Toward the Sound of Place

By Eric Powell

Introduction: The Trouble with Soundmaps

There is an inherent problem with the conception and construction of contemporary sound-based mappings. These documents are most often presented as two-dimensional graphic representations of space with icons or arrows denoting the site from which each sonic fragment was collected. What these maps fail to capture is the fluid and interconnected nature of sounds-in-space over time – what I prefer to call sounds-*through*-space. In order for listeners to communicate their experience, and for scholars to analyze compiled data, it is necessary to consider new paradigms in map-making while reexamining the process of mapping itself (Mitchell 2008, Crampton and Krygier 2006, Kitchin 2012). What we understand to be an accurate or "true" representation of physical space as expressed through paper or digitally-presented graphic maps only present the viewer with the information that established practices of cartography deem important. My research explores the practice of aural map-making with an emphasis on defining the relationship among sound, mapping, and mobility. My goal is to create a framework for the development of new forms of aural cartography that incorporate the physical, embodied experience of moving through sound-in-space – not just as a listener, but as a participant directly engaged in the act of listening and exploring. The aim of this article is to demonstrate one alternative cartographic approach to documenting large-scale sounding environments as interconnected wholes of myriad arenas all operating through fluid relationships.

Defining Space(s)

Throughout *The Fate of Place*, Edward S. Casey dismisses the idea of space as containing meaning, pointing to the homogeneity of space – something existing either as a void or vessel, but unable to have meaning attributed to it. His goal is to bring the concept of place to the forefront of philosophical discourse, uncovering what he refers to as a "difference-in-place" – something outside the uniformity of urban geographies and Western monoculture. He writes: "Place brings with it the very elements sheared off by the planiformity of site: identity, character, nuance, history" (1997, xiii). Casey identifies the ways in which place commonly came to be known as a mere modification of space – something he feels should be more correctly referred to as "site" (1997, x). He argues against this reductionist view of place, stating: "Once space is dissociated from the particular bodies that occupy it, it is bound to be emptied of the peculiarities and properties that these same bodies (beginning with their outer surfaces) lend to the places they inhabit – or that they take away from places by internalization or reflection" (1997, 197). If space is a void, there is no possibility for place. He goes on to argue that it is impossible for a site to be situated within space. This is the requirement of place: "Space in the modernist conception ends by failing to locate things or events other than that of pinpointing positions on a planiform geometric or cartographic grid. Place, on the other hand, situates, and it does so richly and diversely" (1997, 201). While it may seem heavy-handed, this conception of place as a situating device is particularly useful in sound studies. There are interesting links between ear cleaning practices associated with acoustic ecology – often described as an 'uncovering,' 'opening,' or 'search' for sound (Schafer 1977), and the search for place exhibited by Casey: "To uncover the hidden history of place is to find a way back into the place-world – a way to savor the renaissance of place even in the most recalcitrant terrain" (1997, xv).

In contrast, Doreen Massey's *For Space*, troubles the distinction between place as a meaningful, lived, and everyday venue, versus space as an outside, abstract, or meaningless "otherness" (2005, 6). She contends that even in this context, space still has meaning: "[S]pace is equally lively and equally challenging, and that far from it being dead and fixed, the very enormity of its challenges has meant that the strategies for taming it have been many, varied, and persistent" (2005, 14). Now, it is important to recognize that in this text Massey is not specifically arguing for a separation between space and place. She situates place as existing outside the defined (or definable) realm of this conversation. Place should exist in conjunction with space, but first, space needs to be understood as the viable vessel of meaningful information and experience that seems to only be attributed to place.

The important thread running through both Massey and Casey's work is the understanding that space inherently contains meaning – regardless of whether or not that meaning is the multiplicity of timelines and histories (Massey 2005), or the place-world of meaning contained within the homogeneous void (Casey 1997). However, there is still the issue of how an individual navigates these associative relations to space, regardless of how they may be arranged.

