About the Soundscape: Are you a Proponent or an Opponent?

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Abstract: There are two meanings of the term "soundscape". One is pragmatic, and means the noise in a public place, that one wants to reduce, in general. The other is wider and theoretical. The approach of the paper follows the career of this notion of soundscape, the theoretical one. The notion is useful, in particular in the field of culture. But it is an urban legend. In urban planning, the soundscape cannot have an important role. The residents want quiet public places. It remains that there is a stake of urban governance: it concerns these places where feasts occur, generating too much noise from the point of view of the residents.

Key words: Soundscape, urban planning, consumers society.

1. Introduction

In general, a soundscape is the sonic footprint, or signature, of some phenomenon. It exists in many fields. In science and art, it is a serious notion. In social matters, it is an urban legend. But it has some presence and utility. The paper will try to explain that.

An example of soundscape in science is noise under water. Under the water, to detect a phenomenon, one uses sounds (hydrophones, sonars …) and on land or in the sky, one uses visual signs or waves (radars …). For instance, each submarine has its own sonic signature, which can be recorded, analyzed by computers … and even recognized. In the countries with a modern navy, there are repositories of these submarines' signatures[1]. This is shown in the French movie "Le chant du loup" ("The Wolf's Call") which seems to be well documented on this topic.

In art, let us take the example of the famous French composer Olivier Messiaen. He was also (a little) ornithologist. Often, in the countryside, he listened to birds' songs, noticing the notes on a musical score … It was easy at this time… After, it was the source of inspiration for pieces of piano he composed. A movie can have its own soundscape, but it remains that it is an artefact. The French composer Pierre Schaeffer, who invented the "concrete music" reworked the recorded sound of a locomotive ("Etudes de chemin de fer", "Studies of Railroads"). "Pacific 231" is a piece of music for orchestra composed by Arthur Honegger, imitating the noises of a locomotive. Here the soundscape is a serious notion: there is a reality, but it is only the starting point to construct an artefact.

In social matters, the soundscape could be the sonic signature of some community or group. The word has been invented by a Canadian composer, Murray Schafer, in the 70's. His book, *Tuning the World: The Soundscape* is deliberately holistic, considering the biological world and the social world, both [1]. Also, the book sets out a program, the "sonic design". The goal is to preserve and promote the "sonic footprint" of a community. The soundscape in this meaning would be a sound marker of the identity of a community. But scientific research on the topic is unable to clearly identify this sound marker of communities, today [2]. An argument (in favor of the existence of soundscape in

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[1] Thirty years ago, the RMA (Revolution in Military Affairs) stated that technology was upsetting all aspects of war. Indeed, it has been checked for soundscapes. Another example is drones.

this sense) is that without hearing noise one dies. This does not hold. To hear no noise is impossible. In a very deep silence, one hears the sounds of one's own body. Also, there are deaf people. They do not die. But they suffer from solitude. The proponents of the theories of Michel Foucault, when they study the effects of media (that they describe thanks to the metaphor of the Bentham's panoptic), speak of solitude and confinement. But what makes bearable this solitude and this confinement is the media themselves, not the soundscape. In other words, the emptiness that the media generate in the people's life is fulfilled by the media themselves. Of course, the soundscape of communities existed in the past, at the time of tribes. But this has disappeared. Ethnomusicologists know that the music they record is disappearing, the records are useful to preserve this music from oblivion. Perhaps the soul of this music survives in the music of Debussy, or Ravel, or Godowsky, or in jazz.

It remains to explain why one speaks of soundscape. The notion has some presence and is useful.

The approach of this paper consists in explaining the soundscape as a part of a trio: Bentham's panoptic, soundscape and chosen sound.

We shall describe the meanings of this trio in the following chapters. In the conclusion, one will try to set out what are the consequences of the soundscape, when the cities are concerned.

2. The Imposed Sound or the Bentham' Panoptic

The sonorizing of public places often occurs: stores, malls, fairs, events … The British composer and musicologist Constant Lambert described a sonorized street in Great Britain, in the 30's [3]. The author has observed a large avenue in Peking, in the fall of 1990, where many loudspeakers were diffusing songs all the daytime. The sound is chosen by some person, a

