A New Sense of City through Hearing and Sound

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Abstract:

Cities, buildings and architecture are usually described in visual terms. Architecture does not produce sound and it can not be heard. On the other hand, it does not radiate light, but yet it can be seen. It is often our sense of hearing which assists us in experiencing urban environments. Sound, space, hearing are embedded in our cultural existence and development. The addition of new media technologies has introduced new cultural practices and adaptations of space are emerging as a result.
In this paper we explore the emergence of a new 'sense of the city' both in terms of perception and experience, as well as in terms of our understanding of the meaning of the city.

Aim of this paper is to look at:
What are the potentials of sound to document, study and shape the way a city is experienced?
How is our experience of the city and the choices we make in it affected by mobile communications, pervasive media, ambient informatics?
How are these projects linked with new cultural practices and networked culture?
To which extent do they constitute a new "cultural urban identity"?

Listening to the noises of the city

"…And sitting in the darkness of my moving cell, I recognised echoing in my tired brain, all the characteristics sound of a town I'd loved, and of a certain hour of a day, that I had always particularly enjoyed. The shouts of newspapers boys in the already languid air, the last calls of birds in the public garden, the cries of sandwich vendors, the screech of trams at the steep corners of the upper town and that faint rustling overhead as darkness sifted down upon the harbor..''
Albert Camus, L'Étranger

We hear long before we see. Slowly we begin to filter sounds out to focus our eyes on specific objects instead of gazing/listening/feeling/smelling the great multisensory "Everything" (Ackermann, 1990). As art looked toward public space, temporality, experience and participation, it was inevitable that artists would begin to include sound in their work. For sound encapsulates all of these qualities by its definition. Critic Max Bruinsma has referred to sound as a "carrier" and it is certainly true that sounds are powerful in triggering memories, in forming narratives inside our minds. One sound can resonate disparate memories or fragments that share some kind of emotional vibratory frequency (Bruinsma, 1990). In a scene from Kieslowski's film *La double vie de Veronique* (1991), Veronique receives a cassette tape from a secret admirer. Listening to the tape over and over again with headphones and learning to recognise the sound she is able to find a cafe, where the man who has been haunting her, is waiting for her to find him.

Buildings and architecture are usually described in visual terms. But it is often our sense of hearing which assists us in experiencing and navigating through urban spaces. «What seems obvious is often overlooked. This is certainly the case with the sensory dimensions of the built environment. Our houses, our streets, our cities, are not the blueprints, photographs, drawings, postcards, to which they are so often reduced, but a rich sensory brew of sounds and odours, textures and colours. We drink in the flavours of the urban atmosphere, we wade through the sounds of the city streets, we press and push and clamber in and out of buildings. Yet much of this experience lies below the surface of consciousness: it impresses itself on our bodies while leaving our visually based mental maps untouched». (Classen, 2008).

There is a paradox between the fact that cities are highly structured spaces in which almost everything one senses has been processed through a human brain to be orderly, and the fact that interactions therein are far too complex to be controlled.
The physical laws governing the propagation of sound make the city soundscape a territory in which the boundaries between private and public are constantly being questioned. While architectural barriers can effectively provide a visual privacy for individuals in their working and living spaces, it is much less frequent that buildings are able to produce acoustic isolation. All of the sounds you

create are resonating your neighbor's body to some degree. While this issue is often viewed as a shortcoming of construction techniques, we can also understand how leaving this communication channel open allows our private enclosures to be embedded in the wider context of the public city.

The Soundwalk: going nomadic again

Michel de Certau in his essay *Walking in the city* describes walking as a language:
«Sounding, listening and walking are all embodied ways of experiencing the world. If we want to use sound to develop human relationships within public spaces, walking is a way to do it. By playing with the ideas mentioned here: sound as space, mapping, ritual, repetition and rhythm, and sound as liberation-artists and composers can remind the public how pleasurable embodied experience can be, by inviting them to reconnect their inner and outer, their dreaming and waking, selves in real space»
 A soundwalk is a practice of listening in which one moves through an environment with complete attention to sound. Westerkamp defines the soundwalk as an «excursion whose main purpose is listening to the environment. It is exposing our ears to any sounds no matter where we are». «Wherever we go we will give our ears priority». They have been neglected by us for a long time and as a result we have done little to develop an acoustic environment of good quality. (Westerkamp, 2001)

