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# Silencing the city?

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#### Summary

The notion of silence must be handled very carefully. In addition, its use reveals the way we deal with the urban environment as well as social life. What does the notion of silence convey about the current state of the urban sonic environment? How can we clarify the various meanings and the stakes involved in silence? Three themes are developed in order to answer these questions: silence as a research topic presents three complementary perspectives (acoustic, sociocultural, technological); silence as a polysemous notion emphasises the ideas of keeping quiet, tranquillity and pause; silence as a design issue relies on basic properties and principles in order to orient the design of the urban sonic environment.

The complexity of the urban sonic environment is now recognised fairly generally and numerous developments in research have shown that:

- · It can no longer be tackled without addressing the myriad factors and interactions at play and, in particular, without comparing and contrasting physical or acoustic with sociological or cultural data.
- · It can no longer be tackled purely as a nuisance: the issues of annoyance and noise pollution are now being supplanted by reflections on sonic quality and aural comfort.<sup>1</sup>

We wish to deal with a number of pointers that may be used as an alternative to excessively simplistic arguments that tend to reduce silence to what it is not: a monovalent concept.² Certainly, silence is a very ambivalent notion which leads to various paths, sometimes contrasted or even opposed. On the one hand, silence is to be associated with death or boredom. Closely related to *horror vacui* of modern times, it involves a negative connotation. On the other hand, silence is used as a criterion of sonic quality denoting a positive value. We look for it and we appreciate it. François Michel (1986, p. 54) summarises this phenomenon: 'Ambivalence of the fundamental notions: silence, place of any blessings, or place of all the fears' (personal translation). Obviously, silence is a notion that must be handled very carefully and its use reveals the way we deal with the urban environment as well as social life. What does the notion of silence convey about the current state of the urban sonic environment? How can we clarify the various meanings and the stakes involved in silence?

Three themes will be developed in order to answer these questions:

- · Silence as a research topic
- · Silence as a polysemous notion
- · Silence as a design issue

### Silence as a research topic

The notion of silence is very often applied – at least implicitly – in research on the sonic urban environment. Hence, silence emerges as a significant and multivalent theme in current culture. Although delicate, it is situated at the crossroads of a set of very diverse issues: issues of well-being when it comes to setting up norms of acoustic comfort; issues of public health when it comes to stress or hearing disabilities; issues of economic stakes when it comes to estimating the value of real property situated in quiet zones; issues of sociability when it comes to solving problems of disputes between neighbours. The complexity of such questions requires learning the lessons of various scientific disciplines and perspectives.

A) We know that from an acoustic perspective the historic evolution of urban noise has witnessed extreme intensities before being reduced to 'average levels'. While there may be less noise now than in the late nineteenth century, at least in Western countries, we cannot say that there is more 'silence(s)'. For example, the reduction in high-intensity industrial noise (resulting from decentralisation, degrowth and regulation of the industrial sector) has been accompanied by a decline in areas or periods of silence (think of urban sprawl, peri-urbanisation, metropolisation and development of nocturnal activities).

At the same time, the discontinuousness and strongly rhythmical nature of yesterday's noises have been replaced by the *continuity* of contemporary noises and by what Gillo Dorfles (1984) has so aptly termed 'the loss of interval' (as illustrated by the prevalence of urban drone - loud and incessant background noise from traffic - the persistence of nocturnal movements and activities 24/7, or the relentless use of electrical or electronic equipment etc.).

So silence would appear to be a relevant issue in aural and urban planning as well as in the recognition of the acoustic identities of cities in terms of the low intensity or discontinuity that it reintroduces into the soundscape.

We also know that *from a sociocultural perspective* our recent heightened sensitivity to noise is an important phenomenon. There are many reasons for this, including the popularisation of ecology, the individualisation of society or more effective techniques for controlling noise production. These reasons have to be set against the emergence of a strong argument in the development of environmental policies, namely combating noise pollution. And an ideological trend highlighted in our research, tends – either implicitly or explicitly – to link the notion of silence to this argument.

In other words, we may contend that 'the right to silence' – an underlying legal notion harnessed by political authorities or associations to combat noise pollution<sup>3</sup> – is progressively turning into a 'duty of silence', a social norm that is gradually creeping in on the back of the increasing individualisation of habits and lifestyles

described by sociologists. The totalitarian threat of such an argument is based on a confusion and lumping together of hazy notions: public tranquillity, aural comfort and acoustic silence. So the manner in which silence is handled, either in institutional policy or in user behaviour, would appear to be a delicate area in the social management of the urban sonic environment.

