

# The art of noise: Comment on The sound of silence

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## **Abstract**

This article explores a possible cultural psychology of sounds, or rather, constitutes a call for an inclusion of sounds as part of our analysis of people's daily experience. The reflection is based on social sciences as well as on artists' work on the limits of sounds. The argument is, first, that soundscapes are as much constitutive of our experience as the spatial and material components of our lived spaces. Second, sound can be considered as specific semiotic system; as such, a cultural psychology has to examine experienced sounds, as one modality of social meaning-making and personal sense-making. Third, if sounds are organized as semiotic systems, then a developmental approach can be defined. Fourth, empirical implications are highlighted; the proposal here is to combine people's perspectives on perceived sounds, the semiotic resources on which they draw to make sense of them, the location of these sounds in actual sociocultural settings and the relations between these various perspectives.

## **Keywords**

imagination, noise, semiotic system, sound, sphere of experience

The variety of noises is infinite. If today, when we have perhaps a thousand different machines, we can distinguish a thousand different noises, tomorrow, as new machines multiply, we will be able to distinguish ten, twenty, or thirty thousand different noises, not merely in a simply imitative way, but to combine them according to our imagination.

(Luigi Russolo, 1916)

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“ouitchi-tchatchitchatchaouitchitchatchitchitchaNIAAAAAAAAH . . . ouitchi-tchatchitcha . . .”

(Simonds, 1988, p. 45)

Listening to Martin King’s “I have a dream” is a different experience than reading the same sentence (Müller, 2012), and reading an account of the numbers of deaths in the world war trenches has nothing to do with a description of the sonar environment in which young men have learned to live (see for instance Remarque’s [1928/1989] depiction of his ear-recognition of various types of flying and exploding bombs). In an engaged article, Müller (2012) brings us to reflect about the importance of sounds in our experience of the world, and shows how partial and incomplete depictions of the past would be without recordings of their aural quality, or at least depictions of their sounds. A historian, Müller argues for an integration of a study of *soundscape*s (Schafer, 1977/1993) – the sound environment – to develop a full-bodied history.

Müller partly bases his argument on the psychological functions of sound. In effect, he argues, sounds can be seen as “a source of information”, as “a tool of orientation”, a “means to gather experience” and a “component of communication” (Müller, 2012, p. 446). On this basis, the author interestingly suggests that the study of sounds is fundamental to understand in which world people lived in specific past situations, how they could orient themselves in it, how they could confer sense to these sounds, and how they could communicate.

These two points raise issues which directly triggers the curiosity of a cultural psychologist. First, if sound is a source of information and means of communication, then it means that people can interpret sounds as mode of understanding the world. We therefore need to consider the active role of listeners seriously. Second, if the world of people of the past cannot be understood without a proper account of their soundscapes, then social scientists and psychologists should also account for people’s current experience of sounds. Third, it raises the question of what people who hear little or not at all orient themselves in their environment. In what follows, I will address the two first questions – and leave out the third to other enquiries. Here, I will continue Müller’s call for a history of sounds by suggesting that cultural psychology should integrate sounds in its enquiry. Doing so, I call for a non-naïve approach of sounds as sociocultural psychological phenomena.

## **Social spaces, soundscapes and the semiosphere**

Through its interest for the social, psychology has early developed an interest for people’s context or environment, describing social groups, social fields, and then institutions. Strangely, the concrete, material aspects of these places is still only scarcely studied and has only recently come back to the fore in cultural psychology, for instance with Kharlamov’s analysis of the experience of being in the urban space (2012), or Valsiner’s interest for people’s movements in ornamented world (Valsiner, 2007; 2008; but see Fuhrer, 1998).

These geographical, material and urban spaces interest cultural psychology because they constitute human environments, and more precisely, because as people move through them, in time, they are constantly exposed to their presence, shapes, volumes, colours and sounds, and contribute to them. These geographical environments guide our physical movements, and also, because we keep being exposed to shapes, colours and sounds at the periphery of our consciousness, they actually guide our thinking (Valsiner, 2011). First, in the here and now, street signs and colours suggest to us some places, inform us about the status of others, induce us to spend money or to not come any closer. Second, in a deeper sense, our long-term experience of the places in which we move is also the situated process by which we learn to move and to see; we therefore internalize and generalize these relationships to space, colours of the landscape and textures of the buildings. Our spaces become the texture of our minds, in a very essential sense. Hence, the nostalgia of migrants for their homeland landscapes or for the shape of the houses of their village speaks for such deep connections between our material environments and our identities and sense of what feels homely. Third, we actually also contribute to the transformation of the material space – we create sounds as we walk in the streets, drive cars and play the drum, we transform our gardens and houses, we paint walls and make urban plans.

