
The Icebreaker: Soundscape works as everyday sound art

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The following discusses the potential of soundscape work to reveal new aspects of our everyday aural environments. Openness to the voice(s) of one's sonic surroundings is maintained as a hallmark of soundscape works, and also a key component of sound art more generally. Different perspectives and questions are articulated, with a consistent focus on the variety of spaces engaged by both sound(scape) artists and listeners. A case study is presented – a recently initiated sound art project on the part of the author entitled *The Icebreaker*. The latter is a musical instrument, performance piece and interactive installation made from piezo microphones and ice. Prepared compositions, including soundscape works, are diffused at different moments when one 'plays' *The Icebreaker*. I describe this emergent work as an example of the sort of considerations and negotiations that are at the heart of soundscape/sound art composition. My aim is to demonstrate how sound artworks bring us to attend to sounds we formerly failed to notice, revealing our own reactions to these stimuli at the same time.

1. INTRODUCTION

The following discusses the potential of soundscape work to reveal new aspects of our everyday aural environments. Openness to the voice(s) of one's sonic surroundings is maintained as a hallmark of soundscape works, and also a key component of sound art more generally. Different perspectives and questions are articulated, with a consistent focus on the variety of spaces engaged by both sound(scape) artists and listeners. A case study is presented – a recently initiated sound art project on the part of the author entitled *The Icebreaker*. The latter is a musical instrument, performance piece and interactive installation made from piezo microphones frozen into different pieces of ice (figure 1). Prepared compositions, including soundscape works, are diffused at different moments when one 'plays' *The Icebreaker*. I describe this emergent work as an example of the sort of considerations and negotiations that are at the heart of soundscape/sound art composition.

Deliberate re-presentations of specific sounds or sound recordings within works such as soundscape pieces draw us to attend to our mental reactions to these stimuli. This is often a surprising experience,

such as when soft sounds that contribute to the babble of an everyday environment are recorded, amplified and placed front and centre in a mix. Similarities and differences from one's own experiences are highlighted. Attention is drawn to the soundscapes we come into contact with every day.

We are at the centre of our own shifting soundscape in terms of aural perspective – however, the perimeter of this zone overlaps with many other spaces, both public and private. There are also many points of reference within each zone, as soundscape studies ask us to consider relationships to every sound that we can possibly attend to. Microphones and amplification enhance this capacity. Soundscape composition involves making field recordings with portable equipment (sometimes referred to as 'soundwalks'). These samples are then edited, processed and mixed into evocative new works that communicate the feelings stirred in the recordist (both in the field and afterwards in the studio) as well as a sense of where these affective responses took place.¹

The creative instincts (and skill) of the soundscape composer are present even in seemingly simple pre-production choices such as deciding where to walk and point a microphone. These constitute the first of many acts of mixing through listening for the soundscape artist. With *The Icebreaker*, the microphones are placed inside the ice I use. This is a different type of 'field recording', involving a different type of listening from the 'soundwalking' practices promoted by the World Soundscape Project and other soundscape initiatives. A space is created by the work that promotes listening to sounds that are well known to those living in countries that experience sub-zero winters, or who cool their drinks with ice cubes. These everyday sounds are often heard, but rarely listened to (where 'listening' is understood as a type of affective-reflexive practice). *The Icebreaker* is at once

¹For information on my own audio art practice, please visit <http://opositive.ca>. For information on a soundscape research project around the Lachine Canal (Montreal, QC Canada) directed by Andra McCartney in which I participated, please visit the 'Lachine Canal: Journées sonores' project website at <http://s171907168.onlinehome.us/andrasound/lachine/>.