**C)** Finally, from a technical and technological perspective we should not underestimate the economic and industrial riches at stake in the soundproofing market; take the emergence of new 'soundproofing' materials and techniques such as double glazing, sound barriers or active noise absorption. This is also borne out in a different way in changing advertising pitches in various different markets. 30 years ago, a powerful engine had a powerful roar ('Put a tiger in your engine!'). Today, power is much more low profile ('Mitsubishi, Silence, Power').

Here, once again, silence as a virtual objective of technical progress appears as an implicit argument around which a general consensus appears to be emerging, even though the proliferation and systematisation of such developments are likely to generate paradoxical side effects. Take the proliferation of sound barriers along motorways or large infrastructures that frequently have deleterious interruptive impacts on both social and urban life and the landscape on a European level. Whether in terms of the development of new technologies or spatial devices, the question of silence is a serious issue in the economic and technical management of the urban sonic environment.

These three major perspectives – acoustic, sociocultural, technological – make silence a contemporary topic and a complex research object that cannot merely be dealt with in a simplistic, mono-disciplinary or dualistic manner. Therefore, a dual representation that tends to treat silence as the opposite of noise, thus implicitly defining the former as the absence of the latter, is increasingly being used to analyse the urban soundscape. In other words, silence is perceived by default, and although it crystallises 'ideal' representations of the environment, it does so in both a monovalent and decontextualised way: monovalent in the sense that silence is defined only in relation to noise; decontextualised in the sense that silence per se is regarded as an absolute quantity. In other words, such a dualistic approach to representations appears to be an obstacle to achieving silence: Fighting against noise pollution may not be the same as fighting for silence.

# Silence as a polysemous notion

Silence. The polysemous nature of the word evokes three overlapping notions. The first two are certainly the most obvious. They refer to the Latin distinction between *taceo* and *sileo*. As Roland Barthes (2002) showed in his course devoted to 'The Neutral', the word *silence* involves both the idea of keeping quiet, of absence of

talk (*tacere*), and the idea of tranquillity, of absence of movement and noise (*silere*). The third notion – the *pause* –emphasises the temporal dimension of silence and its articulatory power. In this case, silence enables the unfolding process of the sonic environment: 'The time grants no privilege to sounds on the silences: they both have in common the dimension of duration' (Charles, 1978, p. 64, personal translation).

A) First and foremost, silence denotes the absence of noise, the state of a place in which no sound can be heard. The silence of the city under this first meaning indicates that the urban space tends towards an absence of any noise emissions. References to this type of silence suppose that extreme situations can be generated: by regulations (a 'zone of silence' near a hospital); by fantasy ('silent neighbourhoods' demanded by certain complainants); or by ritual (a minute's silence for victims of a disaster).

But this meaning also runs through more banal situations demanding 'peace' or 'tranquillity', and it is as if silence is a guarantor or even a catalyst for such notions. This would make the 'peace' of the city just a euphemism for silence in its dreamed-of radicality.

And yet we quickly realise that as soon as we start listening closely to the city, this absence of emanating sounds never really exists: 'Silence, like music, is non-existent. There always are sounds' (Cage, 1961). So instead of an absence, silence denotes the presence of 'almost no' noise, the state of a place in which the slightest sounds can be heard. Hearing one's own footsteps, the hum from somewhere near, or the tolling of a bell in another neighbourhood are diverse ways of perceiving urban space. By allowing different sounds – both near and not so near – to be heard, silences reveal the territorialising power of the sonic environment (Augoyard, 1980).

So this first semantic interpretation is dominated by a spatial connotation and by the territorial dimension of silence. The issue is the absence of noise, which can generate feelings of either insecurity or public tranquillity, and this dimension may be linked primarily to topological principles for organising urban space: isolation, barriers, islands, sectioning, zoning etc.

However, this absence of noise is fundamentally relative insofar as these topological principles for organising the urban space cannot be treated as planning recipes or universal solutions. They need to be studied and designed in their own specific contexts in accordance with the aural scale that, in the case of the city, is determined by the relationship between near and far, here and there, and between the local and the global, etc.

