# CD I: THE VANCOUVER SOUNDSCAPE 1973

produced by the World Soundscape Project, Simon Fraser University

- [1] Ocean Sounds (6:04)
- [2] Squamish Narrative (5:47)
- [3] Entrance to the Harbour (7:06)
- [4] Harbour Ambience (6:31)
- [5] The Music of Horns and Whistles (3:12)
- [6] Vancouver Soundmarks (3:49)
- [7] Homo Ludens Vancouverites at Play (5:06)
- [8] The Music of Various City Quarters (8:11)
- [9] New Year's Eve in Vancouver Harbour (8:24)
- [10] On Acoustic Design (20:24)

An introduction to the science and art of composing the soundscape, narrated by R. Murray Schafer, with recorded examples of good and bad acoustic design in Vancouver.

### Cover:

Imprinted over the photo of the Vancouver skyline is a graphic level recording of a concert of frogs, interrupted by a noisy automobile. The car succeeded in silencing the frogs for several seconds, but eventually they returned. This example has been adopted for The Vancouver Soundscape as symbolizing the destruction and recovery of the natural soundscape. It may be heard on CD I, ID 10.

#### Credits:

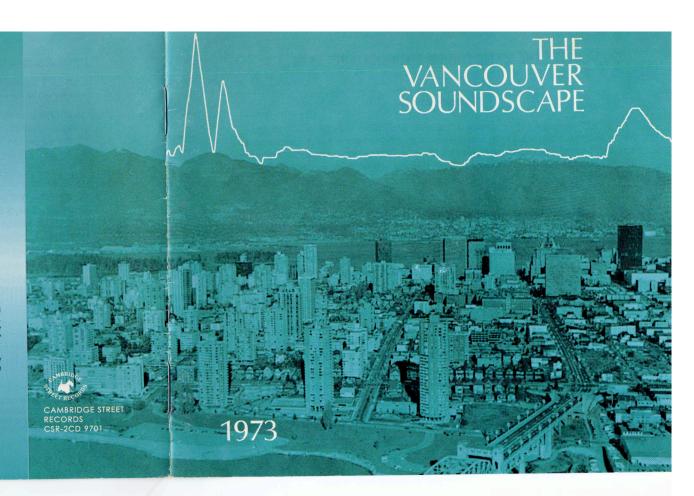
Except for New Year's Eve in Vancouver Harbour all sounds on CD I were recorded between September 1972 and August 1973. The recordists were Howard Broomfield. Bruce Davis, Peter Huse and Colin Miles. Bruce Davis supervised the mixing of the recordings. The Vancouver Soundscape was directed and edited by R. Murray Schofer.

The Music of Various City Quarters (ID 8) was remixed by Barry Truax for this CD. New Year's Eve in Vancouver Harbour (ID 9) was recorded by Hildegard Westerkamp on New Year's Eve 1980-81.

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### Introduction

CD I contains excerpts from the original two-record set of The Vancouver Soundscape, which was published more than twenty years ago. It accompanied and complemented a book of the same name. The following text is an introduction to the recordings written by R. Murray Schafer in 1973, who was the Director of the World Soundscape Project at that time.

The Vancouver Soundscape [was] undertaken by researchers of the World Soundscape project in 1973. The aim of the World Soundscape Project is to bring together research on the scientific, sociological and aesthetic aspects of the acoustic environment. The Vancouver Soundscape is our first field study of an actual environment, that of the city in which the project originated.

It has not been easy to reduce the hundreds of tapes collected to a manageable form, and the sounds selected for inclusion here are not intended so much to cover the subject as to illustrate various points discussed in detail in the companion book.

Sometimes continuous and unedited recordings of environments have been included; at other times, sounds have been mixed or spliced together arbitrarily for comparative illustration. The liner notes explain the techniques used.

To record sounds is to put a frame around them. Just as a photograph frames a visual environment, which may be inspected at leisure and in detail, so a recording isolates an acoustic environment and makes it a repeatable event for study purposes. The recording of acoustic environments is not new, but it often takes considerable listening experience to begin to perceive their details

accurately. A complex sensation may seem bland or boring if listened to carelessly. We hope, therefore, that listeners will discover new sounds with each replay of the records in this set .... Each of the sequences has its own direction and tempo. They are part of the World Symphony. The rest is outside your front door.



World Soundscape Project team at SFU in 1973. Left to right: R. Murray Schafer, Bruce Davis, Peter Huse, Barry Truax, Howard Broomfield.

