York No. 1).

Neuma has recently released several CDs with the collective title Electroacoustic Music. I listened to the first (subtitle Classics, 1990) and Electroacoustic Music II, 1991. The Classics CD includes Edgard Var‰se's Po‰me 'lectronique (1957-8). This piece, composed using the proportions of the Golden Section to create an interplay of shifting sound masses and planes, is related to soundscape composition in one significant way: it

was created for a specific place, the Philips Pavilion, and was composed in collaboration with the architect, Le Corbusier (who also worked with lannis Xenakis). The sound materials, however, were not recorded at the location. The CD also includes two pieces by Milton Babbitt: Phonemena and Philomel, both for voice and tape, as well as Roger Reynold's Transfigured Wind IV for flute and tape, and lannis Xenakis's Mycenae-Alpha. Once again, as I noted earlier with reference to Xenakis's writings, he is inspired by the movements of environmental forces: "Xenakis's music depends on giving aural life to shapes and patterns of movement, whether invisible [sic], as in a cloud, or invisible, as in the movement of molecules in a gas" (liner notes, 1990). In this piece, he uses the UPIC graphic drawing board to convert images (which look like close-ups of cellular structures) into sound. He is inspired by the rhythms and forms of the environment, and uses mathematical and graphical means to represent that inspiration. While this approach is different from working with environmental sounds in context, his attention to the environment is similar.

The second disk, Electroacoustic Music II, contains no reference to how the collection came about. It includes work by five composers. One piece, Phoenix (sung by Electric Phoenix), by Gerald Shapiro, refers to inspiration through the composer's reading of Sound and Sentiment, by Steven Feld. There is no use of environmental sounds or direct references to the sound environment.

Turnabout produced a CD in 1966 entitled simply Electronic Music. It includes pieces by only three composers: Ilhan Mimaroglu, John Cage and Luciano Berio. No explanation is given for the choices. In the introduction to Cage's Fontana Mix, he says: 'When we use our perception of logic we minimize the actual nature of the thing that we are experiencing" (liner notes 1966), a reminder of Cage's effort to use indeterminacy to allow sounds to be heard for themselves. Fontana Mix uses a variety of recorded sounds within an indeterminate structure.

New Electronic Music from Leaders of the Avant-Garde was produced by Columbia Records in 1967. Once again, it includes work by only three composers: Cage, Variations II; Babbitt, Ensembles for Synthesizer; and Henri Pousseur's Trois Visages de Li‰ge. The latter piece uses words derived from poetry including the street names of Li‰ge, Belgium, but no recorded environmental sounds are included. Babbitt's is an electronic piece using the serial method. Cage's Variations II is a composition with a performance organized using chance procedures, for any number of players, any sound-producing means. This particular realization is by David Tudor, amplifying a piano with a contact microphone and phonograph cartridge, as well as using various materials such as plastics and toothpicks to stroke, scrape and pluck the strings.

New Music for Electronic and Recorded Media was produced by Charles Amirkhanian for Arch Records in 1977. It includes works by seven composers, all women. Laurie Anderson's New York Social Life and Time to Go (for Diego) are clearly inspired by social situations, in the first piece, artists' conversations, and in the second, the words of a guard asking people to leave the Museum of Modern Art. The words from these situations are then taken out of context and given musical settings. Annea Lockwood's World Rhythms mixes ten channels of rhythmic environmental sounds with live performance of a gong- player "reflecting some changing, inner physiological rhythm in a network of feedback between player and environmental sound, and between player and gong" (liner notes 1977). Unlike many of her other works, this piece is not linked to a specific place, but still emphasizes the relationship between performer and environmental sounds. The other pieces on this disk use recorded instrumental and vocal sounds as well as electronic sources in structures that range from improvisation (Pauline Oliveros) to computer generation (Laurie Spiegel). There are no other references to environmental sounds or contexts in the descriptions of the pieces.

In all of the disks that I have discussed so far, there have been decisions made about what to include that are either affected by nationality, membership in an organization such as the Canadian Electroacoustic Community, or the taste of a particular producer. The intention of international competitions is to find the best in a field based on the value of the work, using peer juries. As a result, CDs from international competitions may be considered of greater canonical importance than the former types.

