# Sonic Thinking

# How Sound-art practices Teach Us Critical Listening to Space

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### Abstract

This paper proposes that sound art works (or sonic artistic practices) can encourage auditory conscientiousness and thus foster stronger concepts for the future of urban sonic environments. Artists and their works can do this both by revealing ways that urban spaces could sound as well as reflecting ways that we could listen. Founding the discussion in practices of the soundscape movement a few case studies will be considered, including installations (sounding and silent), soundwalk and interactive (artist research) approaches.

**Keywords:** Sound Art, Soundscape, Listening, Ear Cleaning, Sonic Commons, Acoustic Ecology, Urban Sound Space

# 1. Sound and City Planning

Sound art practices, including public installations, somposition, performance, and so-called 'silent' sound works can be valuable means for developing auditory awareness of urban environments. Such works can teach us to 'think with our ears' – a prerequisite skill for effective urban sound planning.

From the side of urban planning there has also been growing recognition that sound should be taken into account in city development. A prime example is Max Dixon who was brought as a sound consultant for the recent "Sounder City" action planning in London. Dixon suggests that the (potential) sound of city space should be taken into account from the onset of urban planning projects and, further, that sound should be approached by planners in a positive manner.<sup>1</sup>

Before a concept of a desired future sonic environment can be constructively integrated into the shaping of new urban sound environments, an understanding of already-present sound spaces – as well as the nature of being a listening agent – must be further developed and deepened. Unfortunately there has not yet been the same energy invested in developing listening practices, or (encouraging) sensibility to the sonic environment among city planners, as there has been among sound artists and acoustic ecologists. Sound art pieces and practices can encourage auditory conscientiousness, both by revealing ways that future urban spaces could sound as well as reflecting ways that we could listen. This is turn can foster the development of stronger concepts for the future city spaces.

So many artists are working with urban sound, that a fair overview is impossible here, and only a few artists are mentioned (even fewer considered in depth). These are prefaced by a consideration of practices related to the soundscapes movement and acoustic ecology. Under the inclusive definition of sound art and sonic practices the works here include forms of soundwalks, installations (both unsounding and resounding), performance, and interactive or artistic-research approaches.

<sup>1.</sup> From presentation given in Berlin at <a href="http://sonic-places.dock-berlin.de/?page\_id=346">http://sonic-places.dock-berlin.de/?page\_id=346</a>; see also PDF of Sounder City Strategy at <a href="http://www.silence-ip.org/site/fileadmin/SP\_J/Dixon.pdf">http://www.silence-ip.org/site/fileadmin/SP\_J/Dixon.pdf</a>

# 2. Approaches to the Soundscape

It is greatly to the credit of artists, in particular composer and environmentalist R. Murray Schafer, that the term *soundscape* became established, along with a discourse on sonic environments growing since the late 60's, first as The World Soundscape Project and now through the World Forum for Acoustic Ecology. Schafer, and the field of acoustic ecology, is concerned with the changes that our environment is undergoing on an auditory level – in ways that often remain invisible – primarily as a result of industrialization and technological culture.<sup>2</sup>

Schafer characterizes soundscapes most simply in terms of hi-fi and lo-fi, where hi-fi refers to a high signal to noise ratio, i.e. a soundscape in which one can easily discriminate the various sounds or sound events in it and each sound has the potential to be perceived and identified. This allows a listener to grasp onto *earmarks* (Schafer's aural twist on the word landmark), characteristic sounds that punctuate a particular area.

A lo-fi soundscape is one in which it is difficult to discriminate various sounds and sound events. It is commonly framed as a product of our modern industrialization being compounded by our electrical revolution. Schafer generalizes the spectrum of hi-fi to lo-fi as running from country to city, from night to day and from ancient times to modern.<sup>3</sup> In other words, as we humans increase our cities and lead ever more round-the-clock lives, our soundscape is increasingly lo-fi. The difference is not purely in volume level but the high density that the overlapping of many sounds create. The audible horizon is contracted into a closed in ambience in which a sense of distance and perspective is lost.

Whether or not you agree with the dualistic characterization of urban/lo-fi versus natural/hi-fi soundscapes (and despite a few valid critiques of the usefulness of the term sound-scape for urban contexts<sup>4</sup>) the discourse forms one basis for useful concepts and practices for developing critical listening to space. These include *ear cleaning*, *soundscape composition* and *soundwalks*.