### [1] OCEAN SOUNDS

Four examples of Pacific Coast surf from the Vancouver area. The first consists of gentle ripples on a pebble beach. This is followed by small wavelets, lapping on a long, coarse, sandy beach (0:44). Both were recorded on Vancouver Island. These are followed by rougher waves, churning in a small, rocky cove on Point Atkinson (1:21). Full surf comes next, recorded on a gusty March afternoon on Vancouver's sandy Wreck Beach (3:35).

#### [2] SQUAMISH NARRATIVE

The outdoor ambience throughout this cut is from the marshy west end of Westham Island, on the George C. Reiffel Waterfowl Refuge. Superimposed over this is the voice of Squamish Indian, Herbert George (1:05), recorded at his home on the Burrard Reserve. He tells us how he makes racing canoes out of 60-foot cedar logs. The language is his mother's tongue, Squamish; but his narration is halting because he has forgotten many of the words. During the pause (at 4:18) you may hear him mutter, "How do you say that now?" Herbert George uses white man's tools and their names appear conspicuously in his narrative (spirit level, square, bit, plane, sander, marine varnish).

The Reiffel Waterfowl Refuge, being situated a few miles south of Vancouver International Airport, is buzzed frequently by airplanes and one can be heard in this section (approximately 2:00 to 3:45). The slight rushing sound of the wind in the microphones, which can occasionally be heard, has been left that way intentionally.

### [3] ENTRANCE TO THE HARBOUR

The sequence begins with the great diaphone at Point Atkinson, the oldest and strongest of Vancouver's foghorns. Built in 1912, it has been heard 20 miles away and produces an ear-splitting intensity of 137 dB, 25 feet from the horn.

Attended by a lighthouse keeper, the Point Atkinson horn is scheduled for replacement by an imitation diaphone as part of an unfortunate scheme by the Canadian Government's Ministry of Transport to automate all marine navigational aids. [ed. note: this old diaphone was replaced by a less powerful, higher-sounding, two-tone air horn in 1976, which itself has been replaced by a weaker electronic horn in 1996, see CD2, ID 15].

As the sequence moves in a simulated entrance voyage into Vancouver Harbour, two other smaller foghorns come into earshot- the Calamity Point horn (0:28), and the Prospect Point horn (2:03), as well as the Burnaby Shoals fog bell (1:18). The sequence ends with the docking of the CPR Ferry, *Princess of Victoria*, at her berth in Coal Harbour. The creaking door (6:03) is at the entrance of the waiting-room.

### [4] HARBOUR AMBIENCE

This is a compilation of various harbour sounds. Except for the opening minute, all the material was recorded near Prospect Point and Brockton Point, and has been combined into a single sequence. The tug horn (0:55) and the two boat horns (1:26 and 3:41) actually occurred about twenty minutes apart and they have been brought together for convenience. There are six seaplanes in this sequence (0:49, 2:40, 3:07, 3:24, 3:45, and 4:18). Of these the second, third and fourth occurred just as they appear on the record, just seconds apart. They give some impression of the persistence of this sound over Vancouver Harbour.

The sequence concludes with the sound of a man reeling in his fishing line at Brockton Point (5:03), then casting again. The rod had a small bell attached as a warning device, so that he could put it down and enjoy the comings and goings through the Narrows. The factory whistle (6:00) comes from the industrial North Shore, across the Narrows.

### [5] THE MUSIC FOR HORNS AND WHISTLES

This sequence consists of a collage of horns and whistles. The steam whistles at the beginning are each unique, and contain rich harmonic spectra. And though the air whistles which follow are mass produced, many of them also preserve distinctive features, particularly when they are sounded in various ways by their operators.

The whistles appear in the following order:

- 1. (0:06) Steam shift whistle at loco Oil Refinery, recorded at the refinery entrance.
- (0:24) Steam whistle of the CNR\* ship, Prince George, recorded at the foot of Main Street.
- (0:47) CPR air-powered steam shift whistle, recorded at the foot of Drake Street, False Creek area.
- 4. (0:56) Air horn of the S.S. Federal 7, recorded under Lions Gate Bridge.
- (1:10) Air horn of a tug, with barge in tow, signaling for swing-span bridge over the Fraser River to open.
- 6. (1:19) Air horn of CPR\*\* freight train, recorded in the Fisherman's Wharf area.
- 7. (1:43) Air horn of CPR ferry, Princess of Victoria, recorded at Coal Harbour.
- (1:50) Air horn of B.C. Hydro train, recorded between Granville and Burrard Bridges, False Creek area.
- 9. (1:59) Air horn of B.C. Hydro train, recorded under Granville Bridge, False Creek
- 10.(2:05) Air horn of an unidentified freighter, recorded under Lions Gate Bridge.
- 11.(2:17) Air horn of B.C. Hydro train, recorded at the foot of Fir Street, False Creek area.
- 12. (2:20) Air horn of CPR train, recorded at the foot of Main Street.
- 13. (2:29) Air horn of an unidentified freighter, recorded under Lions Gate Bridge.
- 14. (2:32) Air horn of CPR train, recorded at the foot of Main Street.