Sounds are spatial, and they thus are part of our physical environment. As Müller suggests, they constitute soundscapes, three-dimensional, physical sound environment, in which we live. As much as physical spaces, they are perceived by humans through their senses and their physical, embodied experience; and as their experience of space, experiences of sounds needs to be treated, analyzed – these becomes signs for humans. Like physical spaces, sound is pervasive; first, it is always on the process of being experienced, catching our attention or disturbing us; second, it is also and always exposing us to endless social meanings; and third, we participate to sounds. Sounds constitute one modality of the semiosphere in which we live.

The notion of *semiosphere* has been proposed by Lotman to designate the world of culture in which we live, made out of semiotic units – the minimal conditions of carrying meaning through time and space among humans (if not other species) – and as “the result and the condition for the development of culture” (Lotman, 1990, p. 125). The notion was built in analogy to that of biosphere, used to designate “the totality and the organic whole of living matter and also the condition for the continuation of life” (Lotman, 1990, p. 125). If sounds are relevant to humans, whatever their cause is, it is because they become one of the modalities by which culture functions.

## **Boundaries: Noise, sounds, music, meaning**

To contribute to a reflection of a possible cultural psychology of sounds and soundscapes, I will explore a few attempts made to reflect on people’s experience of sound in specific spheres of experience. Using an old technique, I will approach

sounds through contradistinctions: when the idea of sounds becomes blurred and meets a limit – noises, words, or music. This exploration is in no way exhaustive.

“Sound” designates “(what is heard because of) quick changes of pressure in air, water, etc.” (Procter, 1995, p. 1378) – a sound is a vibration interpreted by an ear, and here, a human ear (with no major dysfunction). Something which is heard can also be interpreted in a different ways.

### *The cultural construction of the meaning of sounds*

In a foundational essay for cultural psychology, Boesch (2007) reflects on “the sound of the violin” and questions what makes its beauty. He examines the epigenesis of the violin through history and in different places in the world, as well as the developmental trajectory of the young violinist who needs to discipline his movement and hearing so as to produce a *beautiful* sound. The essay brings him to reflect on the mutual adjustment of person and instruments, through a life course and history, and mediated by dynamics of recognition. More relevant for the current discussion, Boesch particularly reflects on the tension that justifies the search for a “pure” sound – a utopia of something not yet heard, but powerful enough to mobilize the effort of civilization and musicians:

Utopia is the imagination of a world entirely in harmony with our fantasies, of reality totally in tune with our inner experience. In other words, Utopia abolishes the “I”–“non-I” antagonism. The beautiful sound, an external phenomenon, yet produced by our mastery and corresponding to – or even surpassing – our ideal standards, thus becomes a proof of our potential to create a phenomenon which, by its appeal, symbolizes Utopia. (Boesch, 2007, p. 186)

Eventually, Boesch suggests, the beautiful sound is a mythem, linked to a cultural ideal of purity, in opposition to *noise* – or “sound dirt” (Boesch, 2007, p. 188). He goes as far as suggesting that rock music is looking for this “dirt” – through its noisy music and dirty clothes and greasy hair.

But what then, is noise? In such a view, noise is sound which has not been cultivated – either because it has not been produced by humans, or because humans have not yet developed a system to identify and name it. But “noise” is also very often simply the sound of “Others”, as Gonseth, Knodel, Laville and Mayor (2011) observe through the history of musicology.

If we now examine the perspective of individuals, the boundaries between sounds and noise manifest slightly differently. In an intriguing case study of a Thui village in Northern Thailand, Chuengsatiansup describes the illness of women which is foremost manifested by a hyper-sensibility, or even a feeling of being attacked by daily noises, “blasting motorcycles, drunkards, quarrelling neighbors, machines eating up the forest” (Chuengsatiansup, 1999, p. 297). These “noises” are perceived as highly unpleasant and participate to the ill-state of these women, manifested by deep tiredness, numbness and insomnia, without