**B)** The next meaning of silence is to say nothing –remaining speechless. Under this second meaning, the silence of the city signifies that the city has ceased 'speaking to us', that it has lost its identity or its 'aural signature'. The urban drone swallows up noises, empties them of their meaning and renders mundane the noises

as well as the areas or the moments of silence that are supposed to counteract this. Homogenisation, standardisation, repetition, normalisation and a continuous stream of noise and music; functionalisation and mediatisation of transmission or communication processes; jamming of any listening or reception create the condition for neutralising the expressive power of sounds (Attali, 1985). Neither noisy nor silent, the sonic environment becomes mute.

And yet silence is not always synonymous with an absence of expression within this second meaning. Very often it helps to qualify everyday social situations. It can denote distrust or reserve, threat or complicity, prudence or connivance, depending on the situation; it all depends on how, when and in what circumstances silence occurs. 'Silence imposed', resulting from an order to be quiet, is supplemented by 'silence acted', which modulates relations with others. Silence becomes a manifestation of a way of being together. Hence, it is important not to equate silence with absence of communication. Following Watzlawick, Beavin and Jackson's theory of communication (1967), it is not possible not to communicate. Even silence, which could be interpreted as a refusal to communicate, is in itself a form of communication. Moreover, in the classical period, Abbot Dinouart (1771) suggested clarifying the principles of the art of keeping silent and speaking in company. Thus, instead of opposing silence and communication, it is more relevant to consider silence as a form of communication.

It is also possible to analyse the relationship between silence and political power. The control of sound by power aims to limit speech and verbal expression. Everything must not be publicly expressed; it is a question of establishing diverse mechanisms settling the said and the unspoken. The analysis of the power of the Church and its evolution in the eighteenth century reveals various usages of silence:

In the distraught or trembling silence in front of God, substitutes itself gradually as an art to keep silent, to 'guard one's tongue' in good Christian form and in virtuous subject, as the civil practices become detached from religious behavior. The momentum of the silent faith give way to an education of the 'virtues' by the Jesuits, by taking place deliberately in the field of the civil practices and by introducing 'civility', 'honesty' and 'duty of state' (Courtine & Haroche, 1987, p. 33, personal translation).

Censorship, which finds its extreme application in the Inquisition, condemns the excess of words. It is the golden age where the Church has the power to silence by strength. The rule of silence is explicitly ordered here. Then, with the development of the political strengths and the new philosophical currents which dispute the authority of the Church, we observe a movement which lessens the faith in customs. Civil practices are less influenced by religious behaviour. Silence, until then compulsory, is transformed into a code of civility. The citizen owes it respect, no longer in blind faith, but as testimony to knowing how to live in society. More recently, the legal texts concerning the ban on disturbance of peace at night explicitly men-

tion the argument of law and order. Please note, with Pierre Sansot, that it is not so much the noise as such that is considered here, but its conditions of production and its meaning:

'On the pretext of taking care of the rest of the inhabitants, we shall ban, we shall pursue the "disturbance of the peace at night". The noise which is tolerated when it accompanies the effort of production is prohibited when it is a sign of enjoyment or tumult without purpose' (1976, p. 23, personal translation).

To summarise, this second semantic level is dominated by the social connotation of silence. The issue here is mutism (communication or the absence of communication between people), or more specifically, types of mutism – or forms of communication between people. For Georg Simmel (1950) silence is a fundamental dimension of secrets and operates as a basic condition for society to function.

**C)** Lastly, silence has a third meaning: the interval of time during which sound is interrupted, suspended or pending. This time the silence of the city denotes that the activity will continue, i.e. that there are pauses and that these indicate key moments in the unfolding of the sonic urban environment. The individual is placed in a state of hyperesthesia insofar as impressions are accentuated and perceived much more acutely during the silent 'pause'.

But here again silence, understood in this third meaning, does not just belong to the here and now. It also encompasses a longer period that brings into play past memories and anticipation of the future. As the city rises in the morning, the background noise gets increasingly louder. Even though it is gone, the peace of the night is still there in people's ears and serves as a reference in relation to the changing ambiance they are experiencing. Conversely, the gradual disappearance of the sounds of human activity in the late afternoon announces a silence that is not yet there but can be sensed. Therefore, silence also triggers a 'movement of protention and retention' (Husserl, 1990) in a city's aural state.