International Competitions

The Prix International Noroit-Lÿonce Petitot is a competition of acousmatic music. The prize was founded by Franı̈ois Bayle, Michel Chion, and Jacques Lejeune, all of whom worked at the Paris GRM studio. I reviewed the disk containing works by the 1991 winners of the prize. All of the works could be considered acousmatic, as they use recorded sound sources which have been removed from their original context and transformed so that they are unrecognizable. First prize went to Robert Normandeau, for 'clats de Voix, a piece which includes some short recognizable sections but is mostly abstracted. The next three pieces are typically acousmatic. The last piece, by Philippe Le Goff, receives a Mention. Meta Incognita includes many recognizable sections and a reference to a specific sound environment in the liner notes. Le Goff says: "it is the result of a long journey, which took me to the Arctic lands to listen to nature, language and music" (liner notes 1991). The piece includes the throat singing of two Inuit women, and concentrates on their moment of laughter at the end of the piece, integrated with the sounds of voice, wind and drum.

It makes sense that in an acousmatic competition, most of the selected works would follow the aesthetics of acousmatic music rather than a wider range of approaches to

electroacoustic music. The Bourges competition, on the other hand, offers prizes in a number of categories which are intended to encompass the whole range of electroacoustic music. There are four sections: Electroacoustic Music, Music for performers and tape (mixed), Program Music, and Live Electroacoustic Music. Bourges also offers the Magisterium, a prize for more established composers, in which there are no categories. I reviewed eight disks, which are associated with the prizes from 1988 to 1991. Some disks also included selections from much earlier competitions (1973-77). Several pieces used environmental sounds, but rarely in context. The 1991 Magisterium went to Bernard Parmegiani for Exercisme 3 (1986); and Barry Truax for Riverrun (1986). Exercisme 3 begins with a short soundscape section including the cry of an unnamed bird. The piece then transforms to a composition of digital sounds modified through a pitch-to-MIDI converter and computer system. Riverrun uses the metaphor of a British Columbia river to structure the granular synthesis of electronic sounds. Although this piece uses electronic sounds as a source, its structure is based on the perception of a sound environment.

On the 1990 competition disk, there is one piece by Gabriel Valverde, called Cumulos, which uses the inspiration of the movement of galactic cumulus to shape the movements of electronic sounds. Although this piece refers to an environment, it is not to the sounds of that environment but rather the movements within it.

The 1989 Program Music prizes included two examples that work with environmental sounds. Christian Calon's Minuit uses some environmental sounds, which are never identified with a particular place. Alistair MacDonald and Nicholas Virgo's Busk

was composed almost entirely from conventional music and environmental sounds recorded on the streets of Birmingham. These 'sources' frequently appear as 'windows', but are not necessarily the main focal points of the work. Rather, the drama lies in the way that the music arrives at the panoramas offered by the windows and is then drawn away to alternative vistas. Hence, Busk is essentially an exploration of the continuum between two types of material: raw sources and their electronically manipulated derivatives. (liner notes, 1989: unpaginated)

Hence, this composition is not intended to be about the streets of Birmingham, but about the process of manipulation of the sources. While some of the prize-winners in the Bourges competition disks that I reviewed included environmental sounds, the context of the sounds was not generally the focus of the work. Truax's Riverrun is closest to the idea of soundscape in its attention to the sounds of a river environment. It is also an excellent example of the use of granular synthesis as a compositional process, and uses electronic sounds as a source. Soundscape pieces using recorded environmental sounds did not appear in this sample.

Reviewing the set of recordings as a whole, it is clear that soundscape works are a small minority in these international collections, in which environmental sounds are more often treated acousmatically, when they appear at all. It is remarkable to note the higher number of soundscape pieces in the Canadian collections than in international collections. Factors which may influence this greater activity in soundscape composition include an interest in portraying relationships with a natural environment in the Canadian arts, as noted in chapter two, as well as the importance of the World Soundscape Project, and the continuing role of the Vancouver activities of the World Forum of Acoustic Ecology in the development of electroacoustic music in Canada.