having a physiological explanation. To account for this, the author proposes a complete analysis of the village's mode of life, which has been questioned by regional and world legislative and economical changes, and was forced to undergo through deep transformation. Hence, for reasons of animal protection, the traditional elephant trade became prohibited, which demanded that new occupations for elephants and new trades for villagers be found; the forests were being sold to large foreign groups which started to use extensively its wood, preventing traditional uses; the media brought new leisure to young men, such a motorbikes and alcohol. In that perspective, the "noises" that make women sick are actually the sounds of all the aspects that impose a rupture on the previous way of life of villagers and women: The sound of woodcutting is interpreted as the noise of machines destroying the physical environment, the sound of young men having fun with their motorbikes becomes the noise of young men risking death through dangerous mechanical objects. In that sense, a noise is a sound which is perceived as rupture – whether it designates a real source of danger, or because it questions who one is, the relationships between the person and her social and material environment, or one's vision of the future and the meaning of existence. Chuengsatiansup's (1999) coup de force consists in her analysis of the complete semiosphere: why specific sounds are interpreted as noises having the power to somatically aggress people can only be understood when these are put in relationship to other meanings, diffracted through other material means and modes. In that sense, for what they designate and what they are not, sounds are part of a semiotic system.

### *Artists' explorations: From non-sound to sound*

What is a sound, and how sounds touch us or disturb us, has been systematically explored by musicians and composers. Since the beginning of modernity in the Arts – mainly after industrialization and the First World War – the pursuit of beauty became secondary in painting and in music; artists engaged in making sense of, admire or denounce the new conditions of existence. In his 1916 Futurist manifesto, Russolo enthusiastically asked his readers to learn to listen and discriminate the sounds of modernity, which could become a new material for creative invention. Over the last 100 years, and especially after the Second World War, musicians and composers have developed complex ways to create a wide diversity of sound experiences, using for this natural sounds, instruments, synthesizers and new technologies. Since the 1950s, through stereophonic effects, multiple tracks, uses of samples and drones, and thanks to the quality of sound systems, headphones and physical places, they manage to create sounds which have a deep spatial structure – it is possible to literally hear sounds that move through space and have complex layered architectures – and a strong materiality: vibration, drums and palpitations create deliberate physical experiences of pressure, tensions, etc., as in the sound showers of electronic music.<sup>1</sup> In such work, different sounds are transformed for new composition; whether they are natural or industrial, pleasant

or not, “noise”-like or music, they thus become material for creation of new soundscapes. Musical research has thus questioned the limits between noise and sound, sound and music, sound and space; it definitely displays a deep understanding of what sounds does to people, and how active listeners engage with sounds.

Other artists have also developed reflections in our experience of conferring meaning to physical spaces and soundscapes, but this time exploring the boundaries between different semiotic modes. For example, in his partition *Circus on*, John Cage (1979) asked performers to choose a literary text, and through some algorithm, to progressively replace words by their corresponding sound. In their “Urban Circus” performance directed by Volker Straebel,<sup>2</sup> artists thus played a scene of Döblin’s *Berlin Alexanderplatz* (2003), going through a reading of the description of the place, with words being progressively replaced by the corresponding sounds produced by artists, working with objects, electro-acoustic instruments as well as historical archives. With time, a word-based description of an urban location became a soundscape meant to recreate the experience of Berlin in the 1930s. Such piece can be seen as exploring the boundaries between two semiotic systems, that of verbal language, and that of sound, and as playing with the listener’s experience: can a place be known in the same way, whether it is represented through sounds or through words?

### *Sounds between perception and imagination*

These contrasted examples highlight the importance of the active role of the listener in the construction of a soundscape: If words and sounds can be equivalent of the construction of an experience, if noise can be used for music, it is because “sounds” are not simply perceptions; they are active constructions. To hear sounds, people draw on their experiences of past sounds, and use their imagination of things and spaces. The fact that humans are quite bad at identifying the cause of sounds, or to discriminate between “real” and “artificial” sounds might support this idea. Sound effects engineers or designers precisely play with this fact when they prepare radio shows or soundtracks for theatre or cinema: all kinds of tricks are used to create specific sounds<sup>3</sup> – which listeners happily attribute to their imaginary source. Hence, the flapping of a helicopter is better created with an undulating sheet of metal than by recording of an actual helicopter, where the only clear noise becomes that of the motor. Consequently, people actually know many sounds through fictional reconstitutions in the first place. Most of us can close their eyes and imagine the bomb-whistling and blasting of the First World War, or the deep pounding of galloping horses of Native Americans – while never having approached such situations. Rather, we have an imaginary of sounds, which is fed by fictions: we read novels, see documentaries and movies, in which these sounds were precisely carefully crafted. This imagination of sounds becomes our experience of such sounds, and there is little doubt that these fictional sounds shape our experience of daily sounds.