"personality" or a DJ (Disk Jockey). The goal is unclear. Adorno, in *Introduction to the Sociology of Music*, recalls that there is pre-musical: let us quote war music, penitentiary music, work music[2] [4]. The goal of the sonorized public spaces could be … people getting tired. According to the famous zoologist Konrad Lorenz, experiments have shown that tired animals are more easily influenced [5]. So, human beings tired by noise will be more easily influenced by advertising or by the sight of attractive goods. In his book *Discipline and Punish*, the French philosopher Michel Foucault has commented the famous Bentham's panoptic [6]. The device invented by Bentham was really followed to build prisons, even if there are no many examples. It was conceived for any kind of surveillance, for instance hospitals, or workshops were considered. The device is a central tower where the wardens are, surrounded by a circular building with the cells where the people are under surveillance [7]. There are no walls in the cell, facing the tower. The wardens see all the people living in the cells. The idea is a monopoly of the useful signs, which are produced and circulate. Here, the visual signs show the supervised to the supervisors. The supervisors benefit from a plunging view over the supervised. They miss nothing … For Foucault, the Bentham's panoptic is the metaphor of the surveillance society which achieves the obedience of anybody, imposing solitude and confinement.

For the French geographer Jean Pascal Vauchey the sonorizing of public places is analogous to the Bentham's panoptic [7]. It was generalized around the 80's, after the defeat of the "free radios", or "communities radios" of "associative radios". They were replaced by networked commercial radios. All the room was taken by commercial chains or state radios. At the same time many public places were sonorized.

Here, the schema is an arrow. The signs (audio) go from the emitter to the receiver. They are arbitrarily

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[2] The famous Franch economist Jean Fourastié (1907-1990) has described how, when he was a child, he listened to peasants working in the fields while singing together.

chosen. There are no means to get rid of them. One is obliged to listen to them. One can argue that the arrow corresponds to technical characteristics. Of course, the sound goes in one direction, from the source to the place where it is listened to. But more interaction is possible. It is the theory of the specialist of media Pierre Schaffer, who presents the communication allowed by media as a triangle, not an arrow [8]. This theory is presented later in the paper.

Concerning the idea that technology generates solitude and confinement, it is disputable. Of course, many people watch TV or listen to radio, alone, during a long time. Today, the addiction concerns more the videogames. But people go outside their home, also. They crave some collective transes, that they find in more and more specialized places: dancing halls, concert halls, auditoriums, stadiums … Even in the villages, as soon as some kind of new entertainment becomes popular, people gather: dancing, singing, cooking, horse riding … [9]. The same about solitude and confinement has been said about the car. Sure, a driver alone in a car is solitary and confined. But carpooling develops. In the European centers of large cities, one gets rid of the car. When people get acquainted for instance thanks to Internet or the social networks, they can meet using cars. The car is indispensable to the social life in the countryside.

3. The Soundscape

As it has been said, the soundscape is an urban legend. But it has three interesting characteristics that one will try to explain: presence, idealization and utility.

3.1 The Soundscape Has a Presence

After the French sociologist Baudrillard, there are in the society two kinds of processes: either extensive, either local and saturating [10]. While the Bentham's panoptic is an extensive process, there is also a local and saturating process: the soundscape. It is a kind of counterpart of the Bentham's panoptic, hence its presence.

This presence is also shown thanks to a matrix of morphological analysis. The method of morphological analysis consists in analyzing a set of phenomena using a matrix which shows the characteristics of the diverse phenomena in the set: in lines, the phenomena, in columns, the criteria (characteristics). The method is useful to search for a new phenomenon, inside a set of phenomena already known.

One shows the Bentham's panoptic and the soundscape in this matrix (Fig. 1).

The two processes check different cases in the matrix.

The soundscape is the ideal counterpart of the Bentham's panoptic. To use simple words, the soundscape is the opposite of the Bentham's panoptic. The Bentham's panoptic is imposed, comes from outside, is arbitrary, tiring and cannot be consumed. The soundscape is spontaneous, comes from inside and can be consumed (but it does not exist). It is pleasant, since it is the local sonic identity.

3.2 The Soundscape Is an Idealization

The soundscape is local, spontaneous, and consumable.

One knows that the cities develop by themselves, partly, and also are fashioned by forces outside them (globalization). So, the local autonomy is shaken up. It is the same for the villages. In the peri urban areas, the villages have deeply changed. For instance, the role of the farmers is declining [11]. The population shares its life between the next city and the village itself.

	Extensive process	Local and saturating process	Real	Consumable
Bentham' s panoptic	✓		✓	
Soundscape		✓		✓

Fig. 1   The matrix showing the characteristics of the two processes: the Bentham's panoptic and the soundscape.