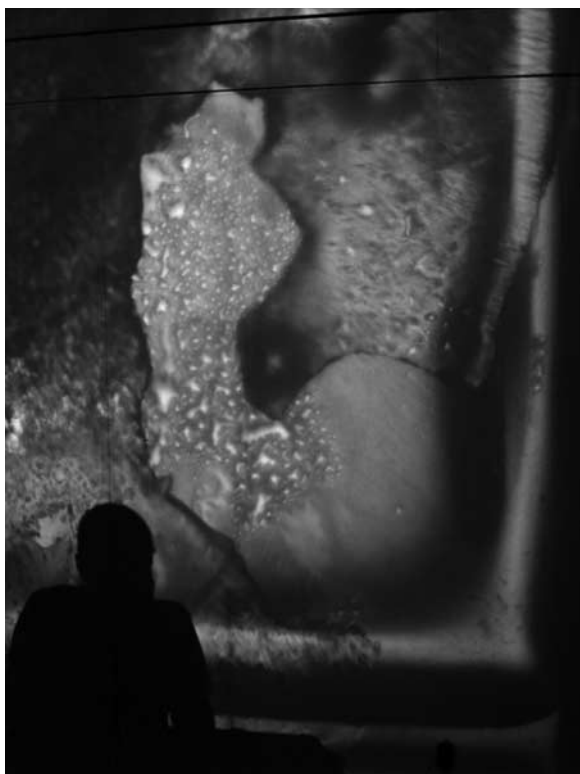


Figure 1. The Icebreaker.

constrained by its environment (indoor/outdoor, summer/winter, and so on) at the same time as it exceeds it through evoking other landscapes and/or everyday experiences of ice and water. The practices of environmental listening employed and promoted in the work resonate with the listening strategies of soundscape studies (Westerkamp 2002; Arquette 2004; McCartney 2004; Helmi 2006) as well as other articulations such as Goldstein's holistic listening (1988) and Ratcliffe's rhetorical listening (1999).

Making sense out of immediate experience is often a process that is unconscious. Ideas, concepts and memories are evoked by the sounds we encounter going about our lives. Attending to this activity allows one to reflect on the ephemeral foundations of our subjectivity. Sound artists are intimately familiar with this process of becoming more self-aware through listening at the same time as they acknowledge the deep impact our sonic environment has on our sense of self in any given moment.

Articulating this double potential offered by listening is key in raising awareness around the complexities of our modern soundscapes (as Westerkamp, Schafer and other members of the World Soundscape Project have demonstrated). Soundscape works composed from soundwalk or other field recordings demonstrate the capacity for 'revealing' within sound art through calling listeners to think about what they

might have heard but not listened to in their own everyday aural environments.

Soundscape work without the journey into the inner world of listening is devoid of meaning. Listening as a totality is what gives soundscape work its depth, from the external to the internal, seeking information about the whole spectrum of sound and its meanings, from noise to silence to sacred. (Westerkamp 2003: 121)

Crafting such self-reflexive experiences for an audience requires a familiarity with being surprised by sounds and what they call forth from one's self. This familiarity is bred through journeys into inner worlds of listening on the part of the sound(scape) artist, enabled through practices of recording and collecting sounds with an ear towards future works. One gathers sounds with an intuition as to what they might *reveal* when placed into new mixes. With this ethos in mind, I turn now to a more detailed account of *The Icebreaker* project before coming back to a wider discussion of the nature of this 'revealing' within soundscape and sound art practice.

2. THE ICEBREAKER PROJECT DESCRIPTION

I began working on *The Icebreaker* in February 2007.² This work can be described as a new musical instrument, sound installation and performance piece derived from frozen water and piezo microphones. The work enables the broadcast of a surprisingly large palette of sounds. Possibilities range from tones created by tapping the instrument's various surfaces, to subtle drips as the ice begins to melt. Different sizes of ice are used, as well as different objects with which to strike the ice, resulting in a sophisticated percussive instrument. The frozen microphones are also sensitive to static charges delivered through touching the ice with skin or metal. Output from the microphones can be passed through an array of effects pedals before being sent to speakers. These sounds can also be combined with prepared recordings, including soundscape pieces. Elements of *The Icebreaker* are modular and easily located in close proximity and/or at a distance from one another, allowing for different possibilities in terms of how the installation inhabits material and sonic architectures.