Altogether, such an exploration suggests that our ability to experience soundscapes is an active construction, for which we draw on our personal experiences of sounds and places,<sup>4</sup> as well as on semiotic resources and cultural conventions available in our environment.

## Genesis of sounds

As any other sociocultural phenomena, sounds also have to be understood in time. In an ontogenetic perspective, as Müller (2012) recalls, audition is one the first sense of the young infant, before birth already. Sound plays a fundamental role in early interactions, as touch and smell – so that sound can be said to participate to the constitution of “sonor psychic envelop” (Anzieu, 1995) – one of the constituents of our thinking capacities. Boesch (2007) also describes the genesis of beautiful sound from such ontogenetic perspective; in his description, the child’s exposure to sounds, perhaps through parents who play the violin, the exposure to teachers and audiences who react to their sounds as “good” or “bad”, participate to the development of a sense of a “beautiful sound”.

In terms of cultural history, how specific sounds became identified, admired, reproduced, or created, becomes one question – which Boesch addresses in his sociogenetic analysis of the sound of violin (2007), or that is at the heart of Müller’s (2012) project of a history of sounds.

Sounds should also be studied in their microgenesis. Studies like Chuengsatiansup’s (1999) suggest the daily interactions and small scale processes by which sounds become noise and backward. Cage’s performance retraces the process of sense-making of sounds and places.

At their various scales, such analyses suggest that the capacity to recognize sounds in a given place and time falls into the same dynamics as the socialization to, or enculturation, or progressive mastery of any other semiotic system. Hence, it is quite likely that mastering sound as semiotic system demands a progressive capacity to discriminate units in a sonar flow, to differentiate and name some of them, and to organize them (Werner & Kaplan, 1963). In any new sphere of experience – an urban centre or the jungle, a theatre or a cafeteria – people thus have to differentiate harmless from dangerous sounds, or relevant from irrelevant ones. When the groups in that environment have developed coding systems or other semiotic modes to codify these sounds, they might also have to use these secondary signs – music notation, names of ammunition type or of motors; and when these secondary systems are lacking, they can even be invented – such as the proposition to codify bird songs (Thompson, LeDoux, & Moody, 1994).

Like any semiotic mode, sounds are attached to other social modes of organization, specific group values and histories. People then learn which sounds are beautiful or ugly, authorized in public or to be kept private, such as body noises; people also learn to identify some sounds as representing wider values, such as the trumpets of dedication to a country, or the church bell as reassuring, or the call of a muezzin as hostile. Sounds thus organize our relationship to self, others and the

world in a deep way; all the complexity of power, ideologies, and myths can be found in our relationship to sounds. For such reasons, studying soundscapes should be, as any other semiotic system, part of the project of a cultural psychology.

## Studying the experience of sounds

In this last section, I consider some empirical implications for a study of soundscapes from a cultural psychological perspective. I first come back to existing propositions, and then sketch a few lines for a possible enquiry.

Müller's project for history includes sounds recorded and sounds described, without clear distinction between them. Methodological reflections in social sciences separate these two aspects. Drawing on sociological perspective on musical taste, Bauer (2000, pp. 264–265) proposes to distinguish four levels of analysis to understand people's relationship to sounds: "(M1) the sound as conceived by a composer; (M2) the sound object as it is performed and possibly recorded; (M3) the sound as it is transcribed into notation; and finally the sound as it is appreciated (M4)". Bauer comments by saying that sounds can be produced intentionally or not (a musician vs. a car), listened to willingly or not, and listened to in various social contexts that impinge on its interpretation (notably depending on criteria of distinction, desirability, etc.). Things become even more complicated if we reflect in developmental and sociocultural terms.

First, if sounds might exist out-there, beyond apprehension, there is no such thing as an "objective" listening of sounds. Capturing a soundscape with an audio recorder demands to choose where to place microphones, and how to edit the recorded sounds. In addition to these technical issues, another human dimension immediately enters: whose landscape do we want to reproduce, and from which physical perspective? People young and old have different auditive capacities. They also have different locations in the space and therefore in the sound<sup>5</sup> – small children, who are closer to the floor, hear different sounds than adults with their heads at almost two meters. Sounds are heard through the ears, but also through vibrations in the body; different constitutions transmit sound wave differently.

Second, as suggested, sounds are, like any other perception, immediately interpreted. It is quite likely that people's attention for different sounds – what appears as relevant information or simply as background noise – differs in different spheres of experiences. Attention depends on a range of other psychological aspects – among which one's general affective mood (e.g. happy vs. irritated), or one's goal-oriented activity in the specific sphere of experience (e.g. cutting the loan vs. reading a difficult book). Hence, one day in one's garden, one just hears the beautiful songs of the birds; the next, only the annoying motorbikes crossing in the area – while both sounds are positively present.