Annotated Discography:

Anthology of Australian Music: Electroacoustic Music. Canberra, Australia: Australian Centre for the Arts and Technology, 1996. Computer [MAX, algorithmic], mixed voice and instrument, synthesized. 6 pieces. no environmental references. Anthology of Australian Music: Electroacoustic Music. Canberra, Australia: Australian Centre for the Arts and Technology, 1994. Pressing, Gerrard, Cary, Vennonan, Burt, Worrall. No environmental references. Voice with MIDI keyboard, MAX, mixed instrumental and electronic, synclavier, digital and analog sound processors, processed instrumental sounds. Cologne-WDR Early Electronic Music. CD 9106. BV Haast, 1990. Herbert Eimert and Robert Beyer, Klang im unbegrentzen; Eimert, Raum; Eimert Klangstudie I; Eimert and Beyer, Klangstudie II; Eimert, Glockenspiel; Goeyvaerts, Komposition #5 and #7; Gredinger, Formanten I and II; Koenig, Klangfiguren; Pousseur, Seismogramme I and II; Hambraeus, Doppelrohr II; Evangelisti, Incontri di fasce sonore; Ligeti, Glissandi and Articulation; Kiebe, Interferenzen; Brun, Anepigraphe. Serial technique, electronic sources.

Cultures Electroniques. Laureats, Concours International de Musique Electroacoustique, Bourges, 1988-1991. 4 sections. Electroacoustic Music, Performers and Tape, Program Music, Live Electroacoustic Music. Magisterium-- no category stated for each piece. 1991 Magisterium. Bernard Parmegiani, France. Exercisme 3 (1986). Barry Truax, Riverrun (1986). 2 selections from 1975-77 competitions. Change the World, It Needs Changing. (1973) Wilhelm Zobl (Austria). Exploration of vocal texts using electronic, vocal, various concrete sources. Created in experimental studios of Radio Poland. "The answers must be concrete, for truth is concrete and art must be based upon truth." (Hanns Eisler). James Dashow (USA- Italy) Whispers Out of Time (1975-76). Electronic music, electronic sources. Explores use of AM, FM and RM spectra, and various degrees of depth and spatiality. 1989 Magisterium and Electroacoustic Prizes [2 disks]. Leo Kupper [Belgium]. Francisco Kropfl [Argentina].Orillas--vocal sounds, struggling to come through. Richard

Karpen [USA]. electroacoustic music mixed. Il Nome [voice and tape]. uses sound of breaking glass, not in an environmental context. Gilles Gobeil [Canada] Voix Blanche--ondes martenot and tape. Julio D'Esrivan. [Venezuela] Salto Mortal electronic. disk 2. Christian Calon. Minuit. Takayuki Rai [Japan]. Piano and live electronics. Alistair MacDonald and Nicholas Virgo {UK}. [pro] Arrivals [Andrew Lewis, UK]. Unrecognizable sources. 1990 Electroacoustic Prizes. Mura-lki [explosive breath]. Kjell Johnson, Norway. Flute and computer manipulations of flute sounds. Paul Dolden Below the Walls of Jericho. Instrumental sounds multi- tracked [400 tracks]. Robert Rowe [US] Flood Gate--violin, piano, interactive computer system. Frances White, Valdrada, USA. Computer treatment of vocal sounds. Carmelo Saitta, Italy-Argentina, La Maga O El Angel de la Noche. Instrumental sounds digitized and processed. Frances White, Still Life With Piano, piano and tape. Gabriel Valverde, Argentina. Cumulos--electronic sounds which move and form like galactic cumulus.