Schafer encourages practicing ear cleaning, or training one's auditory environmental awareness, e.g. by using various exercises such as those compiled in "A Sound Education"<sup>5</sup>.

<sup>2.</sup> Raymond Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester VT: Destiny, 1994), 43.

<sup>3.</sup> R. M. Schafer, The Soundscape, 43.

**<sup>4.</sup>** See e.g. Jean-François Augoyard and Henry Torgue, *Sonic Experience: a Guide to Everyday Sounds* (Montreal: McGill-Queen's UP, 2006), 7.

<sup>5.</sup> Raymond Murray Schafer "A Sound Education: 100 exercises in listening and sound making" Arcana Edition, Ontario Canada, 1992.

These mix simple ways of attending to common sounds around with exercises reminiscent of traditional musical ear training. They ask one to listen to streets; to attend to landscapes but also indoor ambiances; to listen moving and standing; to actively create musical improvisations with ordinary objects; to track sounds across space and over time. Schafer touches on themes including the way sounds interact in space, the imagination of sound, how we talk about sounds (e.g. by making up new words to describe them) as well as developing a habit of recording and cataloguing sounds.

This habit of recording and cataloguing found sounds is also at the base of *soundscape composition* which, as the name suggests, is a practice of creating audio works based on field recordings. This musical practice, as well as more freeform experimentation with field recordings, can become a valuable tool: a means for attuning to the characteristics of urban sound space. As any artist who has worked with field recordings might relate, the active recording and use of the audio material retunes one's ear to the live space in various ways. Additionally, the experience of comparing field recordings one has made back to the site in which they were made can help elucidate that recording is by no means a copy of the original atmosphere but in fact presents a quite particular – a mediated – sonic impression.

Soundwalking at its foundation involves walking and listening, but it can be practiced in a wide variety of forms including walks lead by an artist along a predetermined path; walks with eyes closed or open; walks with pauses to stop and listen or walks involving small sonic manipulations or interventions.<sup>6</sup>

The concept of walking around or going to listen to a particular urban place is a recurring theme in sound art practice and many artists have their own unique versions. It is no surprise that Max Neuhaus, a pioneer of sound installation art had a *Listen!* series in which, starting in 1966, he lead people to nearby sites to experience the sounds he had encountered there. Among other related works are *Electrical Walks* (2003–) by Christina Kubisch, which use headphones that can detect electromagnetic signals allowing pedestrians to tune into an invisible and normally inaudible dynamics of urban space). 8

<sup>6.</sup> On a soundwalk I was personally able to take part in with well-known practitioner Hildegard Westerkamp among the memorable sonic moments was when she took dry leaves and crumbled them softly close to our individual ears.

<sup>7.</sup> Alan Licht Sound Art 23 and also "Sound Art: Origins, development and ambiguities" in *Organised Sound* Vol. 14, No. 1 April 2009 CU Press, 4-10. p5

<sup>8.</sup> Licht 2009, 6; Cox 2009, 24.

#### 3. Sound Art

# 3.1. Silent Signs

By playing with what is and isn't there, many sound artists encourage us to stretch our auditory perspective and reflect on its normal limits (to ponder what it is we might miss). Sound art works often elicit a confrontation with one's own listening posture, transforming a simple 'visitor' to a sonic performer of/within the work. Examples of this include Akio Suzuki's Oto-date (or Echo Points) and Peter Ablinger's numerous chair pieces and installations which relocate the composition of the piece on to a willing participant – putting into focus the person's immediate, multi-modal and performative experience.

Many works of Peter Ablinger are interdictions that 'frame' an auditory space. Using arch-like constructions, or objects as simple as chairs, Ablinger plays with a reconsideration of the perceptual possibilities that are in fact always available to us in our audition of open space.

Ablinger has realized a number of works using texts or configurations of chairs as Hörorte or listening places. A group of chairs (sometimes arranged with other objects) will be set up in a spatial composition, structured with reference to elements of the site. These are at the same time a kind of sculpture and also indicates (conceptual) audience space. An empty chair points to the potential presence of a seated auditor. The sites designated by the chairs as listening places remain so after the chairs have been removed, as with Listening Piece in Four Parts (2001) in which 20 chairs were placed at four sites on four different days. Though the seats stayed in each case for only about two hours, according to Ablinger "the four places remain—now as a piece of music—for anyone aware of this fact." It is not directly the sounds of the particular place that Ablinger's pieces highlight but instead the experience and process of listening; the touching of world and ear. 10

Another work, 3 Easy Pieces (2004) is an installation realized around a harbor. Its three parts are, first, acoustic interruptions or framings by a couple of sound absorbent passageways. Second, chairs set up as though for a concert. Third a construction of four pedestals at the four cardinal points is placed in a field. The pedestals bear various instructions on holding and removing the hands behind the ears, with different variations for each direction.<sup>11</sup>

<sup>9. &</sup>quot;Peter Ablinger– Stühle, als Hörorte/Chairs as Listening Places". http://ablinger.mur.at/docu01.html.