This third semantic level is dominated by a temporal connotation. The issue is the pause, or more precisely, the dynamic that underpins the pause and which takes us into the realm of perception and aural aesthetics. And this dimension ultimately harks back to principles of composition and the temporal organisation of the urban sonic environment – permanence, cyclicality, discretion etc. In that sense, Brandon LaBelle accurately argues that 'silencing comes to perform a sort of domesticating arrest onto the dynamics of the social' (2010, p. 47).

## Silence as a design issue

Based on what we have just seen and by way of a conclusion, we may attribute three basic properties to the notion of silence that in different ways point out the deter-

mining role of the spatial, social or temporal context in the conception of silence. But before completing this article, let us listen to Mikel Dufrenne (1991, p. 89) who very accurately emphasises the fact that silence is not a state but an ongoing process:

Certainly, we can wish for silence; against troublesome or aggressive noises, we try to protect ourselves, and the teacher asks its class for silence. But then we look for calm more than for silence: the lessening of a certain violence, the possibility of a finer listening. It also happens that at certain hours the world around us makes silence: when noon reign over the savanna, when the night reigns over the city, and when what tears away this peace is surprise and worries. But saying that silence is made, it is to recognize that it is not first, that it is in a way unnatural, as when we impose it or when we produce it artificially (Dufrenne, 1991, p. 89, personal translation).

How then can the notion of silence be clarified and help us to better design the sonic environment of cities?

#### 1. The notion of silence is both relative and fictitious

It is relative because silence does not exist per se, but only in relation to a different level or type of sound, action or perception. And it is fictitious because there is no such thing as absolute silence (a total absence of external noise does not eliminate the enteropathic sounds made by the body) and because 'the perfect silence' also appears to be an unachievable pipe dream. Vladimir Jankélévitch refers to 'corridors of silence' (*coulisse de silence*): 'As silence takes hold, tiny noises hidden away in the corridors of silence emerge and rise up out of the obscure depths' (1978, p. 188, personal translation). In a way, silence brings people face to face with themselves and it brings inhabitants' relationship to their soundscape into focus.

#### 2. There is no one silence, but a diversity of silences

While political or institutional initiatives to combat noise pollution tend to assign silence a simplistic 'one-way' value (treating it as an ideal minimal acoustic level), we have tried to show how the uses, practices and representations of silence vary markedly depending on the social, spatial or temporal context in which it is analysed. We need to counter the monosemous and simplistic treatment of the notion with a more polysemous analysis and, in a more concrete vein, to highlight the myriad ways that silence may be experienced in the city.

For example, if there is such a thing as 'empty' silence that simply means 'emptying' the noise of others (traffic or a neighbour) and keeping it at a distance from oneself or one's house, there must also be 'full' silences that offer multiple possible meanings and differential textures. Every silence has its own specific texture that needs to be teased out and described. The nocturnal silence of the city is not the same silence as the one found when the city is deserted during holidays. Silence

may be sought after or feared; it may play a repellent role or trigger angst; it may also attract, etc.

#### 3. Silence acts as a revealer of sonic identities

Silence is created not so much by the level or absence of noise, as by the change from one qualitative level to another (a change or break in intensity, continuity or direction). In other words, we need to distinguish between the object and the principle of silence. As we have seen, depending on how we analyse it, 'silence as object' may relate to a pause in a conversation ('communicational and social' silence), an absence of emanating noise ('spatial' silence) or discontinuity ('temporal' silence). 'Silence as principle', on the other hand, resides in the transition from one to the other. Take some examples: The silence of a crowd reveals the noises of the city; the silence of the city reveals the noise of neighbours; or alternatively, 'social silence' reveals 'spatial silence', which may reveal 'temporal silence', and vice versa.

We may also use these basic properties of silence to propose certain principles for designing the urban sonic environment: 'relativity' (keeping a sense of proportion and balance), 'pluralising' and 'revealing'. However, none of these principles would be suitable or transposable from a regulatory perspective. The suitability of implementing them and the weight assigned to them may only be gauged in accordance with a project's specific context.

The principle of relativity assumes that we differentiate between different levels and textures of sonic space (inside a dwelling, at neighbourhood level or in the design of an urban itinerary), but it does not prejudge the sonic texture of each one.