Initial ideas were developed and tested at home. Piezo mics were wrapped in plastic and then frozen into ice-cube trays filled with water. The resulting devices ceased to pick up ambient air vibrations,

²For images, video, audio and text regarding *The Icebreaker* project, please visit <http://icebreaker.opositive.ca>. This initiative was started in February 2007 and has received support from the Canada Council for the Arts, Concordia University's Faculty of Arts and Science (Montreal), Carleton University's Architecture Department (Ottawa) and the Senselab/Société des arts technologiques (Montreal).

perhaps unsurprisingly. But the mics were extremely sensitive to any percussive and/or touch-based interactions with the ice, resonating with a lovely ‘ping’ when tapped. They were also nearly invulnerable to feedback. This moment of discovery was reminiscent, for me, of previous soundwalking experiences and journeys through inner worlds of listening and intuition as described by Westerkamp above. Placing mics in unusual places is a habit I developed through working on soundwalking/soundscape projects. I do this because I know it can result in the recording of interesting sounds that I otherwise never would have noticed.

The audio fidelity of *The Icebreaker*’s piezo mics is not superb. This compromise, however, is essential, as the piezos are small and easily integrated into different pieces of ice without affecting the percussive resonance of these shapes. They are waterproof-able and can withstand strong amounts of pressure when frozen, struck, stepped on, and so forth. Lastly, piezos can be used to playback sounds instead of acting as microphones. While volume levels are not very loud, hanging pieces of ice can act as micro-speakers, inviting an audience to approach and touch an installed version of *The Icebreaker*, physically manipulating its hidden sounds.

This basic research was shared with various artists and groups over the past year and a half through dedicated research residencies, one-on-one workshops and studio visits. The current design of *The Icebreaker* incorporates over 12 pieces of amplified ice and can be run entirely off a 12-volt battery through the use of a converted car stereo. Crystal-clear audio fidelity is not essential in terms of this system, since the frozen piezos have a limited range of frequency and amplitude. This configuration can then be multiplied (2, 3, 4 times...) in order to create a surround-sound installation. The design is entirely portable and useful for a variety of different performance contexts (both indoor and outdoor). It also allows any given performance of *The Icebreaker* to occur without depending on the power grid. The system is unbalanced from the point of view of grounding, meaning that a/c hum is a constant threat. Battery power eliminates this issue (although direct input boxes with ‘ground lift’ settings often work when plugging into PA systems or recording devices). The 12-volt battery can also be charged using inexpensive solar panels, an act that points to some of the wider environmental concerns addressed by the project. These have to do with investigating the paradoxes of technologically based artistic responses to our society’s over-consumption of industrially produced electricity and the impact this has on global balances of ice and water.

Ice was also chosen for the production of sonic events in order to evoke a feeling of transition from

one state to another – highlighting the compellingness of rhythms derived through natural events (such as the beat provided by dripping water). Ice feels solid, until its constantly shifting nature is revealed as it melts in our hands or before our eyes. For audiences and players of *The Icebreaker*, this shift also registers with their ears. Ice has many possibilities for different shapes that themselves promote different styles of interaction. It also represents a particularly Canadian sonic material. If nothing else, the cold Canadian winter climate provides possibilities for very large or numerous ‘ice microphones’ to be built without resorting to indoor refrigeration (although the latter can be used tactically during other seasons).