Massey writes, "If no space/place is a coherent seamless authenticity then one issue which is raised is the question of its internal negotiation. And if identities, both specifically spatial and otherwise, are indeed constructed relationally, then that poses the question of the geographies of those relations of construction" (2005, 10). Even though Massey's critique is primarily spatio-temporal, while Casey attempts to avoid the void – this questioning of the structures that make up the meaning within space can be mobilized into sound studies using Barry Blesser's concept of the "eventscape" (Blesser 2007). [1] By using this term, Blesser opens up the politicized and rather narrow concept of the "soundscape" (Schafer 1977) or even the somewhat broader "aural environment" (Truax 2001). In my interpretation, Blesser uses this term to describe the interaction of all the sonic events within a particular area and how they interact within space over time, providing an excellent application of Massey's conception of space containing multiple histories and trajectories. A sound, by nature, exists as a remembrance of a thing past. Echo and reverberation are merely additional inscriptions from

a sound event that was. To extend the role of the sound object into Casey's notion of place, a sound event is an indicator of a unique intersection of space, time, and sound. The way a particular sound is perceived is completely dependent on how, where and by whom the sound is heard. However, it is possible if each iteration of a sound is remembered, a cumulative catalog of timbre, reverberation, and duration can be stored, allowing the listener to effectively situate him or herself using sound.

Aesthetics, Maps and Meaning-Making

A map's inability to truly represent space is not a striking revelation. Many postmodern theorists and critical cartographers have questioned the idea that a map represents the 'real,' or even *what* a map represents (Crampton and Krygier 2006, Kitchin et al. 2012). The practice of cartography is subject to many of the same cultural assumptions found in the experience of space and place. Peta Mitchell discusses the self-perpetuating power systems within traditional maps in *Cartographic Strategies of Postmodernity.* She writes: "For centuries, [the] map has been given privileged status as having a direct correspondence with the real, in that it objectively and realistically re-presents, on a smaller scale, the territory, the real, the truth" (2008, 17). Moving beyond Mitchell's postmodern critique of this assumption is Massey's idea that maps are representations of space and time captured together (2008, 9). In this line of thinking, a map becomes a singularity – a captured moment-in-time. However, this idea of the mapped singularity brings into tension the separation between subject and object. Kitchen et al. describe this shift from representational cartographic theory to a post-representational, processual understanding of mapping (2012, 480).

How is it possible to expand a fluid form of collective mapping into the aural environment? What forms will a new aural cartography take? There are countless examples of how artists and researchers are approaching the convergent realms of mobilities, sound studies, and cartography, including several recent surveys and critiques of contemporary and interactive soundmapping processes (Waldock 2011, Ouzounian 2014). However, aside from my previous critiques expressed in the introduction, what I am interested in discussing here are the ways in which we can explore the tensions that arise out of trying to create mappings of space using sound.

There are many artists and researchers working with forms of mapping or inscribing meaning on to space through sound: Hildegard Westerkamp's practice of soundwalking, Christina Kubisch's electrical walks and installations, as well as Janet Cardiff's audio walks are three excellent examples of how individuals are using modes of embodied performance and inscription to use listening-based approaches to aural cartography. Strategies for aural cartography must take into account the fact that the way in which we perceive the aural environment is an ongoing negotiation and navigation of multiple interleaved sites and locations, developing experience and meaning over time. John Urry discusses "wayfinding" as a means of "moving around *within* a world, a process of constant engagement and readjustment in relation to the environment – rather than 'map-reading' that is moving across a surface as imagined from above" (2007, 86 his emphasis). This need to be *within* the environment is a key element, tying together Massey's notion of multiple trajectories overlapping within a single space, and the embodied audile technique (Sterne 2003) of the active participant. The next question is, of course, *how* is the participant moving? Through what means are they wayfinding? The easiest way to experience the aural components of the eventscape is through walking. Michel De Certeau explores the act of walking through urban environments in *The Practice of Everyday Life*. For him, walking is a means of inscribing new meanings across the surface of the city (1984, 105). This idea resonates strongly with Massey's notion of the multiple trajectories contained within space, as well as Urry's process of "wayfinding." An important element to consider when discussing inscription and wayfinding are the ways in which memory works as an inscription device. In her article, *Movement, Memory and the Senses in Soundscape Studies* Jennifer Schine discusses how we begin to create meaningful associations with place through sound through the use of soundwalking as a tool for memory retrieval.