**<sup>10.</sup>** Ibid

<sup>11. &</sup>quot;Peter Ablinger- 3 easy pieces" http://ablinger.mur.at/docu12.html. (Last accessed, 06.14.12).

The visitor becomes audience, performer, and conductor in the piece, attentively listening within these self-imposed conditions. Such works highlight what or in what ways we could perceive a city site for ourselves, if only we came to think about it in a certain way.

Along a similar vein, Akio Suzuki, a composer and performer, also has works that focus on listening in space, such as Oto-date, which can also be thought of as a unique form of urban soundwalk. These Oto-date piece(s) come from the ideograms for oto (sound or echo) and date (place or point), and are therefore essentially echo points. They made up of a circle drawn into a street or sidewalk enclosing two figures which appear at the same time to be footprints and ears. This sends the message at once: stand here and listen.

First appearing in Berlin in 1996 Suzuki has placed his Oto-date in cities including Paris, Torino, recently Bonn, each time seeking out locations in which a standing listener might hear something interesting or unexpected, in particular echo. They offer a chance for people who may already be familiar with a certain site to experience it anew. Similar to Ablinger's chairs, they ask for a change of (listening) attitude. While chairs ask for a literal change of bodily position, the Oto-date ask an unfurling of ears.

The echo points encourage us to ask: what should I be hearing, why this spot and not another, what are the points that we might have marked for ourselves (and why). This last thought links to one of the crucial questions for city sound planning, namely, what aspects of our urban sonic environment would we want to emphasize, and why?

Ablinger and Suzuki's works show us ways to attend to the environment; encouraging listening perspectives that illustrating the contingent nature of auditory experience. <sup>13</sup> While silent installations encourage us to reflect on our listening attitude, installation that do use audio material can provoke us to think about how a space should or *could* sound, as well as what sounds belong in particular spaces, and who is allowed to make them.

#### 3.2. O+A and the Sonic Commons

While changing infrastructural conditions, construction/demolition of buildings, and shifting social aspects can have various effects on the acoustic environments, sometimes the change can work the other way: changing the sonic character can have social consequences. Artists Bruce Odland and Sam Auinger have been engaged with the sonic environment of cit-

<sup>12. &</sup>quot;Akio Suzuki: Hana / Otodate in Torino" <a href="http://www.estatic.it/en/content/akio-suzuki-hana-otodate-torino">http://www.estatic.it/en/content/akio-suzuki-hana-otodate-torino</a> and "Akio Suzuki at Borgovico33" <a href="http://www.bv33.org/schede/14\_suzuki/e-suzuki.html">http://www.bv33.org/schede/14\_suzuki/e-suzuki.html</a> (last accessed, 06.14.12).

**<sup>13.</sup>** Suzuki and Ablinger's pieces also have the benefit of illustrating energy efficient, environmentally friendly approach to artistic practice.

ies for decades. During their collaboration they have created pieces that have done just that: influenced the character of public spaces through an alteration of their sound.

As a result of years of attention and engagement with in the auditory environment sound artists are a wellspring of interesting and useful concepts to reflect our listening experience of urban space. Bruce Odland and Sam Auinger are among artist who stress our complicity in the present sonic environment. They articulate this in an idea of the sonic commons which is expressed by them as "any space where people share an acoustic environment and can hear the results of each other's activities, both intentional and unintentional." The sonic commons makes a point that the people who share the acoustic environment are responsible for its aural character are hearing each other as sound-making participants. If there are trains overhead, it is because people are riding around in them, if a city green space sounds instead like a traffic island it is because we indirectly allow it through acceptance of status quo; we are receiver and perceiver of self-made conditions.