- 15. (2:49) Air horn of B.C. Government ferry, *Queen of Tsawwassen*, recorded at Horseshoe Bay.
- 16. (2:55) B.C. Hydro's "O Canada" air horns, sounding 12 o'clock noon, recorded at the corner of Burrard and Robson Streets.
- \* Canadian National Railway
- \*\* Canadian Pacific Railway

### [6] VANCOUVER SOUNDMARKS

This sequence contains three Vancouver soundmarks. A soundmark is a prominent feature of a soundscape, possessing properties of uniqueness, symbolic power or other qualities which make it especially conspicuous or affectionately regarded.

First there is the O Canada Horn (0:14), recorded from Stanley Park approximately two miles away from the horn. Compared to the previous recording, which was made a few blocks away where it measured 108 decibels, at this distance the horn is considerably less vulgar. It fits into the scale of the soundscape more easily, and the distance helps to smooth out the mechanical angularity of the national anthem melody.

The O Canada Horn was first heard in Vancouver on June 19, 1967. It was the brainchild of local engineer Robert Swanson, who thought it up on his own to celebrate Canada's 1967 Centennial. It has been playing (in E major) steadily ever since, except for a short interlude (January 26 - February 10, 1972) when, following a "mixed public reaction", it was temporarily silenced. [ed. note: compare this to the recording on CD II, IDs 1 & 12, recorded from Brockton Point after the O Canada Horn had been relocated on top of Canada Place in 1994].

The second soundmark is the Nine O'Clock Gun (0:36), also recorded in Stanley Park, and heard echoing off the buildings and mountains around the harbour. Built in 1816,

and originally used (some say) under Wellington, the six-foot muzzle-loader was donated to the province in 1856, and came to Vancouver from Esquimalt in 1894. It is fired nightly at nine o'clock and, on clear and cloudless nights, has been heard as far away as Mission, 42 miles to the east.

The third soundmark is preceded (0:58) by several seconds of West Coast rain on the recordist's umbrella, as he waited for the Bells of Holy Rosary Cathedral to begin (1:28). Of 211 churches in Vancouver, only 11 have real bells, and of these the Bells of Holy Rosary are the most interesting. Although they have had periods of inactivity as well, a campanologist from England has recently taken charge and now the bells have a number of apprentice ringers. It is not easy to learn the technique of ringing, for the bells must be paced with great accuracy.

The recording here was made on Saturday, June 16, 1973, when a visiting group of English ringers came to the Cathedral and for the first time in North America rang an "Eight-Splice Surprise Major" peal, consisting of 5,024 changes. The beginning of the peal is cross-faded (2:37) to the end, which came 3 hours and 3 minutes later. The peal went unnoticed by all but a small number of passers-by and one TV newsman who couldn't understand why the ringers were making "all this racket."

### [7] HOMO LUDENS

This sequence has a *homo ludens* quality - man at play. It opens with children's voices, recorded on the playground of Seymour School in the east End, near the CNR tracks.

The triplet of train whistles (beginning at 0:24) illustrates two different whistle tunings. There are two trains. The first is tuned to E-flat minor, with the root of the chord on 311 Hertz. This is the common tuning for Canadian trains. It was developed by Robert Swanson of the Airchime Manufacturing Company of Vancouver. The whistle of the second train, though produced by the same manufacturer, is a semitone lower than the standard tuning, and is perhaps the result of Doppler-shifting.

The shouting voices of the children are cross-faded into the shouting voices of adults, recorded at the Vancouver Stock Exchange (1:07). Some friendly old timers follow, singing their hearts out on a Saturday night in Gastown (1:50).

The infield patter from a suburban baseball game at Coquitlam's Mundy Park (2:59) takes on a ritualized character as one team shouts encouragement to the pitcher (Benny) and the other team shouts to the batter (Al).