Schine's article responds in a very interesting way to issues raised by Barry Truax in his 2012 article *Sound, Listening and Place: The aesthetic dilemma* where he posits that there is an inherent difficulty in re-presenting the individual experience of place in artistic creation, working towards an understanding of the role of the composer in maintaining one's own connection to the outside world throughout the composition process in order to transmit an emotive understanding of the contextual relationship between place and sound. In my own artistic practice, and in the project I am using as an example of an alternative form of aural cartography, the role of the listener is necessarily embodied. However, contrary to much of the work discussed above, in this particular project, listeners transition from soundwalking to sound-canoeing.

Alternative Cartographic Strategies, and Modes of Inscription

I would like to introduce the use of sound as a mapping device within the aural context in a way that provokes interaction and intervention between physical space and the sounding environment, inscribing meaning in very different ways. To do this, I discuss a multi-year research-creation work based on the composition of a site-specific performance and installation event entitled *Under Living Skies (ULS)*. This piece is based on two central questions: What are the sounds of Saskatchewan? How can the unique aural character of this province be presented to an audience?

In order to answer these questions, I spent the summers of 2010-2012 collecting field recordings, generating a library of impulse responses, as well as scoring and recording site-specific compositions and improvisational interventions across the province of Saskatchewan. Creating a work that both influences and is influenced by environmental sound involves application of both artistic and scientific methods: integrating geologic, topographic, acoustic, and psychoacoustic analysis with elements of acoustic ecology, contemporary music practices, and new media technology. The goal of this work was, and still is, to create musics that interact in a very direct and concrete way with physical spaces: using creative and qualitative methods to examine resonant frequencies of geological formations, to measure natural reverberations and echoes, and finally to create a performance event that responds directly to the unique acoustic character of a specific lake in Northern Saskatchewan. Creating a piece of music that truly resonates within the site, performing music of and for the land.

In 2010, I was commissioned by the Saskatchewan Arts Board to create a piece of music that explored the unique sound environment of the province. This was the first step into my ongoing exploration of sound-based mapping and attempts to capture the sound of place. The final outcome of this commission was a suite of four movements for chamber ensemble and 8-channel tape exploring sonic identity through our aural relationship to four key themes which become the movements within the piece itself: *Resources, Transportation, City*, and *Country*. This piece used a wide range of field recordings to explore the compositional balance between environmental sounds and instrumental voices. [2]

More important than the composition itself was the time I was able to spend circumnavigating the province, listening and recording. It was through this commission that I became interested in the idea of trying to create a catalogue of how sound interacted with space in a more quantifiable way – not just the one-time intersection of time, space and event that can be captured through a field recording, but

Fig. 1. Nigel Taylor on location in Swede Lake, SK

by trying to understand all the ways in which the landscape filters and reflects sound events, and how different eco-regions respond to similar acoustic phenomena.

The second installment of the *ULS* project was a period of intensive audio-based mapping research, involving testing a number of theories surrounding the ability to generate a cohesive document that captures the behaviour of sound-through-space. Over the summer of 2011 my team (consisting of 3 researcher associates)[3] and I created a library of impulse responses, instrumental interventions, and field recordings from locations across the province, allowing me to perform acoustic analysis of these locations, as well as directly comparing the sound of a canola field to that of the open prairie, or a lake in the Northern forest. The impulse responses collected during this installment provided some of the most useful data with regard to the relationships among sound, different ecosystems, and geological formations.

The 2012 stage of the *ULS* project synthesized findings from the two previous iterations through the development of new compositional approaches, heightened listening practices (with particular attention to the responsiveness of the physical environment to musical stimuli), and an understanding of the sounding character in a small bay off of Swede Lake near Prince Albert SK (see Figure 1).

Over the course of a month, the project team created a series of onsite aural explorations testing the useability of the impulse response data collected in 2011. This period of work was very fruitful. Without too much surprise, while the impulse response data was useful in pointing toward reverberation time and a few resonant frequencies, our ears tended to be better suited toward highlighting and experimenting with the unique timbral characteristics of being situated in a particular place around or on the bay. The exploration of sound-through-space.