Works like their audio-visual performance *my eyes...my ears* can serve to expose the absurdity of the auditory conditions we create for ourselves in urban environments but also point to ways that that city sonics can shift over time for the better, or worse. *My eyes...my ears...* is a performed in a double binaural presentation method– two times two ears each replayed in a spatial quadrant of loudspeakers and three screens set up around the seated audience. The four-ear audio composition is intermittently visual, replaying scenes in cities such as New York (2009). The piece weaves through bright day and introspective night scenes, from the shut-in shell of an automobile to the rhythmic rattatat of subways. To the audience, doubly hearing and half seeing it can be both dreamlike and real.

In a documentation of the piece O+A are shown making recordings at Dumbo, a highly valued urban neighborhood. From its riverside the Manhattan skyline shows its profile, accented behind an elegant arch of the bridge overhead...on which a train roars extremely loudly. Despite the intense amplitude a woman walks along the gravel path of a park below the bridge pushing a baby carriage. The question comes to mind whether subjecting the unexposed and non-consenting ears of an infant to the screech of metal rails overhead could be considered a form of abuse. With these scenes, "my eyes...my ears" bears [ear]witness to

**<sup>14.</sup>** Sam Auinger's Page <a href="http://www.samauinger.de/page.php?ID=503">http://www.samauinger.de/page.php?ID=503</a>, see also: Bruce Odland and Sam Auinger, Reflections on the Sonic Commons, *Leonardo Music Journal*, Vol. 19, pp. 63–68, 2009

**<sup>15.</sup>** Documented both on Bruce Odland Homepage <a href="http://www.bruceodland.net/">http://www.bruceodland.net/</a> as well as that of Sam Auinger <a href="http://www.samauinger.de/page.php?ID=503">http://www.samauinger.de/page.php?ID=503</a>

<sup>16.</sup> CBS video: <a href="http://www.cbsnews.com/video/watch/?id=5578344n&tag=contentBody;housing">http://www.cbsnews.com/video/watch/?id=5578344n&tag=contentBody;housing</a>

the all too common absurdity of who and what we are subjecting to a sonic overload of our own creation.

O+A also are known for their series of installation works using urban sound recorded through *tuning tubes* (which result in a harmonic structuring of the sound) and transmitted in real time to omnidirectional speakers positioned in a public space in the vicinity. Among these is *grundklang bonn* (2010-2013) a work created when Sam Auinger was designated as Bonn's first official "city sound artist" in 2010.<sup>17</sup> Two unassuming cubes positioned in an urban square by the main station resonate respectively with a live feed of sounds from the adjacent street, and a feed from the nearby Rhine river. The physical acoustic characteristics of the tube turn the unstructured 'noise' of the street into an acoustically organized ambience which is surprisingly restful.

Other works of theirs test the material and resonances of urban architecture through large scale installations, making possibilities of alternative sonic environments tangible. In their performance-installation *Urban space*, *urban sound* (2013) used a combined approach in sounding out a stretch of newly built underground train tunnel in Cologne. Two stations and the two parallel tubes between them became resonating bodies for recordings, filling the station spaces with displaced sonic realities such as New York's Grand Central Station, and the tunnels with real-time feeds of sound from the streets above (harmonically filtered through tuning tubes, as with the cube installations). Interwoven with this was a long duration performance that used manipulations of the real time audio–feed to further activate the immense space of the tunnel.

While works like *my eyes...my ears...* are valuable for provoking discussion and reflection on the state of the sonic commons, O+A's long duration 'concerts' in urban architecture probe the acoustic potential of those spaces thereby opening up auralizations of alternative ways such spaces might sound. Their use of tuning tubes for permanent installations bring a third important aspect, namely, possibilities of constructive sonic design for urban public space – which may well transform the identity of a site not only aurally but socially. According to the artists the social character of the square in Bonn has had a noticeable changed over the last few years. In a sense these sound installations make places out of non-places, bringing an auditory focal point that works to focus the attention of passersby back onto the sonic environment of the site (sound that usually serves as the original material basis of the work).

<sup>17.</sup> One indication that cities have an interest in sound art: for the last few years Bonn has recognized a number of artists as official Stadtklangkünstler, or city sound artists. <a href="http://samauinger.de/timeline/grundklang-bonn/">http://samauinger.de/timeline/grundklang-bonn/</a>

# 3.3. Peter Cusack and Personal City Sounds

Another practice, exemplified by musician and sound artist Peter Cusack, is to quite literally engage in dialogue with people about the sounds of their cities. Besides his music and his work making field recordings of "dangerous places" Cusack has travelled to over a dozen cities investigating individual listening experience: his *Favourite Sounds Project* demonstrates how personally meaningful our auditory surroundings can be.