The ‘ice mics’ can be used in a variety of ways for sound art performance – both ‘live’ and in the studio. One method involves freezing a mic into a thin sheet of ice. I can then rap on the ice, making swirling, skating-like sounds, and so on. But I can also push on the ice with my foot and eventually stand on top of it, creating very intense squeaking and cracking noises. Attempting to achieve silence becomes an interesting demonstration of the futility of trying to stand still. **Movie example 1** – ‘Frozen Puddle’ – shows a semi-choreographed moment with this component of *The Icebreaker*, where the ‘voice of the ice’ (as some have called it) makes itself heard.³

Another platform is called the ‘Ice Xylophone’. It is the most evocative, but also quite prone to unanticipated behaviour. The amount of dissolved air in the water used for freezing, for instance, dramatically affects how the ice responds percussively; the frequency and timbre of each piece is a result of this density, combined with the shape and size of the ice, how it is set (e.g. hanging or on the floor), how long it has been left to melt and crack, and so on. The ice xylophone uses ice mics shaped into different lengths of hanging cylinder. The pieces are hung in hard-to-reach places so that one’s whole body must be used to play the instrument, causing the ice components to sway around, sometimes smashing together. Short circuits, however, can become happy accidents (**Movie example 2** – ‘The Ice Xylophone’).

Sharing this technology with other sound makers has been particularly rewarding in terms of improvisations. **Sound example 1** represents one such moment, with myself on the Ice Xylophone, Suzanne Binet-Audet on the ondes martenot, Kareya Audet on laptop and David Madden on guitar. This excerpt was selected from a series of improvisations recorded

³Performer: Owen Chapman, Choreography: George Stamos, Additional Sound Design: Anna Friz, Lighting Design: Yvan Cazon, Video Editing: Laura Cohen. This excerpt was selected from documentation footage recorded on 8 May 2008 during a research residency in the Carleton University Architecture Department in Ottawa, Canada. This information also applies to ‘Movie example 2’ below.

live to two-inch tape on 29 June 2008 at the hotel2-tango recording studio, Montreal Canada (sound engineer: Howard Bilerman).

What *The Icebreaker* presents to both performer and audience is familiar and yet unexpected. It stirs up mental responses in the moment as well as later when walking over icy landscapes – breaking through our tendency to hear as opposed to listen to the different voices of our surroundings. The squeak of ice beneath our feet when crossing a frozen puddle in early winter – this is a sound many of us have heard and can imagine (especially in Canada), but fail to notice in the everyday. It can be very aggressive, almost painful when amplified – but at the same time surprisingly comforting, as though a type of Foucaultian ‘savoir’ or deep, unconscious knowledge were being confirmed. This unconscious ‘knowing’ is at the root of our experience of the everyday.

This highlighting of unconsciously registered sounds is hardly unique to *The Icebreaker*, of course. In terms of Canadian artists, Matt Rogalsky’s work *2 minutes and 50 seconds silence (for the USA)* uses small sounds derived from a speech by George W. Bush on 17 March 2003. The result is a composition made from the spaces in between Bush’s words (Rogalsky 2005). When asked what sound sources she generally works with, sound artist and composer [sic] (Jennifer Morris) replies ‘Right now it’s bass, guitar, koto, and the sounds that I hear inside and outdoors. Even if they are not heard by the human ear, I try to figure out ways to capture them, with a pickup and such’ (Chapman 2007: 237).⁴ And as Wende Bartley suggests in the liner notes to her 1992 work ‘Icebreak’ (a piece created through processing recordings of short improvisations with parts of the Javanese court-style gamelan at Simon Fraser University, from her *claire-voie* CD released on the ‘empreintes DIGITALes’ label in 1994): ‘Ice breaking, melting, dissolving into water. An infinite sound language full of shape, movement, and texture. Where are the stories buried in the rivers, creeks, glaciers, and canyons? Stories that formed this land we now call home.’

