Expression

Soundscapes

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Abstract

This article examines the issues of soundscape construction and reception and states that a city is a construction built from private sonic narrations that both shape and are shaped by spatial structures. The analysis of three audio-visual practices: *Playtime,* a film by Jacques Tati; *Infrasonic Soundscape*, an interactive online artwork by Hidekazu Minami; and *Dialtones (A Telesymphony)* by Golan Levin, a concert performance whose sounds were produced by the audience's mobile phones reveals the polyphonic character of space. These examples necessitate verifying the way one perceives the understanding of the concepts of sound and space as well as their interactions.

The phenomenon of soundscapes requires transgressing the dichotomies of space/place, seeing/listening (sound/image), and listener (recipient)/creative subject (sender of a specific message), in favour of the intermediate categories. The core of the *interspace* which arises on this ground constitutes a dialog anyone might enter if they afford a gesture addressed to the other (various forms of space embodiment).

Key words: soundscape/ high-fidelity soundscape, city heteroglossy, musical graphic, graphical music, melosphere, acoustic ecology, ambient music, interspace, music-in-the-city, audibility.

The main thesis of this paper examines the issues of soundscape construction and reception and states that a city is a construction built from private sonic narrations that both shape and are shaped by spatial structures.

The term "soundscape", as coined by R. Murray Schafer, refers to a collection of acoustic phenomena ascribed to the particular physical space. The acoustic manifestation of urban space, emerging in the act of subjective perception usually submits to the overwhelming pressure of visual stimuli. In this article, analysis of three artistic creations will reveal the polyphonic character of space. Each author's consciously developed aural

sensitivity lays the foundation for each product. The research of acoustic ecology theorists suggests that this research material should include audio-visual practices: *Playtime* (1967)*, a film by Jacques Tati; *Infrasonic Soundscape*, an interactive online artwork by Hidekazu Minami; and *Dialtones (A Telesymphony)* by Golan Levin, a concert performance whose sounds were produced by audience's mobile phones. These examples necessitate verifying the way one perceives the understanding of the concepts of sound and space as well as their interactions.

Part One: *Playtime* by Jacques Tati

In Jacques Tati's films the intellectual-aesthetic peregrination around a city leads from congested streets to inner residues of silence excluded from traffic noise. Despite the fact that R.M. Schafer did not use the term "hi-fi" in reference to urban spaces, the assumption that they exist in each city as intentionally designed acoustically blank places that might be filled with any content, appears to be justified in the work of J. Tati. In *Playtime* these blank spaces take the shape of acoustically sterile hotels and modern steel and glass buildings and provide an opportunity for a spectator/listener to witness the process of space-familiarization by means of sound. The fundamental question that the French director considers is the role that objects and the human body play when perceived as sound accumulation or sound storage instruments. His films exemplify the complex and fascinating nature of objects that are diverse in terms of shape and texture that release acoustic phenomena upon touching.

Mr Hulot, the protagonist of the film, directs his efforts at attaining this goal by exploring the acoustic manifestations of leather armchairs, the only props filling the space and by observing people through their manoeuvres in space (e.g., the acts of getting up, sitting down, clapping) that result in acoustic reactions of various kinds. Some gestures and activities that lead to sound reverberations were grotesquely exaggerated in the film. The rustling of papers, the tapping of a ballpoint pen on a document, the fastening of a zipper and the shaking-off of invisible dust are acts performed with reverence. The intended comic effect is achieved due to the fact that in everyday life these sonic manifestations comprise noise and as such are frequently pushed to the margins of sound consciousness. As R. M. Schafer states, noise consists of sounds which a man has learnt to ignore (Schafer 1994, p. 4).

It is due to Mr Hulot's sensitivity that all acoustic phenomena are registered and only then are they heard by a listener in the act of secondary perception. As a consequence, the act of touching the armchair by the protagonist is not solely the act of offering voice to a mute object, but also a means to make the spectator/listener aware of the possibility of exploring the character of space through sounds rather than sight. Sound is a factor that allows Mr Hulot to orientate himself in space and the access to sound determines his affiliation with a place. In his meditations on listening, W. J. Ong writes that "embodiment" and "immersion" are rendered possible due to listening. "Sight isolates, sound incorporates. Whereas sight situates the observer outside what he views, at a distance, sound pours into the hearer. […]You can immerse yourself in hearing, in sound. There is no way to immerse yourself similarly in sight" (Ong 1982, p. 72).