In cities including New York, Berlin and Beijing he interviews residents about their sonic experience, primarily by asking what is their favorite sound of the city, and why. This positive question on urban sound opens a communicative space for reflecting on people's experiential relationship with their (home) urban living space. It reveals the variety with which people might hear a city and the creativity with which such impressions can be related once invited to express them. Cusack uses the collected opinions of residents as a guide to make field recordings of those favorite sounds in the respective city, which are collected in an accessible interactive map of the cities' sound spaces and provide a subjective sampling of their sonic environment, audible anywhere in the world.<sup>18</sup>

Cusack's work grows out of an interest in acoustic ecology and working towards the positive development of soundscapes. He has also been active in trying to turn acoustic field work and closer considerations of particular urban sonic spaces into a more important part of a city planning dialogue.

# 4. Listening Practice

The discourse of acoustic ecology advocates developing aural competence towards the sonic environment. Barry Truax describes listening as our "crucial interface" with the environment, as well as "a set of sophisticated skills that appear to be deteriorating within the technologized urban environment". One might further extend the idea of listening as not only interface but a participation with our surroundings. While one might find many indications

<sup>18.</sup> http://favouritesounds.org/

<sup>19.</sup> Barry Truax, Acoustic Communication (Westport, CT: Ablex, 2001), 15.

of a fall of aural culture, there are areas in which listening is being further preserved and developed as a skill: among these are the diverse forms of sonic art practice.

Truax suggests that a competent auditory attention to the soundscape – which must be taught and developed – is being neglected in society today but that it is a cultural responsibility to foster.<sup>20</sup> Training ourselves to listen is a human responsibility as not only the perceivers but creators of sonic experience, such as when it comes to constructing our living spaces, namely cities.

Listening training can take various forms: author Jonathan Sterne, in his account of the conceptual development of modern auditory culture, *The Audible Past*, provides a genealogy of listening as a cultural practice linked with particular tools and media. Like Truax, Sterne describes listening as a set of skills, but his way of investigating the socio-cultural as well as technological aspects is to trace the development of *audile technique*: Sterne's term for the practical skills and attitudes of and toward listening as a technique. Sterne's account characterizes listening through its forms of engagement, and frames it as a method that "carried with it a great deal of cultural currency." One could say that artists engaging with sound in the city have been developing audile techniques for diagnosing and positively developing our shared urban sonic environment.

What connects many of sound art works and practices are the ways they strive to sensitize auditory awareness to dynamics – visible, invisible, implicit, explicit, aesthetic, political, social, architectural, personal – normally left unreflected in the present and in turn disregarded in the planning of urban spaces of the future. Many pieces also provide a sense of auditory possibilities (what sounds / sonic dynamics might be present if particular conditions were to change). Works can point out the conditions that lead to a particular impression (e.g. effects caused by architecture or visual elements). Sonic art practices can also encourage the development of an aurally descriptive language. One often hears claims that sound is difficult to talk about (e.g. because we are visually oriented culture, or because it surpasses verbal expression). One way to counteract this is to create more opportunities to communicate positively about sonic experiences (e.g. in regard to a sound installation).

They also bring an sensitivity to the individual auditory perspective: O+A through performances sharing their own personal experience as in my eyes my ears; Akio Suzuki by inviting visitors to perform and become the work, as with the Oto-date; Peter Cusack through his direct questioning of residents as to their unique aural preferences. In a sense such

<sup>20.</sup> B. Truax, Acoustic Communication, 58.

<sup>21.</sup> Jonathan Sterne, The Audible Past: Cultural Origins of Sound Reproduction (Durham: Duke UP, 2003), 137.

works recognize and utilize personal sound space, which conceives of auditory environments as centering on an individual (recognizing that at the same time these are physically, mentally, socially participating in a larger dynamic with those around them).<sup>22</sup> Thus sound art and its practices provides a needed counterweight to the objectified and abstracted tools conventionally used to address the sonic environment of cities (e.g. such as noise mapping). It is vital that opportunity is made for continuing artistic investigations and provocations of sound spaces, and for listeners to experience sound works which intervene, reframe, provoke and play with city sound environment – for finding new ways to tune into (and retune) urban space.

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