In 1966 Max Neuhaus, at the time a concert percussionist, with his series called *Listen!* laid the grounds for the practice of soundwalking. He surprised his audiences by inviting everyone to leave the concert hall, follow him on a walk around the city and listen to the sounds of everyday life as if they were music. This change in the framing of perception from passive to active and from static to mobile could also be seen in relation to a more general return to nomadic lifestyles which we are experiencing in contemporary society. In his book *The Songlines* Bruce Chatwin describes the aboriginal custom of orienting oneself in the australian inland by the way of chant. This tradition provides a means for travelers to access memories of place which are shared and passed on from generation to generation (Chatwin, 1987). In *Anatomy of Restlessness* Chatwin further argues that the nomadic origin of mankind has left us with an ancestral need to move and to experience a constant change of scenery: «Diversion. Distraction. Fantasy. Change of fashion, food, love and landscape. We need them as the air we breathe. Without change our brains and bodies rot.» (Chatwin, 1996). Applying this thought to the practice of soundwalking suggests that walking while listening frees the mind from the urgency for change and allows for different modes of attention.

Mobile audio devices and appropriation of public space

Many listeners report that mobile audio devices make them feel more connected to their physical surroundings. It is widely recognised that these devices allow listeners to create their own cinematic experience, applying in everyday life Michel Chion's theory of *added value* (Chion, 1994). The same audiovisual illusions that we experience at the movie theatre can be also exploited to construct our own narrative in the real world. Composing our own soundtrack is a very powerful way to live the city and has been defined as a strategy of appropriation (M. Bull, 2008). A place that is imposed on citizens by urban planners and developers might be perceived as foreign and unwelcoming, but combined with a chosen set of sounds, it can turn into a more familiar place. As in cinema, this remains of course an illusion that has a limited autonomy if it is not reconnected to the social sphere. The risk that this illusion carries is well described in Michael Bull's words: «The aesthetic moment of urban experience within iPod use draws the "other" mimetically into the users own imaginary realm- theirs is a strategy in which all "differences" are negated and become one with the user.» (Bull, 2008). Negation of the other implies erosion of public space, or as Teri Rueb writes: «What is the space of compromise and negotiation of meaning akin to "public space" in this moment of dual movement between global homogenization and expanded cosmopolitanism? […] As a society we have become atomized, but the question remains "can we form molecules?"» (Teri Rueb, 2008). By eluding the shared experience of a common acoustic environment, we lose the chance to establish unforeseen relations and to question our perspectives through forms of mutual confrontation.

Tuning headphones to shared places

We have chosen a number of case studies that attempt to solve these problematic issues by proposing different approaches to the use of mobile audio devices. The selected works have in common that they reconnect the private sound space provided by headphones with the physical and social space surrounding the listener, offering new and fascinating ways to explore the city.

Mark Bain – Bug (2008-2010)

Where architecture does indeed provide acoustic isolation, sounding devices can be deployed to spread doubt on the firmness of concrete. This has been the claim of American sound artist Mark Bain. In his recent work Bug, he proves that architecture is not only for the eyes: "I imagine a thin cable coming out of a large building and someone standing in front of it, enraptured, eyes closed." (Arno Brandlhuber, 2008). The vibrations of Arno Brandlhuber's studio in

Berlin's Brunnenstraße are transduced into an audio signal by geo-seismic accelerometers. People on the street can listen to their output by plugging a pair of headphones into a jack embedded in the façade. An image of this activity might remind us of the Stasi agent in the film "Das Leben der Anderen" by Florian Henckel von Donnersmarck, suggesting that anyone is now free to eavesdrop in the capital of Germany. However, what passers-by hear in this case is not so much the private life of the inhabitants of the building as much as larger scale transfers of energy flowing through the city and shaking it's foundations in ways that we cannot perceive without the assistance of specialized tools.

Noah Vawter - Ambient Addition (2006)

"If synthetic sounds are introduced, if we venture to produce what I would call 'the soniferous garden', care must be taken to ensure that they are sympathetic vibrations of the garden's original notes" (Schafer, 2004).

Noah Vawter's Ambient Addition is a portable device that attempts to establish a compromise between being helplessly exposed to the aggressions of the urban soundscape and escaping in the isolation of the personalized sound bubble. By introducing a layer of ambient music which is tuned in real time to sounds of the environment, the noises of the city are still heard but in a mitigated form. From a musical perspective the project would seem extremely conservative, as it reduces the complexity of sound to a very small set of predefined pitches and rhythms. However these processed sounds are perceived by the listener together with the original sounds, in a similar way that we would listen to a Japanese wind chime or an aeolian harp, while also feeling the wind. In this way we can consider that they are not excluding but rather enriching the ordinary experience of the city.

