EUROPEAN ACOUSTIC HERITAGE UNDER CONSTRUCTION

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Abstract : How can we define a common acoustic heritage in Europe? How can it be preserved and managed? Under the coordination of the Galician Agency of Cultural industries, the partners, that is to say, CRESSON at Grenoble (France), the Tampere University of Applied Sciences (Finlande), the Phonogrammarchiv of the Austrian Academy of Sciences (Vienna) and the collective of artists escoitar.org have been collaborating for 2 years to propose some answers to these difficult questions. This paper will present the main results that the group had delivered. Actually, this action-research was the occasion for the group to to define, describe, conceptualise, document and represent acoustic heritage of various sound cultures in Europe. It was the occasion to share knowledge on major research projects and methodological tools developed among the different disciplines, such as architecture and soundscape studies. They are bringing forth the archival practices in preserving acoustic heritage and how environmental sounds have been utilised in different research and art projects. In addition this paper provides a description of the online tools that have been developed with the aim of managing and preserving contemporary acoustic heritage in Europe. The project aims to make European sonic environments audible for listeners attracted by the cultural heritage of the continent in different times, places and contexts.

1. introduction

How can we define a common acoustic heritage in Europe? How can it be preserved and managed? Under the coordination of the Galician Agency of Cultural industries, the partners, that is to say, CRESSON at Grenoble (France), the Tampere University of Applied Sciences (Finlande), the Phonogrammarchiv of the Austrian Academy of Sciences (Vienna) and the collective of artists escoitar.org have collaborated for 2 years to propose some answers to these difficult questions.

2. Theorical issue

A lot of works, since the introduction of Soundscape notion by R.M. Schafer in the 70's, have tried to solve this question and it's quite impossible in the frame of this communication to summarize them. Actually, to understand our proposal we decided to focus a little bit on the research results from the Cresson laboratory in Grenoble, France.

Since it has been founded, it has been working on the perception of sound phenomena in the urban space, offering various models of intelligibility of the sound world on the scale of habitat, but also the scale of a neighbourhood or a city [1,2,3]. A basic feature of these works is not to reduce the richness of the sound world to only noise and nuisance problematic: another point of view is highlighted by considering that the sound phenomena take shape in space and in relation to each other. This position implies that not only the physical parameters of the signal are considered, but also physiological aspects of perception and cultural aspects related to social interactions. For example, the study of the sound qualities of a public space refers not only to the study of the physical parameters of sound phenomena in space, but also to the study of their interactions with the practices and social representations of the space. In other words, the sound qualities of a public space study need a combined analysis of acoustics, space and human practices.

More fundamentally, the main research works of Cresson are formulating a critique of the stimulus response scheme that organizes the majority of studies in acoustics. We can criticize the experimental psychology of listening by saying that the signal is the reference to any assessment of perception. However, as Pierre Schaeffer says "*it is the sound object*

given by perception that designates the signal to be studied"[4]. The signal alone cannot explain the richness of perception.

In comparison with most studies on noise, a major epistemological reversal should be introduced. In the words of Jean-François Augoyard, "*any psychological approach to sound perception should begin in the order of the sound experience.*"[5] It is the experience of sound that holds the definition of a sensible quality. Thus, as suggested by Augoyard, "*we can not always say that 'at the beginning, there was the signal' but rather, 'in the order of the time lived, at the beginning, there is the phenomenon listened to'*"[5]. Consequently, this implies that the study of sound phenomena "*is deployed in many fields of investigation as dimensions of the phenomenon of the listening situation*" [5]. If the situation is the laboratory and the listening room, the sound experience is analysed along an axis that emphasizes the physical signal. The analysis cannot say more than what the situation already contains. If the situation is the urban space, what must then be the axis of analysis of the phenomenon? The signal physics course, but also the lived space, representations and social interactions, codes and standards. Thus, any sound phenomenon can be analysed along three dimensions [6]:

1- the physical signal (acoustically measurable and quantifiable sound);

2- the lived sound (listened to and interpreted by perception);

3- the represented sound (in reference to cultural and collective codes).

Sound qualities do not have an a priori obvious internal organization. We must replace the action and the perception of a listener in any sound perception evaluation. It's exactly what we try to follow when we try to define European Acoustic Heritage.

3. European Acoustic heritage in construction

3.1. Importance of metadata

First of all, all partners agreed that it is a theoretically impossible task to determine a "good" or a "bad" sound or soundscape. Considering the prospect of this project, an

aesthetic or moral judgement may also be, if not irrelevant, at least restrictive. To follow the Schaferian concept of hi-fi, indicating the clarity of signal and wideness of the acoustic horizon, is helpful in considering the qualities of soundscapes, but this is not enough, as soundscapes are full of cultural and subjective qualities. The meaning of the soundscape depends on the context in which it can be heard and experienced spatially, temporally and socially. Soundscapes are, after all, sonic environments of the listener, without whom they do not exist. It is the relationship of the sound and the listener and/or community that counts, not "good" or "bad" sounds per se.