When there were strong communities, workers belonging to the same large firm or the same economic sector, or fishers, etc., there was a feeling of local autonomy. It was harmed by deindustrialization, changes in sectors not enough competitive or coping with new restrictive environmental rules, etc. Some villages have overcome the crisis, and the population has increased. But it is thanks to newly arriving people who are very much linked to the next city. The decline of the local autonomy is visible when one considers radios. In the 70's and the 80's there was a move from pirate radios (using the hertzian spectrum illegally) to free radios (using the hertzian spectrum legally) to commercial radios (networked and privately owned) [12]. So, when the local autonomy is declining, the soundscape corresponds to an idealized vision of the local communication, today.

3.3 The Soundscape Is Useful

The soundscape is useful, for commercial purposes. If you believe in the soundscape in Rio de Janeiro, New Orleans or Naples, you more easily buy music of samba, jazz, or Italian songs.

But it is more complex.

A soundscape can be transformed by many means, including AI (artificial intelligence). The time of Olivier Messiaen sitting in a field, by night, with his musical score and his pen, is over. A soundscape can be recorded thanks to sensors, then be changed and become a NFT (Not Tangible Token). A NFT is a file on Internet, which cannot be changed or imitated, with an owner, and is an asset (it can be bought or sold). Besides, there is folklore (originating from some soundscape). And, according to Constant Lambert, there is nationalist music (which uses themes coming from traditional songs or music) [3]. All these genres (soundscape, audio NFTs, folklore, nationalist music) allow mises en abyme and debates. This is required by the "game" in the cultural industry.

It is the same than when graphic arts are concerned. A century ago, the French painter Marcel Duchamp invented the "readymade", an object used in the everyday life (like a shovel), but signed by the artist and produced in small series. Also, he painted a painting of the Joconde which was a joke. Do you believe that the end of the celebrated, unique artwork is a drama? No, it can be a joke, or even … a feast.

So, beside the celebrated, unique artwork (which can be seen in museums), there are copies in small series, copies in large series, luxury, kitsch … One can also mention hybridization (genres are hybridized). All these "genres" allow attracting the consumers. That these multiple tastes can be satisfied, exists, and is wanted and obtained.

After Baudrillard, the absurd and the catastrophe, are seductive [13].

Finally, the soundscape has its utility. But you cannot find it … Perhaps, it is in the archives of the ethnomusicologists, but it is impossible to find it if you do not belong to their milieu.

4. The Chosen Sound

After the French specialist of media Pierre Schaeffer, there is a triangle of the communication (not an arrow). A mediator negotiates with the emitter and the receiver, to adapt the messages sent to the needs and tastes of the receiver [8]. This triangle is shown in Fig. 2.

Pierre Schaeffer proposes schemas a little more complex for the mainstream media (TV, radio) to take into account the differences (State-owned, private). And there are also the Internet platforms like YouTube, Facebook … The turn has been made in the 80's when the reality TV was invented. The message is so much adapted to the consumers' s tastes that it is … himself. As Baudrillard has written, since the reality TV, you
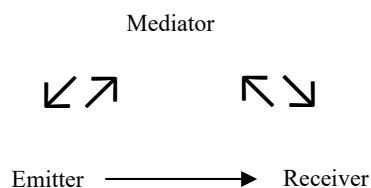
Mediator

↙↗   ↖↘

Emitter ——————▶ Receiver

Fig. 2 The Schaeffer's communication triangle.

cannot challenge or criticize TV, since the TV … it is you. It is the chosen sound, opposed to the Bentham's panoptic (arbitrary sonorizing of a public place).

Of course, the contents are formatted to satisfy "targets", that is to say consumers with tastes narrowly defined (genres, subgenres …). However, the dissatisfied or bored consumer can choose one among several responses:

• He can switch the genre where he chose what he consumed. The cultural industry delivers products classified in "genres" [4].

• He can switch his tastes, which is usual in the "liquid life" [14].

• Even, he can choose another kind of entertainment, including silence.

Of course, there is a pressure of the cultural industry on the consumer, since his tastes are tracked, influenced… It is what Baudrillard calls the "dictatorship of fashion" [10]. But in no way, it is the Bentham's panoptic. Even if it is the freedom of switching what one consumes to another kind of product, it is not the imposed sound of the Bentham's panoptic.

The idea of the soundscape triggers a dream: a sound which is yourself, that you can find easily, and which corresponds to a definitive taste … It is the idea of a consumption which is easy and according to definitive tastes. In reality, consumption implies the pressure of the cultural industry and the possible tiredness of the consumer.