It might be stated that listening contributes to the reconstruction of space and its relations with a bodily subject in a more substantial manner than does visual perception. In Tati's film, the reverberation becomes listening on two levels: firstly, when it [reverberation] is released by the protagonist fascinated with the resounding objects, and secondly, when it is heard by a spectator/listener. I. Sowińska remarks that it is the existence of the receiver and (listening) spectator which makes possible the emergence of "a meaningful and meaning-generative" audibility (Sowińska 2001, p. 41).

In his films J. Tati refrains from differentiating between the intended sounds as a vehicle of a particular meaning on the one hand and the acoustic background on the other. The director dissolves the characters' voices in the noise arising from the surroundings to the point where many of their conversations become incomprehensible to the spectator.

J. Tati appears to call into question the belief that words are the most natural means of communication. It is noticeable in the scene in which a man enters a glazed and minimally furnished room where Mr Hulot explores the acoustic consequences of the act of touching. The protagonist ignores his presence and does not react to the words uttered by the man. Mr Hulot does not notice him until he takes a seat in the armchair that releases the acoustic phenomena typical of this activity. This is what attracts Mr Hulot's attention and results in the exchange of greetings conducted by means of gestures (e.g., head nodding, rising from the armchair), not words. Here, the creaking of armchairs replaces verbal communication. In terms of sonic intensity the room in which the aforementioned characters are constitutes a **high-fidelity soundscape**.

J. Tati, for whom sounds of speech function on the same semantic level as sounds which are not speech, invalidates the meaning conveyed by speech and places it on the level of other acoustic phenomena that are not generally vehicles of meaning, other than in the musical and acoustic sense. J. Tati makes efforts to reveal the plenitude of acoustic stimuli related to the places depicted in the film, but simultaneously he does not subject them to artistic manipulation.

Part Two: *Infrasonic Soundscape* by Hidekazu Minami

Sounds transmitted through a radio acquire physical presence in the place they are heard; therefore, it is the listening itself which offers them the possibility of coming into existence and manifesting their variable nature. The Internet has the potential to offer similar possibilities. *Infrasonic Soundscape* by Hidekazu Minami, a collection of sounds and noises of New York, is one of many projects conducted and documented in this medium. The Japanese designer, artist and programmer placed the hidden ambient sounds on an interface which bears resemblance to radar. This enables the visitors to the website *http://www.thejtty.org/thesis* to regard New York as an instrument playing music, or a diversified sonic platform, enabling them to realize the existence of multiple soundscapes within the city's space (Cf. Skolimowski 2004).

Hidekazu Minami remarks that the incentive to produce this project was to use low-frequency ambient sounds that are usually ignored in the process of perception in order to create a sonorous instrument, enabling the user to interact with it (Cf. Minami 2001). He indicates the significance of a soundscape comprised of elements that we have not learned to acknowledge.

Fig. 1: The outlook of the interface. H. Minami, *Infrasonic Soundscape*,
http://www.dedalu.art.br/artigos/200503imgs/infrasonic.jpg, retrieved: 10. 10. 2008

Fig. 2: Part of an interface. H. Minami, ***Infrasonic Soundscape,***
http://meccano.trovarsinrete.org/archivi/issue06/infrasonic.htm, retrieved: 10. 10. 2008
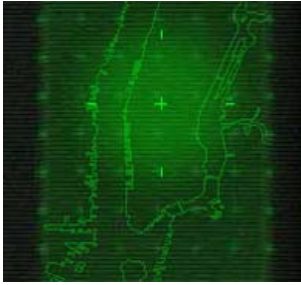
Part Three: *Dialtones (A Telesymphony)* **by Golan Levin**

An intriguing manifestation of artwork based on sound and conditioned by the process of listening are compositions whose sounds are produced through the ringing of the aggreggate audience's mobile phones.

In 2001 Golan Levin, an American new-media artist, together with a group of collaborators, performed the concert, *Dialtones (A Telesymphony),* that was wholly produced through the sounds of the 200 programmed mobile 'phones of the member audience. (http://www.flong.com/projects/telesymphony/#audio). The goal of the *Telesymphony* was not only to attract attention to the concealed music potential of modern technological appliances but also to reconsider the way a private sonic event and public space are defined (Cf. Levin 2001). After registering the mobile phone numbers at a cluster of Web kiosks and achieving new automatically downloaded ringtones, the participants were ascribed to specific seat numbers. During the concert, the ringtones were played *en masse* by a group of musicians who were dialing them via software specially designed for the purpose.

Both the arrangement of the concert attendees and their ringtone melodies, which were known to the computer system in advance, enabled the creation of spatially textured sonic compositions, such as waves of polyphony. The *Telesymphony* explores the vast terrain of musical possibilities ranging from single sounds to sonic cacophony, rendering the spatial texture of this composition perceptible. The auditory stimuli are additionally reinforced by visualisation of music structures executed by a projection system linked with the participants' interfaces.