David Byrne’s recent work *Playing the Building* also exemplifies two emerging priorities for *The Icebreaker* – that it be playable by anyone and create sounds in surprising ways without the use of digital audio technology.⁵ Alan Kaprow’s 1967 piece *Fluids* shares a similar everyday ethos. Kaprow gathered together volunteers for the project by posting the score for the ‘happening’ throughout Los Angeles and Pasadena: ‘During three days, about twenty rectangular enclosures of ice blocks (measuring about 30 feet long, 10 wide and 8 high) are built throughout

the city. Their walls are unbroken. They are left to melt’ (Kaprow 2006).⁶

In terms of sound art precedents that employ ice and microphones, both Westerkamp and McCartney have published soundscape works that feature field recordings of ice.⁷ I have also found traces of two other recent works, but have not yet heard these recordings. The first is a piece entitled *rec01* by Colin Olan (released in 2003 on a label named ‘apestaartje’ from New York). This work was made by placing two contact microphones inside a 10” by 10” block of ice, submerging the ice in water and recording the result. In the words of music critic Peter Marsh: ‘Olan’s contact mics unlock a soundworld previously hidden from the ear, where tiny events are magnified to dramatic scale’ (Marsh 2002). The second ice-specific sound work is by Peter Cusack and is entitled *Baikal Ice (Spring 2003)*. The work is an aural document of the spring ice break-up at Lake Baikal – the world’s largest freshwater lake, located in Siberia, Russia.

3. AUDIO ‘TECHNĒ’

‘Technology’, claims Heidegger, stems from the Greek word ‘technē’, and refers not only to craft, but also to artistic creation. ‘Technē ... belongs to bringing-forth, to poiesis; it is something poietic’ (Heidegger 1977: 13). By making choices and gathering certain types of things over others, I show that I am at home in my work. As a bringing forth or revealing, however, technē involves recognising that moments of linking – of unifying what has been gathered – are often unpredictable. Outcomes rarely end up how we expect them. This is the challenge of juxtaposing different ontologies, of articulating them through mixing and spontaneous creation. It is the challenge of knowing what objects to gather together in advance according to an intuition as to what can be brought forth through their combination. In developing a collection, control is only sometimes part of the agenda. An attitude is adopted towards ‘objects which does not emphasize their functional, utilitarian value – that is, their usefulness – but studies and loves them as the scene, the stage, of their fate’ (Benjamin 1969: 160).

Do works that exist only as recordings or performances count as ‘sound art’? This must be the case if one is to include soundscape work within the genre. Combining Heidegger and Benjamin’s points of view provides a non-partisan way to recognise sound art: it

⁶This happening was recently recreated in April 2008 by the Los Angeles County Museum of Art (LACMA) in conjunction with the exhibition *Allan Kaprow – Art As Life* presented at the LA Museum of Contemporary Art (MOCA). Please see <http://www.lacma.org/art/ExhibFluids.aspx>. Kaprow (2006) also documents a 2005 remounting of the piece in Basel Switzerland.

⁷Westerkamp, ‘Contours of Silence’, from 1994’s *Radio Rethink CD* (Banff: Walter Phillips Gallery) and McCartney, *Les Soupirs de Glace* (see <http://facs-newmedia.finearts.yorku.ca/andra/phare/ice.html>), composed in 2000.

⁴Please see also <http://squirrelgirl.net>.

⁵Please see http://davidbyrne.com/art/art_projects/playing_the_building/index.php.

is about working with technology to gather together sounds for a combined revealing. Sound is part of our everyday life as a hybrid of the material and the imagined. Experiencing sound means letting it go in the very instant it is apprehended. Sound(scape) artists play with this moment as an instant of becoming on the part of a listener – a moment where all previous memories can be awakened, revalued and re-prioritised as reminiscences. This awareness is at the heart of the soundscape research spearheaded by Westerkamp, McCartney, Arquette, Schafer, Truax and others. As McCartney states regarding soundwalking (her preferred method of field recording before subsequent soundscape compositional work),

A soundwalker's engagement with the landscape is at once sonic, tactile, and kinaesthetic. It is defined through what is heard of others' sounds, through interactions with the surroundings, and by the recordist's own movements. Amplification translates the subtlety of touch into an audible play with surfaces and textures. In soundscape works, traces of tactility are embedded that help to link distant and everyday places. They explore auditory experiences and memories of natural and urban environments, and attend to and reflect upon the depth of daily rituals. (McCartney 2004: 185)