Coda to 1990 disks. 1973-75 winners. Eugeniusz Rudnik, Poland. Mobile [1972, 73 winner]. Speech fragments from news broadcasts "the initial material acquired such an abstract form that it could be used as a substance for a musical composition" combined with cello and singing. Zoltan Pongracz--Hungary. Mariphonia (1972, 74 winner] Sung vowels, declamations, weeping, laughter, radically transformed. Based on the dimensions of the body of his wife, Maria. Jose Vicente Asuar--Chile. Guararia Repons [1968, winner 75]. Instrumental sounds processed and electronic sounds. "Electronic sounds can lead. paradoxically, towards primitive forms, towards sound forces that are found in nature, in a virgin and primitive world...All these sounds can be simulated and mastered by the electronic technology with musical end in view." Eduardo Kusnir [Argentina-Venezuela]. La Panaderia [1970, 75 winner] electronic sounds processed using graphic-analogic converter similar to that used by Xenakis. Electroacoustic Prizes 1988. This year marked the first time that the competition was divided into three sections, and the Magisterium was introduced. Paul Dolden, In the Natural Doorway We Crouch. instrumental sounds, multi-tracked. Robert Normandeau Rumeurs (Place Ransbeck). Acousmatic. Horacio Vaggione, Argentina. Tar. Bass clarinet and tape. James Aikman, and Armando Tranquilino, USA. Tragoidia/Komoidia. Instrumental sounds, electronically treated. Vivian Adelberg Rudow, USA. With Love (1986) for cello and tape. Tape uses vocal sounds and electronically produced sounds. Disk 2. Ake Parmerud, Sweden, Repulse. Electronic and instrumental sounds, processed. Poulard Gabriel, France, The Memory of the Stones. Analog and digital electronic sources. Ake Parmerud, Sweden, Yan. Tape and percussion. Tape part is electronic sources. Ricardo Mandolini, Argentina, Microrreflexiones. Source is soprano voice, sometimes radically processed. Lothar Voigtlander, DDR, Maybug Fly. Uses extracts of known songs, at times radically processed.

Discontact! II. 1995. Montreal: Canadian Electroacoustic Community CD. Ned Bouhalassa, Move ; Ian Chuprun Duet; Francis Dhomont L'Ÿlectro (inŸdit); Daniel Feist Diptych; Michel Frigon ItinŸraire au CrŸpuscule; Gilles Gobeil Le vertige Inconnu; Monique Jean Embrace; Kathy Kennedy Music Box Ii; Frank Koustrup Woodsotck to Detroit; Daniel Leduc RŸponse impressioniste; Robert Normandeau Spleen; Er Polen .TRANse.SEPTem. Laurie Radford enclave; Jean Routhier Christof Migone and Michel CotŸ Sous les dŸcombres...; FrŸdŸric Roverselli L'Eveil de la citŸ; Claude Schryer 3 Radiolude; Pascale Trudel Le Poisson Qui Cache l'Oiseau; John Winiarz Jack in a Music Box; Egils Bebris Hockey Night in Opera; Gustave Ciamaga Possible Spaces No. 1; Janet Cross Pleasant Tasks; Rob XCruikshank Starting from the House, Working Outwards; Bruno Degazio Jolly; Robert Del Buonon Harmonica; Markos Lekkas Chronographica Delta; Andra McCartney Arcade '94; Sarah Peebles Nocturnal Premonitions; Randall Smith Fletting Wheels of Changes; E.C. Woodley Abide With Me; Wes Wraggettt Chants of the Apocalypse; Mara Zibens Siquppalavuk/It Sounds Like Breaking; Bentley Jarvis What Are You Talking About? Chris Meloche Extensions V; Sergio Villarreal On the Other Shore; Gregory Jay Lowe Song of the Turtle; Diana McIntosh Processions; Gordon Fitzell Zipper Music; Garth Hobden Inukshut; Shawn Pinchbeck The Children Are the Future; Steven Heimbecker I Beat John Sobol at Pool Last Night; Daniel Scheidt Big Piano: Storm; Darren Dopeland Darkness Colours; Martin Gotfrit Guitar with Hut20; Fred Semeniuk Spraying; Barry Truax Bamboo, Silk and Stone; Barbara Golden Flaming Toast; Yasuhiro Ohtani Brain Wash; Christian Calon en vol; Thomas Gerwin Epilogon; Francisco L^{*}pez El mundo depuŸs de la invasion de los zorÁpteros: Daniel Zimbaldo Ritual of the Rose. 4 environmental references in program notes [but not environmental sounds used], 10 soundscape.