The concert consisted of three parts, each one of them lasting for approximately ten minutes. The opening part was comprised of sonic phenomena produced by the mobile phones of the audience as described above. The second was a solo performance by Scott Gibbons on ten mobile phones that were connected to an amplifier. The final part consisted of a joint performance by S. Gibbons and the audience that produced a crescendo initiated by the soloist and culminated in the reverberation of 200 mobile phones (Cf. Levin 2001).

The aforementioned examples made possible the transgression beyond the architectural context in favour of the city hetereoglossy. This reflection could be complemented by a presentation of the ways architects register the reception of acoustic phenomena with the means available to them. Music and architecture, primarily in terms of composition, are characterized by specific common features, which were first noticed by the ancient Greeks and Romans (Satkiewicz-Parczewska, p. 128). A. Satkiewicz-Parczewska remarks that architectural composition might be regarded as "the music of space which is happening in time"[14] (Satkiewicz-Parczewska, pp. 130-131), for it is possible to mark the beginning and the end of its perception. However, rather than the music of the architecture, this paper focuses on the architecture of music.

 Also worth mentioning are works of art by architecture students that exemplify the thesis of the ability of "seeing" music, i.e. painted, graphic and spatial records of the music heard. They comprise the so-called musical graphic, or– a new form of notation– transgressing the restrictive traditional five-line staff, which allows for the recording of additional aspects of a musical work. One of its significant elements are lines of variable thickness and length or geometric figures by means of which musical events are recorded. Distances between them reflect time relations between particular musical events, as well as their saturation and intensity. According to A. Satkiewicz-Parczewska, "Its [musical graphic's] poliversal and multi-rhythmic character makes these records a tenacious and original phenomenon, where »musical graphic« becomes »graphical music« constituting the phenomenon arising from the conjunction of these two disciplines" (Satkiewicz-Parczewska, p. 134).

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[14] All translations by the author, unless stated otherwise.
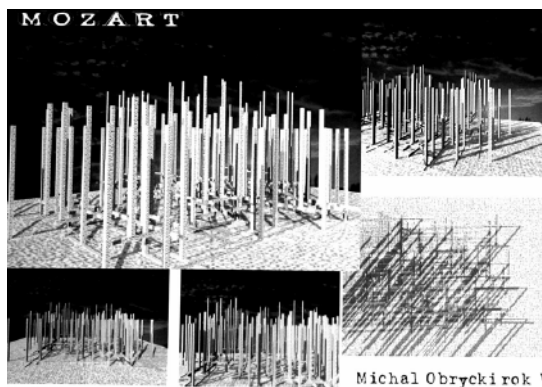
An interesting effect has been achieved by architectural student M. Wysocka in the work of which an excerpt is presented below. The graphical collage with names of streets and districts that display the route she traverses from her house to college, was charted on a graph depicting the fluctuation of her feelings related to the places on her way. The additional reinforcement of the emotional content is the revealing selection of colours M. Wysocka uses.

The following picture exemplifies the transposition of music into architecture in the form of a graph of feelings. The trajectory of feelings, states of increasing tensions, culmination and relaxation, that accompany the perception of the musical composition by Zbigniew Preisner from *A Short Film About Killing* are registered on the time axis.

Fig. 5: B. Dzieruk, *A Graph of Feelings*,
http://architektura.ps.pl/PDF%20-%20przestrzen%20i%20FORMA%20nr1%202005%20-
%2011.10.05/13%20Satkiewicz-Parczewska%20Aleksandra.pdf, p. 140, retrieved: 23. 11. 2008
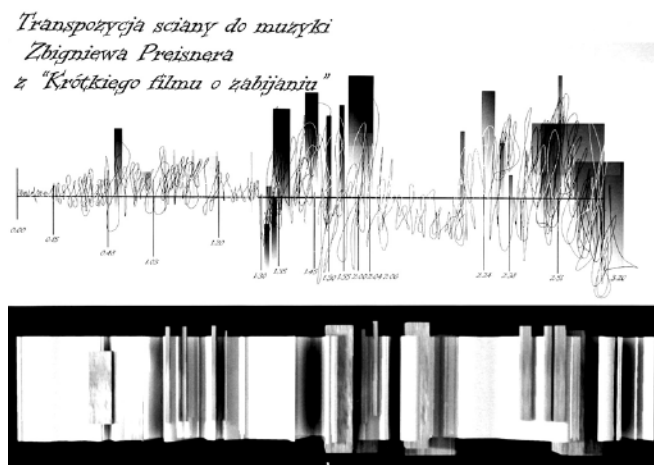
Conclusions