In a similar vein, the principle of plurality assumes that we intervene not only in spatial configurations, but in the nature of social exchanges or the rhythm of urban activities. However, it does not prejudge what form these respective actions should take: creating protected areas, reintroducing courtyard-type designs, reinterpreting spatial forms ('pointed', 'elbow-shaped' or 'funnel-shaped') in street design, mixing or separating activities, temporary traffic bans, alternating certain urban activities, etc.

The revealing principle can only be implemented after a complex expert analysis of the potential that may be unlocked in the local, social and circumstantial context: Closing a street may generate new types of social interaction; reducing the level of population density may provide the possibility for a break during the day; regulating the duration at which public spaces are used may provide an opportunity for showcasing the city's existence. However, depending on the context, each of these actions could have the exact opposite effect.

These three principles (relativity, plurality and the revealing principle) are not general solutions applicable in any situation; they are design tools which always need to be interpreted on the basis of the specific context.

#### References

Amphoux, Pascal, & Thibaud, Jean-Paul (2001). Des silences dans la ville. In: Boyer, Michel, Herzlich, Guy, & Maresca, Bruno (Eds.), *L'environnement, question sociale* (pp. 83-90). Paris: Editions Odile Jacob.

Attali, Jacques (1985). Noise. The Political Economy of Music. Manchester: Manchester University Press.

Augoyard, Jean-François (1980). Répons pour voix discrètes et trois silences. Traverses, 20, 134-141.

Augoyard, Jean-François, & Torgue, Henri (eds.) (2005). Sonic experience. A guide to Everyday Sounds. Montreal: McGill-Queen's University Press.

Barthes, Roland (2005). The Neutral. New York: Columbia University Press.

Cage, John (1961). Silence. Middleton, Connecticut: Wesleyan University Press.

Charles, Daniel (1978). La question du silence. In: *Gloses sur John Cage*. Paris: Union Générale d'Editions. Courtine, Jean-Jacques, & Haroche, Claudine (1987). Silences du langage, langages du visage à l'Age Classique. Aubenas: Jérôme Million.

Dinouard, Abbé (2011 / 1771). L'art de se taire. Paris: Payot.

Dorfles, Gillo (1984). L'intervalle perdu. Paris: Librairie des Méridiens.

Dufrenne, Mikel (1991). L'œil et l'oreille. Paris: Jean-Michel Place.

Husserl, Edmund (1990/1928). On the Phenomenology of the Consciousness of Internal Time (1893-1917). Dordrecht: Kluwer.

Jankélévitch, Vladimir (1978). Quelque part dans l'inachevé. Paris: Gallimard.

LaBelle, Brandon (2010). Acoustic territories. Sound culture and everyday life. New York: Continuum.

Michel, François (1986). Le silence et sa réponse. Paris: Jean-Claude Lattès.

Sansot, Pierre (1976). Existence des bruits et bruits des existences Musique en Jeu, 24, 19-28.

Schafer, R. Murray (1977). The tuning of the world. New York: Alfred A. Knopf.

Simmel, Georg (1950). The Sociology of Georg Simmel. Translated, edited and with an introduction by Kurt H. Wolff. Glencoe, Illinois: The Free Press.

Watzlawick, Paul, Beavin, J. Helmick, & Jackson, Dan J. (1967). Pragmatics of Human Communication. New York: W.W. Norton & Company Inc.

#### **Notes**

- These arguments have been developed extensively over the past thirty years. Two main consequences have occured from this statement: on the one hand, an emphasis on the qualitative dimension of everyday sonic experience (Schafer, 1977); on the other hand, the need to develop interdisciplinary tools transversing applied acoustics, architecture and urbanism, psychology and physiology of perception, sociology and everyday culture, musical and electroacoustic aesthetics, textual and media expressions (Augoyard & Torgue, 2005). Currently, numerous perspectives are expanding this field of research: soundscape studies, acoustic ecology, field recording, sound studies, sound art, acoustemology, sound installation, auditory culture,...
- This article is an extended version of a previous one published in French (Amphoux & Thibaud, 2001). New ideas, references and developments have been added to this new version.
- In 1969 The International Music Council of UNESCO agreed on a resolution announcing the right to silence. Thanks to Jacob Kreutzfeldt for communicating us this information.