Electroacoustic Music. MontrŸal: Radio Canada International, 1990. A four CD set, this collection was made by Radio Canada to document major works of electroacoustic music in Canada. Hugh Le Caine, [environmental sounds]Dripsody; Maurice Blackburn, Blinkity Blank; Gustav Ciamaga, pour M; Francis Dhomont, [er]Th‰me de la fuite; Bengt Hambraeus, [er]Intrada: "Calls"; Alcides Lanza, ...There is a way to sing it...; Kevin Austin, [soundscape]Tears of Early Morning Rain and Cat Fade Away; Sergio Barroso, La Fiesta; John Celona, Cordes de nuit; Yves Daoust, [er]Adagio; Marcelle DeschŠnes, [er]Big Bang II; David Keane, Lumina; Diana McIntosh, [er]...and 8:30 in Newfoundland; David Jaeger, Fancye; Larry Lake, Israfel; James Montgomery, Saigon; Bruce Pennycook, The Desert Speaks: Praescio-III; Jean PichŸ, Taxis to Burning Sky; Ann Southam, [er]Fluke Sound; Barry Truax, Arras; Hildegard Westerkamp, [soundscape]Cricket Voice; Serge Arcuri, Murmure; Christian Calon, La disparition; Bruno Degazio, HeatNoise; Jean-Franlois Denis/Eric Brown, [er]FrŸquents passages; Paul Dolden, Below the Walls of Jericho; Gilles Gobeil, [soundscape??]Rivage; Robert Normandeau, Matrechka; Daniel Scheidt, Obeying the Laws of Physics; Claude Schryer, [soundscape]Chasse. 1 environmental sounds, 7 environmental references, 4 soundscape.

Electroacoustic Music. Stockholm, Sweden: Swedish Information Center, 1993. Akos R°zmann - Klagovisor [inst]; Akemi Ishijima (Fem) - Urskogen [inst ER]; Jens Hedman and Erik Mikael Karlsson - Anchorings/Arrows - inst; ýrjan Sandred - Det tredje perspektivet - computer; William Brunson - Inside Pandora's Box - voice and processing; Tamas Ungvary - Gipsy Children's Giant Dance with Ili Fourier - computer; ke Parmerud - KrŸn - electronic; Rune Lindblad - Worship. Acousmatic; Jonas Broberg - Buccharelli's Lamento - synthesized; Johan Mowinckel --Stanna! acousmatic; Erik Mikael Karlsson La Disparition de l'Azur. Thomas Bjelekborn - Within Without. Voice and instrumental processed; Sten Hanson Suite Brasiliera Inst processed.

Electro Acoustic Music: Classics. Neuma 450-74 CD, 1990. Includes Edgard Var‰se: Po‰me Electronique (1957-8). This, his last completed work, uses similar sound sources to earlier pieces: bells and sirens, human voices, mechanical and percussive timbres. Milton Babbitt's Phonemena (1975) is scored for soprano and synthesized tape. Roger Reynolds's Transfigured Wind IV. Electronic. Milton Babbitt's Philomel, for soprano, recorded soprano and electronically synthesized sound. Iannis Xenakis's Mycenae-Alpha was composed in 1978 on the UPIC system at the Centre d'Etudes de Mathematique et Automatique Musicales in Paris. "Xenakis's music depends on giving aural life to shapes and patterns of movement, whether invisible, [sic] as in a cloud, or invisible, as in the movement of molecules in a gas. Converting these images to sound requires a facility with complex mathematics. In 1976, Xenakis began a way to side-step those complex calculations and developed a drawing board which is attached to a computer which converts images into sound."

Electroacoustic Music II. Acton, Mass: Neuma 450-75 CD, 1991. Gerald Shapiro. Phoenix, sung by Electric Phoenix. Jonathan Berger, Island of Tears. Synthesized sounds, ref. to immigration to US. James Dashow-Disclosures of cello and computer. Instrumental. John Duesenberry, Agitato. MIDI. Peter Child, Ensemblance. instrumental. No reference to how collection came about.