Sonic City (2003-2004)

Focusing less on practical issues of ergonomy and adventuring further into cyborg territory Sonic City was a pioneering project by a group of researchers based in Goteborg. What they developed was a generative mobile music system that reacted to a combination of data collected through an array of sensors both from the body of the user (heart-rate sensor and accelerometer), from the environment (light, sound and pollution sensors) and the relations between the listener and surrounding objects (proximity sensor and metal detector): «Music creation in Sonic City is a co-production of the body and urban conditions and is experienced as a dynamic improvisation and continual rediscovery. Voluntary and involuntary actions, visible and imperceptible events all effect the

sound – thus blurring the boundary between passive experience and active participation» (Mazè and Gaye, 2003). This is particularly interesting as, while experiencing this system, the self is constantly pulled out of its bodily shell and mingled with its surroundings. While also here the music is still heard via headphones only by the person wearing the device, this project does suggests that it is possible to describes through sonic means the complex relations that take place between shared urban settings and single individuals.

Christina Kubisch - Electrical walks (2003-)

Our built environments are dense with electromagnetic fields radiating from all types of appliances. Christina Kubisch has been exploring this hidden and pervasive dimension of the city thanks to specially designed induction headphones which transduce electromagnetic energy into audible sound. Electrical Walks takes the experience of the soundwalk and brings it into uncharted regions. What the walkers hear in this case are the invisible manifestations of power distribution, communication networks, security or public transport systems. Her research in this area has led her to discover a particular kind of genius loci: «In every city there are some surprises. I love American cities because they have deep intense drones. I love Asian cities because they have high and nervous melodies. I like European cities because they are all so different from each other. The electromagnetic sound is connected to the object or place where it occurs» (Kubisch, 2010). The technology that Kubisch developed is derived from an old system employed for the hard-of-hearing: «In the UK, I think they even have a law that churches or public meeting houses have to have these induction loops. What they don't know is that, with these headphones, you can hear exactly what's going on inside. In Switzerland, I came across a group of people—I think it was a group of Indian people— celebrating a religious service in their own language. Because I didn't understand the language, at first I thought it was some kind of terrorist meeting, with all this shouting and these rhythmic sounds. But then I heard the "hallelujah" and "amen," and I understood what it was» (Kubisch, 2006). In these cases the intimate ritual spaces of religious communities spill out of their architectural boundaries and radiate onto the surrounding streets.

Mark Shepard - The tactical sound garden (2007)

This project draws on the culture of urban community gardening to posit a participatory environment where locative media provide new forms of social interaction. "Hacking the sonic space of the city is as old as the street performer, or as recent as the portable boom box or Mitzvah Tank" (Shephard, 2005). While the war on file sharing

continues on the frontier between the free and the corporate internet, Mark Shepard has developed an application for Wifi-enabled mobile devices that allows users to share audio files in public spaces, not only making the practice even more elusive to copyright enforcement agencies but also embedding it in local communities. File sharing in this way becomes connected to specific places. While walking the dog, you could listen to a track "planted" next to a bench by an unknown neighbor. Needless to say, the potentials for this type of social networking to produce real world encounters rises exponentially.

Soundtrackcity (2010)

While the previous projects all create real time interactions between people and urban environments, here we have an approach which employs completely pre-arranged material. Drawing on the form of the soundwalk as developed by artists like Hildegard Westerkamp and Janet Cardiff, Soundtrack City is a project created for the city of Amsterdam which includes a series of audio walks that guide visitors around less known areas of the dutch capital. The walks, together with maps of the routes to follow, can be downloaded in mp3 format from the Soundtrackcity website. Each walk lasts about one hour and is commissioned by the Soudtrackcity Foundation to a different artist or team of artists, including theater makers, composers and writers. One of these walks explores the new area of IJburg. This part of the city started to be developed on a group of new artificial islands on the IJsselmeer in the north of Amsterdam during the last decade. The sound walk for IJburg is inspired by the fact that these a islands have no birds on them – to begin with at least. As birds follow habitual routes, they have not yet learned to stop in this human-made land. This is not so dissimilar to how humans relate to new urban areas. New urban districts which are void of history and have no pre existing meaning can feel like ghost towns. Public art projects like this one can perhaps contribute in providing a means to establish a sense of place and to humanize the products of sometimes questionable urban planning.