The final stage of the *ULS* project is a site-specific performance and installation event. Originally scheduled for the summer of 2014, this event has been placed on hold until scheduling and funding issues can be resolved. In this event, listeners are invited to enter a completely new aural and physical environment that has been specially developed for this project. This performance presentation combines live instrumental and electronic performances, sound sculpture, and short-range FM transmission to envelop the audience in a unique sound-space constructed around the natural acoustics of a small bay on this tranquil remote lake. Participants are asked to hike around the shore, or to canoe through the bay in order to experience the project. This performative act of movement into and through an alternative/modified space integrates the embodied experience of the listener into an immersive exploration of the relationship between sound and space, using musical performance and electro-acoustic composition to chart paths of listening – modified songlines, perhaps – across the bay and through the woods. Here, sound is not the object being mapped, but rather the stylus with which meaning is being inscribed upon (and with) space.

However, the question still remains: how is this a mapping? The technological and artistic interventions that comprise the *ULS* project collectively form an in-depth examination of the sounding environment of Swede Lake. Ranging from spectrographic analysis of impulse response to performing on-site experiments to determine exactly how and where a trumpet's B-flat would ring the longest to exploring how to use the natural echo of the lake as a type of (very analog) delay/looping system – the *ULS* project has effectively defined many parameters of how sound behaves within this particular location. However, the more important question of documentation and transmissibility still plagues this project. It is difficult to share much of this research as my research team and myself have stored and cataloged much of it through our direct and embodied experience in performing the project's interventions.

Additionally, the recordings that we collected (while interesting to listen to from an aesthetic perspective) do little to help listeners at home decode the complex relationships surrounding what was actually happening on site.

This is the key difficulty in completely defining the *ULS* project as a cartographic strategy (or an attempt at an aural mapping). Audio documents (as can be heard in the 2012 recordings) fail to accurately convey all the elements that go into that particular intersection of time, space and sound. This is where Truax's argument toward the aesthetic intervention of the composer's hand to help create or shape associative meaning with the audio document could easily be raised. Should I have conceived of these recordings as short compositions, rather than audio documents of a particular sounding space – albeit documents of a space that has been modified through the intervention of instruments and technologies that are conventionally associated with an aesthetics (read: composed) art-music experience? It was important to note that the *ULS* project is still framed within media arts, and all three of the completed stages received funding from the Saskatchewan Arts Board. [4]

The *ULS* project is an indicator, a marker of how it is possible to move beyond established practices of soundscape composition, soundwalking, and aural cartography to generate conversation around what other forms soundmapping can take. As I move forward in my research into ways of understanding and sharing associations with sound-through-space, I have transitioned into the creation of objects and interfaces that allow for a similar form of aural exploration to that of the walking (or canoeing) listener, adding frames that resonate with a wide range of audiences, as well as addressing issues of accessibility: physically, artistically, and technologically. In conclusion, I return to some of the ideas I introduced surrounding modes of inscription, and the multiple trajectories of experience that can be contained within a single place. While my project began as an attempt to unearth the aural character of Saskatchewan and gradually morphed into a detailed aural exploration of a single Northern lake, there are countless other sounds and experiences (collective and individual) retained by and embodied in all the residents of the province, whether acoustic ecologists or not. It is my personal goal to try and share as many of those experiences with the larger public as possible through a wide variety of tactics toward acoustic and aural wayfinding.

About the Author

Eric Powell is a sound artist and composer who creates site-specific and interactive installations, and performs with live electronics. He is currently working on a PhD at Concordia University in Montreal. Eric is a founding member of the sound art organizations *Electricity is Magic* and *Holophon Audio Arts*, and sits on the board of the Canadian Association for Sound Ecology (CASE). He has recently presented work in Toronto, Prague, Limerick, and Dubai.

Endnotes

1. It is interesting to note that while Blesser himself references this text as the source of this term, "eventscape" does not actually appear in the book. Even as late as 2009, Blesser was using "soundscape" and "eventscape" interchangeably.
2. A stereo recording of the live performance, titled *Under Singing Skies* can be found at: https://ericpowell.bandcamp.com/album/under-singing-skies
3. Myself, Charles Fox, Matthew Griffin, William Hales, Nigel Taylor, and Karl Valiaho.
4. I would like to reiterate my continued gratitude to the Saskatchewan Arts Board for their generous support of these projects.

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