But third, as proposed, sense-making of sounds is more radically taken in socio-cultural dynamics, both synchronically and diachronically. On the one hand, the meaning of sounds is partly made of correspondence between sounds and other

semiotic modes. On the other hand, sounds have a specific personal and cultural historical story. One expects a peaceful garden to escape to a noisy office during the working week; or one associates the buzzing motorbike to the dentist's milling machine. But also, the hope for a peaceful Sunday spent gardening might have been part of the promise of the middle-class dream of the detached cottage; hearing the sounds of motorbike might be an indication of the modesty of one's social achievement.

A cultural psychological study of soundscapes would need to account for these various aspects. There are probably many ways to approach each of them and combine them, such as for instance the one chosen by Chuengsatiansup (1999), or that could be inspired by other sounds scholars, or even artists. From a cultural psychological perspective, these should be located in time – at the scale of the interaction, the developing person or the group. Then, following the idea that there is something to be explored at the border between social meaning and personal sense, physical causes and imagination, and masteries of semiotic system, I would propose an empirical approach that would combine data from three levels of analysis of the social world, and a fourth, synthetic, level of analysis. These would include:

- a. a recording of the sounds, as much as possible from the perspective of people's themselves, for instance by giving people small audio-recorders (as in done with children, e.g. Hedegaard, Fleer, Bang, & Hviid, 2008);
- b. people's commentaries about these self-recorded sounds or the sound they find the most relevant: what they mean to them, in link to the specific sphere of experience in which they occur, but also in link to their others spheres of experience; contrasts between liked and disliked sounds; discriminations made between sounds, and associated nomenclatures; images or impressions associated to these sounds, and doing so, semiotic resources on which people draw, etc.;
- c. a documentation of the complex social and cultural environment regarding the various aspects associated to these sounds, as well of the semiotic and cultural resources on which people draw when they explain their reactions to sounds;
- d. a triangulation, so as to compare the sounds recorded, that is, available to the person, with their interpretation of these sounds (b), in a given context (c). Hence only, by combining the layers of analysis, in different case studies, one might start to document the various components of sounds: cultural meanings of noises and sounds, and their associated social representation and values; individual appropriation of sound-semiotic system, along people's trajectories and through spheres of experiences, together with their related imagination, etc.

### **For a cultural psychology of sound**

As proposed by Müller (2012), sounds play a key role in people's daily experience, but also in their relationship to others, the world and themselves.

Although perceptions have been studied by psychology for a long time, like in other disciplines (such as anthropology, Chuengsatiansup, 1999), the visual has long been privileged over the auditive, the biological and cognitive aspects of hearing over the symbolic ones, and musical systems over daily sounds. Studying sound from a cultural psychological perspective demands more than an analysis of separated perceptions; rather, it demands to approach sound as one of the many components by which people experience their worlds. It is only by considering sounds *as perceived by people* as parts of semiotic systems that we can then understand how they combine with visual representations or discourses, and that we can open the door to studies of the relationships between the social and historical cultivation of sounds – with their values, the tools that produce or capture them – and people’s individual trajectories in their colourful and rustling spheres of experiences.

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### Notes

1. This has been at times explicitly addressed as a theoretical problem in music, as retraced in Méric (2012), and more informally as pragmatic issue by musicians, such as by *The Young Gods* (Walther, 2010).
2. [http://www.straebel.de/praxis/index.html?/praxis/text/t-urban\\_circus.htm](http://www.straebel.de/praxis/index.html?/praxis/text/t-urban_circus.htm)
3. E.g. [http://voyard.free.fr/textes\\_audio/bruitage.htm](http://voyard.free.fr/textes_audio/bruitage.htm)
4. An extreme case of this dance between sound creator, auditors and the work of imagination is that of soundtracks in horror or thriller movies, when they contain diffuse sounds with no clear source – hushing, whispering, cracking, hissing and gurgling – which mainly create a disquieting impression in the listener who may, at the periphery of consciousness, associate them to very early, preverbal experiences (Tisseron, 2000).
5. See the art piece “Dream house” by LaMonte Young and Marian Zazeela (1972), where in an enclosed space with a specific blurring light, a floating continuous sound is diffused through a complex system of loudspeakers. The visitor moves through space and at each point, walking, inclining the head, bending, he experiences the sound as constantly varying and different.

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