The sequence concludes with the sounds of the playground again (4:06), as several boys run past the microphone. Actually the playground sounds have formed a soft unifying background throughout this whole sequence.

### **181 THE MUSIC OF VARIOUS CITY QUARTERS**

Vancouver's multi-cultural makeup results in a large variety of musical activity throughout the city. This sequence begins with an example of Balkan singing recorded at the Vancouver International Folk Dance Society, and leads (0:48) to the Greek Islands Restaurant and its traditional Greek dancing. Since it is located near the docks it is frequented by many Greek sailors as well as local people of Greek extraction. The sound of bottles and dishes smashed on the dance floor demonstrates the patrons' appreciation of the skill and expressiveness of the dancers. The proprietor can also be heard sweeping the glass off the floor - the cost of which is added to the patrons' bills.

The next music heard (2:50) was recorded at the Chinese Musical Society, an organization that rehearses Friday night on Pender Street. In addition to the traditional instruments, a violin and saxophone can be heard. In the background mah-jong tiles from adjacent gaming tables can just be detected. Vancouver's Chinese community celebrates a traditional holiday with a performance of the Lion's Dance (3:55). The simultaneous explosion of firecrackers and drum beats chases away evil spirits and calls back good fortune. The recorded excerpt is remarkable for an example of synchonicity, for at one point (4:46 - 4:55) the rhythm of the firecrackers and drums synchronize exactly.

Next are heard various street musicians (5:05) attempting to be heard above the noise of traffic, including the musical group "Sunshyne" (5:30) recorded at the Royal Centre in downtown Vancouver, where they entertain people on the street at lunchtime. The revival of street-singing in Vancouver dates from about 1965, and it may possibly be interpreted as a desire, particularly by young people, to rehumanize the urban environment. A virtuosic harmonica player (6:10) can be heard finding musical inspiration from the surrounding traffic sounds. The finale is performed by Captain William Coxwell of the Burnaco (a small coastal freighter) on his tuned horns (7:33), as he passes under Burrard Street Bridge. The tune is the Canadian folk song "Alouette", phrased in his own special way, followed by a few bars of "How Dry I Am". Because of some residents' complaints, Captain Coxwell no longer plays his horns in Vancouver harbour.

# [9] NEW YEAR'S EVE IN VANCOUVER HARBOUR

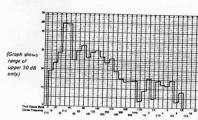
Every New Year's Eve at 12 midnight all the boats in Vancouver Harbour sound their horns and every year this sonic event sounds different. Some years it lasts for only 3 minutes, in other years as long as 15 minutes. Sometimes one hears mostly deep sea ship horns, at other times mostly high "squeakers" from small boats. Like a chance composition it never sounds the same.

This recording is not part of the original *Vancouver Soundscape* but was recorded some years later by Hildegard Westerkamp near the Nine O'Clock Gun, on New Year's Eve of 1980-1981. This recording is particularly striking, because of its interesting musical structure, the variety of horn sounds, and the contrasts in dynamic range. Compare for example, the very loud horn blasts of the Princess of Vancouver and the tiny musical sounds at the end of the recording from a nearby recorder player!

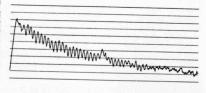
# [10] ON ACOUSTIC DESIGN

A talk by R. Murray Schafer on good and bad acoustic design in Vancouver. The sounds introduced as examples are:

- 1) A section of Vancouver's Noise Abatement By-law No. 2531;
- 2) Moozak at the Oakridge Shopping Mall;
- 3) Electrical hum at the Simon Fraser University library;
- 4) An elevator at Simon Fraser University;
- 5) An old D.C. elevator in the Empire Building, Hastings Street;
- 6) A ventilator at Eaton's Department Store;
- 7) Waterfall and generator at the Nitobe Gardens, University of British Columbia;
- 8) Waterwheel at the Conservatory of Queen Elizabeth Park;
- 9) Bamboo bridge and bird-song at the Conservatory of Queen Elizabeth Park;
- 10) Parabolic bridge, Stanley Park;
- 11) Pender Street store ambience;
- 12) Frogs, recorded at Pitt Meadows.



Third-octave band frequency analysis of a recording from Oakridge Shopping Mall, Vancouver, showing intense presence of low-frequency ventilation noise which background music fails to cover.



Graphic level recording showing multiple echoes produced by an impact sound under a small parabolic bridge, Lost Lagoon, Stanley Park, Vancouver.