It is via this attention paid to daily rituals that the community of sound art makes one of its strongest recommendations to other disciplines of inquiry and expression. This has to do with recognising that everyday spaces connected by concepts such as 'the soundscape' involve social, environmental and personal networks. Sound is like a river we all dive into as we wake in the morning. Sound waves connect bodies, places and minds. This is sound's 'tactility' – it provides contact points where our sense of self can be recognised as partially socially constructed. The 'otherness' of our environment, the suggestion that we somehow exist independently from it, is destabilised. This is what the microphone helps to reveal. This is one of the discoveries enabled by *The Icebreaker* – both for myself and its audience.

The piezo mics arrested in *The Icebreaker's* various surfaces provide mechanisms for amplifying and listening to formerly unnoticed sorts of sounds. But the technology does more than simply enable the 'voice of the ice' to speak – it provides a means for interaction and manipulation (through percussive possibilities and sound effects, panning, volume control, and so forth). The piezos do not reproduce all frequencies equally; the amplifier, speakers, wires and effects boxes all add their own colouration to the mix along with the ice. Listening and reacting to these nuances is reminiscent, for me, to time spent field recording and doing soundscape work, where openness to the touch of sound and the babble of one's environment are keys to discovering what can be revealed through one's own sound art.

4. CONCLUDING QUESTIONS

When my colleagues in the field of cold-water engineering speak of 'ice-infested waters', I am tempted to think of 'rig-infested oceans'. (Franklin 1992: 124)

How does sound art draw from the everyday? How does it give back to this same wellspring? Franklin's statement above provides a clue – it is through promoting a similar inversion of our attitudes around technology that sound art, and in particular soundscape work, can contribute to changing our everyday habits of failing to listen to what surrounds us. The social implications of sound art stem from its potential to reveal innumerable further possibilities for revealing within the different spaces of our shared sonic environments, both technologically enabled and elemental.

I'd like to close with an image to juxtapose against Franklin's. Two years ago I bought a kite for my then three-year-old daughter – which was perhaps a bit ambitious. We were on a family trip in Norway and were looking for a new form of distraction down by the fjord. She had fun with the kite, but I was actually the one who played with it the most as she moved on to other, easier pastimes. It occurred to me that there is something similar to kite flying and the way I work with sound. Simply put, the joy of flying a kite has to do with setting up the equipment, and then letting it go. One plays with the kite, but it is at a distance, and what one does to the kite through controlling the string is rather limited compared with what the kite is doing in concert with the wind. My experience developing *The Icebreaker* has been similar. The noisy short-circuit moments contained in **Movie example 2** ('The Ice Xylophone') demonstrate this well. This sort of happy accident is central to performance, composition and installation techniques that employ improvisation and/or chance, as well as an important component in *musique concrète* and modern electroacoustic music of many sorts. There are, of course, many examples of sound artworks that champion strict control. However, in what might be described as the findings of *The Icebreaker* research up to this point, I have noted that the overriding pursuit of such control deeply affects how a sound artwork will be constructed, and what type of revealing will be enabled. Technology provides different ways to listen to what we formerly simply heard, or perhaps were even unable to hear (such as sounds from the inside of a block of ice). It also affords possibilities for nearly infinite refinements and modulations of such sounds. This is where the question of how much control to exert comes to the fore – which is also a question about audience and how one would like one's work to be received. The precedent set by most, if not all, soundscape work has been to leave ample room for the voices of the sounds one is working with, as well as the interpretive capacity of one's audience.

Sound art is recognisable as such through attending to the revealing it enables. Whether drawn from our shared, everyday soundscapes through field recording and/or created via other audio technologies, the gathering of sounds described above as a central practice of sound(scape) art challenges listeners to continue listening long after they have left a work behind. Projects like *The Icebreaker* that work with listening methods and aural concerns drawn from soundscape studies demonstrate the continued resonance of the central questions addressed by this important genre of sound art.

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