René Magritte painted his famous painting of a pipe, titled "Ceci n'est pas une pipe" ("This is not a pipe"). What he presumably wanted to show, was that in reality it was not a pipe, it was a picture or painting of a pipe. Accordingly, a recording of a soundscape is a recording and someone's representation of a sonic environment, and thus cannot be considered a soundscape.

Drawing on this, we need to make clear that when discussing soundscape heritage we need to make a distinction between **living heritage** and **archived heritage**, i.e. recordings that represent soundscape, or those connected to experiences on soundscapes. Shifting the focus from the living, accessible and interactive environment to artefacts, there is a need to contextualize and classify the recordings. Any classification of soundscape, or any definition of European acoustic heritage, also needs to define the meta-categories of the sound. This is something our partner Phonogrammarchiv has understood since its creation: the metadata make the archive possible. Without it, there is no archival process and actually, sometimes, the context might even be more important than the recorded sound itself**.**

3.2 Categories and classifications

We know now that we have to describe not only the sounds but also the context of its production and listening. We know that beginning with the first works of R. M. Schafer, and still today, several other categories describe these issues, even when sounds do not have all the characteristics of a soundscape. Sounds can act as witnesses of social life and express a sonic milieu, and they can be also sound signals that belong to the category of environmental listening.

All these categories and types of descriptions are part of our acoustic heritage. They do not compete amongst themselves, on the contrary: they are complementary and indispensable to each other. Otherwise, the term soundscape has to be defined and used as a generic term, which is not limited to its original definition, but open to the multiple meanings given by the sets of individuals, institutions and research groups who used it and who are using it today. In addition to physical measurements also the contribution of human and social sciences, such as psychology, sociology, architecture and anthropology, will be taken into consideration when defining the concept of soundscape.

3.3. Cultural heritage in the use of words describing sounds

Although audio recordings constitute valuable acoustic archives for future generations, recordings alone are insufficient in communicating the meanings that crisscross the listening and recording experience. Writing up metadata and coming up with analytic categories reminds us of a fact that cannot be ignored when archiving the sensory environment: communicating to others what one hears is often done in writing, and writing means using a specific language.

Linguistists Masjid and Levinson remind us that language: "*plays a fundamental intermediary role between the subjective, individual nature of sensation and the cultural world that constructs the perceptual field. The cultural world provides the sensory environment – the smells, the tastes, the colors, the shapes, the spaces, the sounds that we perceive. Biology provides the individual's sense organs and the cortical processing of sensations that process the sensory information. But without language our sharing of perceptual experience would be confined to shared environments and shared biology: a mechanical sharing without intersubjectivity. What language adds is the projection outwards from the individual psyche of private sensations now clothed in public representations, and conversely, the introjection of public representations into private psychology*". [7].

Sonic description is in itself an arduous task, not to mention the translation of it to other languages. Something is always lost in translation. For example, sounds that are described in English as "high" are in Turkish "thin" (ince), whereas "low"

sounds are “thick” (kalın). Also, some words can indicate a change of relative pitch with a change in vowels, e.g. clink-clank-clonk in English or kilinä-kalina-kolina in Finnish. Giving an example of the Malesian semai language’s various possibilities of describing waterfall sounds, linguist Sylvia Tufvesson notes that in words like these, so-called sound expressives, vowel alternation encodes not only differences in perceived pitch but also in loudness. “*By encoding such differences, sound expressives provide acoustic knowledge which allows speakers to calibrate spatial distance and navigate surrounding environment*” [8].

This is also the reason we decided to carry out the Soundscape TV interviews (see the website, [9]) with the language of choice of the interviewees themselves, and add truncated English subtitles to share and communicate with a bigger group of people. We wanted to maintain the richness of the different languages used by the interviewees with all their onomatopoetics, metaphors, but also repetitions, imprecisions and hesitations as marks of how people communicate their listening experiences.

As also seen in the writings of the One Hundred Finnish Soundscapes project [10], soundscape description can expand to far more than mere lists of sound sources and a chain of actions. The detail in which a soundscape can be heard and described can measure up to the analysis itself. Nevertheless, it is a cultural competence that needs nurturing. A meagre cultural vocabulary can be a restraint in sonic description, and translation into other languages can blur the meaning even more. Keeping up with a wide and multifaceted vocabulary of sonic expressives and verbs add to acoustic heritage.