5. Conclusion

According to the technological school, the social effect is encapsulated in the technology. The Foucaldian school takes them at their word, to criticize the arrow, which generates solitude and confinement. It is repressive, also. The two schools do not consider the contents themselves, very much. It is the same with McLuhan ("massage is the message"). At the opposite, Pierre Schaeffer, with its triangle of the communication, is interested in the contents. The mediator negotiating with the emitting and the listeners, supervises the adaptation of the messages sent, to the needs and tastes of the listeners. This concerns the mainstream media (TV, radio), which have still a role. Concerning the Internet platforms, they allow many choices to the listeners and are prone to the cult of audience (the indicator being the number of clicks). If the consumer is dissatisfied or tired, he changes his choices. The soundscape is the dream of a communication which would be spontaneous, easy, and stable. It is also the ideal counterpart of the Bentham's panoptic. Today, a surveillance society is a threat. Think of such software as Pegasus, Predator or Firstmile, which allow taking control of a smartphone, without the owner's knowledge … The soundscape is reassuring.

An ultra-fast "natural history of the media" (pirate radios, free radios, commercial radios, mainstream media, state-owned or privately owned, invention of the reality TV, Internet platforms …) shows us that local, autonomous, communication has been given up… The free radios in the 70's have not lasted a long time. It generates a nostalgia which can explain the presence of the soundscape. Also, the soundscape could be explained by the nostalgia of this time, a century ago, when music was not a professionals' affair. According to Adorno, before the reign of recorded music, often music was performed by amateurs [4].

Of course, the soundscape has existed in the culture of tribes, in the past. One can refer to Konrad Lorenz, again. According to him, the instincts of human beings are tamed, and either oppose one another either cooperate one with the other. There is a "parliament of the instincts", where the diverse instincts are in equilibrium, which explains a particular culture [5]. But it is fragile. When the shock with the sturdy modern culture occurs, the tribal culture disappears. Perhaps there was a soundscape: a music performed with specific instruments, subtly linked to the characteristics of the environment where the tribe lived. But the soundscape disappears, also.

Now one discusses the topic of the soundscape and the cities.

In general, the residents wish silence. In Europe, several decades ago, laws on silence were passed. At the start, they were not really enforced, but finally, measures were taken: prohibition of traffic of trucks during the weekends, double glazed windows, noise protection screens alongside highways, attrition of the car in the centers of the large cities, soundproofing of buildings and flats, less noisy aircrafts … Today other measures are discussed: sound radars allowing imposing fines, prohibition of the traffic of motos during the night in the cities, paid parking for the motos with a thermal engine and free parking for the motos with an electrical engine, subsidies to buy a moto with an electrical engine…

To tell resident that one cannot complain with noise because it is the soundscape of the quarter would be a wrong argument and not welcomed. The statement "This soundscape … it is you" should be refused. We live in a competitive society in which people work or study before having a job. So, everybody needs rest. And the doctors agree …

And it is the same in the villages. In the villages in the peri urban areas, the governance is often that of a club [11]. Here people want heritage, security and silence. The village has to be the place where they want to benefit from the quality of life. Often, they oppose new activities involving noise (mines, logistics …).

Is it that in the era of chosen sound all the problems are solved? Since the invention of headsets there would be no problem… Indeed, the people still like collective transes and feasts, in some quarters specialized in entertainment (cafés, cinemas, restaurants, spectacles …). Here, the residents complain with noise … Some cities, like Paris and Barcelona, want to attract tourists partying and, of course, have quiet streets, both. It is uneasy. In the countryside also, noisy meetings can occur when there are festivals which require nice décor. Even, festivals of pop music can occur in natural parks … Therefore, a stake of urban governance remains.

To conclude on the soundscape, it is a serious notion in some fields, like the soundscape under water that some experts analyze, or the soundscape in the nature, which is of interest for zoologists. The soundscape is a reference, with a presence, in culture. In urban planning, it seems that the notion has a negligible role. But it remains an urban legend.

In this society, there is an undisputable tribality. Some tribe can have its own soundscape (music, songs …). But it is a rite or a sign of recognition. It is transitory and local. It is not the "social marker" of the identity of a place. When there is some sonic scenography of the city, it is the same: it is not the marker of the identity of a place, but place branding. In the countryside a soundscape can be associated to an ecosystem (songs of birds …) and be appreciated by some. There is no social identity, the soundscape is a characteristic of an ecosystem. Of course, the choice to preserve it is social, but it is more a stake concerning the global society, than a question of identity.

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