Electroclips. 1990. Montreal: empreintes DIGITALes, Montreal. CD. Electroacoustic works by 25 composers from Canada, the United States, and Mexico. Michel Smith, style de bougalou, instrumental and voice; Craig Harris, Somewhwere Between, inst; Jean-Francois Denis, Point-Virgule, acousmatic; John Oswald, Bell Speeds, acousmatic; Yves Daoust, mi bŸmol, acousmatic with ER; Claude Schryer, Les Oiseaux de Bullion, soundscape; Martin Gotfrit, The Machine's Four Humours, electronic ER [or soundscape of the machine]; John Oliver, Marimba Dismembered, instrumental; Zack Settel, Skweeit-Chupp, fm synthesis, voice and percussion; StŸphane Roy, RŸsonances d'Arabesques, acousmatic; Daniel Scheidt, What If, computer; Bruno Degazio, Humoresque 901534, algorithmic; Richard Truhlar, Simulant, electronic; Gilles Gobeil, Associations Libres, inst; Robert Normandeau, BŸdŸ, acousmatic vocal; Laurie Radford, Landlocked, soundscape; Christian Calon and Claude Schryer, Prochaine Station, soundscape; Hildegard Westerkamp, Breathing Room, soundscape; Amnon Wolman, Man-bridge, ER vocal; Francis Dhomont, Qui est la? acousmatic; Roxanne Turcotte, MinisŸrie, not quite acousmatic:—narrative, uses some environmental sounds, ER reflection on movie sounds; Christian Calon, Temps Incertains, Dan Lander, I'm looking at my hand, not exactly soundscape either, more narrative ER; Javier Alvarez, Mambo a la Braque, instrumental; Charles Amirkhanian, Bajanoom, instrumental. 5 soundscape works, all Canadian. 4 environmental references [3 canadian]

Electronic Music. Turnabout TV 34036S LP, 1966. Ilhan Mimaroglu, Agony. electronic [Columbia-Princeton]; John Cage, Fontana Mix; Luciano Berio, Visage. vocal gestures and inflections - Cathy Berberian.

Electronic Music. Folkways. University of Toronto, 1967. Dripsody. Hugh Le Caine. acousmatic; Dance R4/3 Myron Schaeffer electronic; Summer Idyll Arnold Walter, Harvey Olnick, Myron Schaeffer. electronic; Noesis Robert Aitken. electronic and some concrete sections; Fireworks Val Stephen electronic; The Orgasmic Opus Val Stephen. electronic; Collage J.D. Robb electronic; Pinball. Jean Ivey Inferno Victor Grauer electronic.

Lisboa! a soundscape portrait. WDR CD ZP 9401, 1994. Prologue, Arrival, Trams/Soundmarks and Signals, Cemit‰rio dos Prazeres, Fado/Voices, Mercado da Ribeira Nova, Hilding from noise, Bairro Alto and Bica Soundwalks, Insider River Tejo, Benfica plays the Alfama is listening, Marchas Populares, Epilogue. All by Michael Rusenberg and Hans Ulrich Werner.

Madrid A soundscape collective. WDR CD ZP 9501. Pedro Elas Mamou Iguales para hoy; Michael Rusenberg El ritmo del ciego; Hans Ulrich Werner Metason; Francisco Lopez Un recorrido bajo el engranaje de la mÁquina de viento y arean; Mamou/Rusenberg/Werner/Lopez Cadavre exquis; JosŸ Luis Carles/Isabel Lopez Barrio Latidos, Escenas sonoras de Madrid.

Musique Concr‰te. Editions de la bo-te Í musique, 1960. LP. Diamorphoses, lannis Xenakis. clock sounds transformed acousmatically. Etude Aux Sons Tendus. Luc Ferrari acousmatic; Ambiance I Michel Philippot Acousmatic; Aspect Sentimental Henri Sauguet, acousmatic; Etude Aux Sons Pierre Schaeffer, acousmatic; Etude Aux Accidents Luc Ferrari instrumental--rhythmic agitations of a note of prepared piano; Etude Aux Allures. Pieere Schaeffer acousmatic.

Musique Experimentale II. Editions de la bo-te Í musique, 1960.?? actually after 1963

LP. GRM Luc Ferrari Tautologos I Liner notes focus on syntax. Acousmatic but sounds electronic; Ivo Malec Reflets. acousmatic; Earle Brown Times Five. Instrumental; Francois Bayle. Vapeur. Instrumental; Francois-Bernard Mache. Terre de Feu. Philippe Carson-Turmac.