3.4. Questions of scale and territory

It is somewhat challenging, if not impossible altogether, to define common acoustic heritage in European context. There are several reasons for this. First of all, fundamentally, we notice that heritage forms at a very small territorial scale. Partners in Galicia realized that some people living in a small village on the ocean coast are actually changing their way of speaking (the accentuation) depending on wind direction. In other words, the same people do not talk exactly alike depending on the intensity and direction of the wind. For us,

this is a perfect example of our “European acoustic heritage”. We see that it takes place at a very small territorial scale (a few kilometres); the sounds itself are very important, but even more than that, all the metadata that explains these behaviours are also fundamentally important for the collection of our acoustic heritage.
So, actually, our definition of European acoustic heritage will not be a closed list of “good” sounds but it will consist of different online tools that offer anyone the chance to deposit one’s own heritage. We create the conditions in which others can catch our acoustic heritage. We do not begin by deciding what could be our heritage, we welcome sounds and experiences and offer, through online tools, the capabilities to find equivalent situations all around Europe (see web site [9]). Our tools are designed to promote intercultural approaches and intercultural comparisons. We intend to provide one example with a thematic map concentrating on water. With the help of the map we will gather information from different angles on the subject and seek to chart the sonic expressions of water in Europe. It goes without saying that different forms of water are definitely part of our acoustic heritage as well: rain-storms, seas, oceans, rivers, fountains in towns, to name just a few. Historically, civilizations were built close to water, and water sounds defined acoustic communities, as pointed out in the first large scale study Five Village Soundscapes carried out in 1975 in Europe (Five Village Soundscapes 1977/2009).

3.5. The temporal aspect of acoustic heritage

Of course, once one raises the question of heritage, time and conservation issues become prominent: what are the sounds of the past and the present we should consider parts of our heritage, what should be the means of implementing safeguards for their protection, and how to transmit them to the next generations. Each partner has already come face to face with this difficult question. For example, the Phonogrammarchiv restudied soundscapes that had been a reality in the beginning of the 1980s in different spots of the city of Vienna. They also performed them again with brand new technical equipment. After 30 years, the city has changed, and, for several reasons, some situations cannot be recorded as they were: circulation lines have been modified,

street cars have disappeared, some train stations have closed, human activities are no longer localized at the same spots. This is also happening to Cresson researchers, who worked on the underground spaces at Les Halles, in Paris, a place that is being rebuilt right now and will never again sound the same. Similarly, a Finnish team faced the issues of ever-changing soundscapes during the Acoustic Environments in Change field trip to six Europan villages in 2000. However, they were able to restore a sound that had already disappeared from the village of Dollar, Scotland. The 1975 Canadian research team had recorded local signals, including the fire siren with an exceptionally long decay which they archived to the World Soundscape Project Tape Library at Simon Fraser University, Vancouver. From there, it was easily returned to the collections of the Dollar Museum.

We have to consider the question of time as being of utmost importance. Our approach is two-fold: with the exception of the Phonogrammarchiv, our institutions are not charged with rescuing our sound culture. We are not archivists, and we do not want to decide what needs to be archived.

Several institutions, all around Europe and all around the world, already exist for this kind of archival work. Each of them have their own character, and they complement each other. So, our contribution to this issue is to provide, through the online tools that we are developing, a list of the sound archive institutions in Europe. In this way, any individual or institution that wants to archive a sound collection will find the right place to do it.

More fundamentally, we believe that our work is a small part of our heritage. It will focus more on the hidden acoustic heritage that each of us is carrying in one's personal life, which might be shared with others. We believe that acoustic heritage is being built every day through individual experiences all around the different communities of Europe. Acoustic heritage cannot be described as a closed definition, because of its dynamic character: cities are changing quite fast, our world has already changed a lot and it is impossible to define today what has to be preserved for tomorrow. The time scale is humanly impossible to handle by any group of researchers. What we can do is to offer a framework and a platform, in which any individual or community can deposit its own suggestions.

4. Conclusion

As described above, the partners agreed to say that acoustic heritage in Europe is any sounds that form a testimony of a sonic situation. There is no restrictive definition of our heritage, because, actually, it forms itself in everyday human practices. Acoustic heritage is born of the encounter of a community with sound phenomena, within a spatial territory. Because we want to respect its richness of expression across Europe, we will not develop this project as a reference list of soundscapes. Sound heritage is defined continuously, at every moment, and we prefer to build the conditions in which it is possible to catch all of its expressions. For this, we have developed Internet tools that capture these expressions of heritage and which also allow comparisons between different regions in Europe.

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