Conclusions

The above mentioned projects demonstrate some of the possible ways in which the experience of the city can be redefined through sound and mobile audio devices. These, as well as countless other works not mentioned here, move beyond the production of novel experience that characterizes consumer cultures, while at the same time avoiding forms of elitist withdrawal. Through these projects everyday experience can be transcribed into a new hermeneutical level where the "hidden" and "unseen" is revealed and interpreted in multiple different ways. While

proposing new means of critical expression for the social, cultural and political realities of contemporary cities, these practices establish open ended relationships between technology and subject: audiences can use and interpret the city in a new sense, creating small worlds, imagined communities and endless interpretations within its geographically established territory.

References

Ackerman Diane, *A Natural History of the Senses*. New York: 177, Vintage Books, 1990

Brandlhuber Arno, interviewed in *Tuned City – Between Sound and Space Speculation*, eds. Doris Kleilein, Anne Kockelkorn, Gesine Pagels, Carsten Stabenow, Kookbooks, Idstein, 2008

Bruinsma Max, *Notes of a Listener*, In *Sound By Artists*, eds. Dan Lander and Micah Lexier, 93. Toronto: Art Metropole/ Water Philips Gallert 1990

Bull Michael, *Turning out of the city: the iPod culture,* in *Tuned City – Between Sound and Space Speculation*, eds. Doris Kleilein, Anne Kockelkorn, Gesine Pagels, Carsten Stabenow, Kookbooks, Idstein, 2008

Classen Constance, *Sensuous Worlds: Accessing the Invisible Environment* in *Athens by Sound. 11th International Architecture Exhibition La Biennale di Venezia*, eds. Anastasia Karandinou, Christina Achtypi, Stylianos Giamarelos, Athens: futura 2008, pp. 71-3: 71.

Chatwin Bruce *The Songlines*, London: Cape, 1987

Chatwin Bruce *Anatomy of Restlessness. Selected Writings 1969-1989*. eds. Jan Borm and Matthew Graves. Harmondsworth, Middlesex; New York: Penguin, 1996

Chion Michel, L'audiovision, Paris, Nathan, 1994

De Certeau, Michel. «Walking in the City. In the Practice of Everyday Life, 91-110, Berkeley CA: University of California Press, 1984

Kubisch Christina, interviewed by Christoph Cox in Cabinet Magazine, issue 21, 2006

Kubisch Christina, interviewed by Alessandro Ludovico on Neural Magazine, issue 37, 2010

Mazè Ramia and Gaye Lalya, *Sonic City*, Cybersonica Cream Symposium, London, UK, 2003

Schafer Raymond Murray, *The Music of the Environment*, in *Audio Culture, Readings in Modern Music*, eds. Cristoph Cox, Daniel Warner, Continuum, New York – London, 2004

Shepard, Mark, *Tactical Sound Garden [TSG] Toolkit*, 306090-09: Regarding Public Space, Princeton Architectural Press. November 2005. pp. 64-71

Rueb Teri, *Network Landscapes: Landscape, Public Space & Mobile Music* in *Creative Interactions – The MobileMusicWorkshop 2004 – 2008*, eds. Nicolaj Kirisits, Frauke Behrendt, Lalya Gaye, Atau Tanaka, University for applied arts, Vienna, 2008

Vawter Noah, *Ambient Addition: How to Turn Urban Noise Into Music*, Massachusetts Institute of Technology, 2006

Westerkamp Hildegard, originally published in Sound Heritage, Volume III Number 4 Victoria B.C., revised 2001

Sonic City, retrieved from (http://www.tii.se/reform/projects/pps/soniccity/index.html (accessed 26 December 2010)

Shepard Mark, Tactical sound garden, retrieved from http://www.tacticalsoundgarden.net/ (accessed 26 December 2010)

Soundtrackcity, retrieved from http://www.soundtrackcity.nl/ (accessed 26 December 2010)

Bain Mark, *Bug*, retrieved from http://www.tunedcity.net/?page_id=191 (accessed 26 December 2010)

Neuhaus Max, interviewed by Brandon LaBelle, 2008 retrieved from http://www.max-neuhaus.info/audio-video/ (accessed 26 December 2010)

Kubisch Christina, *Electrical walks*, retrieved from http://www.christinakubisch.de/english/install_induktion.htm (accessed 26 December 2010)