New Electronic Music from Leaders of the Avant-Garde. Columbia Records 7051, 1967. Includes John Cage: Variations II (1961), performed by David Tudor. This is a composition indeterminate of its performance, for any number of players, any sound-producing means. David Tudor's realization is for amplified piano, using a contact microphone and phono cartridge, as well as various materials such as plastics and toothpicks to stroke, scrape and pluck the strings. Milton Babbitt's Ensembles for Synthesizer "exemplifies the distinguishing characteristics of Babbitt's composition, notably his adherence to the twelve pitch classes of the tempered scale, and the minimal use of sound material outside this domain. The work demonstrates the kind of high-speed virtuosity of which the synthesizer is capable" (liner note, David Behrman). Henri Pousseur's Trois Visages de Li‰ge (1961) uses electronic sounds with voice and one pizzicato chord. The words are derived from poetry including the street names of Li‰ge, Belgium.

New Music for Electronic and Recorded Media. Arch Records 1750, 1977. Includes Johanna M. Beyer's Music of the Spheres (1938), scored for lion's roar, triangle, strings and electrical instruments, realized by the Electric Weasel Ensemble. Annea Lockwood's World Rhythms (1975) [soundscape] Pauline Oliveros's Bye Bye Butterfly (1965) is a live electronic piece. The compositional mix includes excerpts from Puccini's Madame Butterfly. Laurie Spiegel's Appalachian Grove (1974) is one of her first pieces of computer-generated tape music, composed after her study of Max Mathews's GROOVE programming system. Ruth Anderson's Points (1973-4) is built purely from the sine tone, which Anderson describes as "a single frequency focal point of high energy." Laurie Anderson's New York Social Life and Time to Go (for Diego), both from 1977, are early examples of Anderson's anecdotal critiques of American culture. 1 soundscape 1 environmental reference

Prix International Noroit-LŸonce Petitot 1991 de composition musicale acousmatique. Arras: Noroit, 1992. 1st prize Robert Normandeau, Eclats de voix--acousmatic, some short recognizable sections. 2nd prize Ake Parmerud, Les Objets Obscurs. acousmatic--single sound sources. Todor Todoroff, Obsession--mention. Acousmatic--fragmented texts, processed water sounds. Serge Morand, Naives--acousmatic. Philippe Le Goff, Meta Incognita. "Anirniq is spirit."

Soundscape Brasilia Zen Studio Brasilia, 1994. Juliane Berber and Christian M. Bassay Blum RessonÎncia; Celso Araujo, Marcelo Araujo and Joao Claudio Silveira D Ambulante; Claudio Vinicius and Bene Fonteles Dreamwalk; Fernando Corbal Exomapascape; Damian Keller Brasil[espaco]ia; Ernesto Donas Goldstein, Juan carlos Arango and Luis Francisco Latorraca Brassllha; Luis Roberto Pinheiro Planos; Hans Peter Kuhn HP's Estacionamento.

The Vancouver Soundscape 1973 1996. Burnaby BC: Cambridge Street Records CSR-2CD 9701, 1997. Ocean Sounds, Squamish Narrative, Entrance to the Harbour, Harbour Ambience, The Music of Horns and Whistles, Vancouver Soundmarks, Homo Ludens Vancouverites at Play; The Music of Various City Quarters; New Year's Eve in Vancouver Harbour; On Acoustic Design. All by World Soundscape Project. disk 2: Darren Copeland Recharting the Sense; Sabine Breitmaster The Hidden Tune; Hans Ulrich Werner Vanscape Motion; Barry Turax Pacific Fanfare; Claude Schryer Vancouver Soundscape Revisited.

World Soundscape Project collection: The Vancouver Soundscape, Soundscapes of Canada (10 one-hour CBC programs), Radio Program About Radio Programs, Howard Broomfield; Maritime Sound Diary, Barry Truax; Bells of Perce, Bruce Davis; Soundscape Study, Barry Truax; Play and Work, Bruce Davis. 1974.

- 1 The Canadian collection is available at York University: all three at University of Toronto.
- 2 For instance, a sound slowed down, as in Westerkamp's Cricket Voice, retains the same rhythmic patterns as the original at a slower tempo, and is related in timbre, while the pitch of the sound changes. This kind of sonic manipulation is not as radical as changing the actual envelope or shape of the sound, as is often practised in musique concr‰te.
- $\ensuremath{\mathtt{3}}$ The producers made this distinction in the liner notes.

<u>home</u> <u>introduction</u> <u>in the studio</u> <u>moments of laughter</u> <u>soundwalking</u> <u>dissertation</u>