The Canadian composer and performer Pauline Oliveros strongly correlates the relation between listening to a soundscape and the understanding of its components on the one hand , and on the other hand, a sense of belonging to the particular space, which manifests itself sonically due to the aforementioned factors (Oliveros 2005, pp. xvi-xxv). She believes that communication disorders render the feeling of "being at home" impossible. In the lecture *From a Research Project on the Soundscape of Wrocław. The Music in the Public Space of the City* [15] delivered during the first Polish interdisciplinary seminar on the present status and future strategy for researches into sound in landscape, R. Losiak implied that cogitation on the city's music and the music-in-the-city might be an incentive to focus on the cultural process

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[15] This lecture was based on the outcomes of research carried out in the Institute of Culture at the University of Wrocław as part of the project *Soundscapes of Wrocław*.

of "making oneself at home" in the urban space. Music and the ways of its reception might constitute a measure of affiliation with a particular space and the people who momentarily settle it. The emergence of this bond becomes possible in view of the fact that as a message addressed to others, music functions as a substitute for their presence (Cf. Losiak 2008, pp. 253-264).

R. Losiak emphasized the role of musical phenomena as holistic and logical structures, which Maciej Gołąb regards as components of *melosphere,* or an area of "meaningful auditory discourses" (Losiak 2008, p. 53). The meaning of these discourses is related to the rules of musical construction as well as to the cultural consequences of the presence of music in the urban space.

In the city-space one might distinguish places of a particular kind invariably associated with the existence of music, which are characterised by exceptional acoustic conditions. Frequently these places are destined to have prominent auditory values due to the functions performed[16]. R. Losiak remarked that music constitutes a regulatory factor in the process of urban space perception also in the extra-auditory dimension. The presence of music delimits space, becoming a point of reference, a peculiar place where the concentration of events takes place.

Recognizing the tradition of musicology and acoustic ecology leads one to state that including audiovisual practices in the present article necessitates the verification of the understanding of sound and space as well as the adoption of new interpretative perspectives.

Soundscapes which have been recorded since the 1960s inscribe themselves in the avant-garde movement's artistic search by arousing new auditory sensitivity that affects novel modes of experiencing space as a whole. Interests of this kind were shared by Edward Varese, John Cage and Karlheinz Stockhausen, whose spiritual successors are artists performing in the genre of ambient music. A. Karpa notes that "nowadays, when music is considered a means of structuring space (contrary to the past, when it was believed to structure time) musicians of the postdigital era need to create architectural textures and fill space with sounds, to which they are imminently ascribed. These new electronic compositions are based on the components of our auditory surrounding, on the fragments drawn from the information dumping ground of civilization, from media hype. Cleansed from the digital dust, set in a new context, they structure new qualities – multilevel acoustic spaces of nonlinear, fractal

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[16] Losiak remarks that these might be places of special touristic value such as meeting places, places of worship, or places related to entertainment and trade.

character, which are entered rather than interpreted and analyzed in a traditional way" (Karpa 2003, p. 35).

Following the assumptions of R.M. Schafer "soundscape" is a broad term ranging from a musical composition to a radio program and the acoustic environment (Schafer 1994, p. 7). At the foundation of both the ambient music created by Brian Eno in the 1970s and the aforementioned artistic projects and works of art based on sonic experiments lies the idea of the acoustic management of space. The blending of artificially created sounds with natural sounds has repeatedly taken the form of a collage. The character of musical collages might be construed as a form of artistic self-commentary on the interests and domains of the future strategies of audiovisual art. Juxtaposing the differences in the reception of traditional note-oriented musical structures and ambient music, consisting of sounds of fractal texture, K. Antosiewicz remarks that "fractal textures cannot be represented by means of symbols, that is why they require different levels of emotional activity. We listen to real sounds, not to their interpretation, which is invariably unsuitable. Consequently ambient music appears to be an ecstatic form of music, fulfilling the Taoist formula of opening to everything that surrounds us: traffic noise, the swoosh of a stream and a fly's buzz, the way they are in reality" (Antosiewicz 2000, p. 36).

The phenomenon of soundscapes requires transgressing the dichotomies of space/place, seeing/listening (sound/image), and listener(recipient)/creative subject (sender of a specific message), in favour of the intermediate categories. The core of the *interspace* which arises on this ground constitutes a dialog anyone might enter if they afford a gesture addressed to the other (various forms of space embodiment).

The urban phonosphere constitutes a meeting ground of substantial potential which might fulfill the need of touch, stronger than real and palpable contact. Such a meeting could be also perceived as a specific mode of bonds between a man and the world.

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