

inter.noise 2000

The 29th International Congress and Exhibition on Noise Control Engineering
27-30 August 2000, Nice, FRANCE

I-INCE Classification: 6.6

ON THE RELATIONSHIP BETWEEN ACOUSTIC COMMUNITIES AND ISSUES REGARDING PUBLIC ANNOUNCEMENT SYSTEMS

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Keywords:

ACOUSTIC COMMUNITY, PUBLIC ANNOUNCEMENTS, ELECTRIC SIRENS, SOUNDSCAPE

ABSTRACT

This paper examines two cases in which electric sirens or musical chimes and public announcement systems are used in rural Japan, to determine what kind of sounds are seen as noise by societies. To discuss what kind of sounds are seen as noise, the concept of "Acoustic Community" is employed. As a conclusion, (1) the existence of an "Acoustic Community" is required when sounds designed for a public can be heard all over a certain region, and (2) even if similar sounds seem to play pervasive role in some "Acoustic Communities", the actual issues that play pervasive roles may be quite different.

1 - INTRODUCTION

The common definition of *noise* is "a class of sounds that are considered as unwanted." According to this definition, whether a certain sound is seen as noise or not may depend to a great degree on the individuals who happen to hear the sound, and their society. In order to determine what kind of sounds are seen as noise by societies, this study focuses on the relationship between the sounds of electric sirens, musical chimes, and public announcements in rural Japan and residents' reactions to these sounds. Recently, complaints that these sounds are noise pollution have been increasing in some places, but there are many places where people do not consider these sounds noise. To discuss what kind of sounds are seen as noise, the concept of "Acoustic Community" is employed.

2 - ACOUSTIC COMMUNITY

The original concept of "Acoustic Community," as proposed by R. Murray Schafer, can be seen in the following quotation:

Community can be defined in many ways: as a political, geographical, religious or social entity. But I am about to propose that the ideal community may also be defined advantageously along acoustic lines [1].

It will be clear from this quotation that Schafer's definition of "Acoustic Community" involves a redefinition of an actual community according to its use of sound. This means that the existence of a certain community is the prerequisite for the existence of an "Acoustic Community." In other words, an "Acoustic Community" is one possible aspect of a community. Accordingly, Schafer offers that communities like the Huns community, Plato's ideal community, the French fishing village, and so on, are examples of "Acoustic Community" [1].

Truax expanded on the concept of "Acoustic Community" [2]. He defined the "Acoustic Community" as "any soundscape in which acoustic information plays a pervasive role in the lives of the inhabitants". He goes on to say that "it is any system within which acoustic information is exchanged" [2]. This expanded definition does not require the prior existence of one specific type of community to achieve an "Acoustic Community". It means, instead, that an "Acoustic Community" is a *type* of a community, not simply an aspect of a community. He also pointed out that "the boundary of the (acoustic) community is arbitrary and may be as small as a room of people, a home or building, or as large as an urban community, a broadcast area, or any other system of electroacoustic communication" [2].

3 - CASE STUDIES

Electric sirens or the newer musical chimes, which have recently been replacing them, are used for telling the time in rural Japan. In most cases, these sirens or chimes are sounded at noon or at dusk, but in some cases they are also used very early in the morning. In addition to sirens and chimes, public announcements are often made. In some districts, public-address systems are only used to inform residents of emergencies, such as typhoons, tsunamis, and so on. But in other districts, these systems are also used to tell the residents about more trivial matters, such as lost pet announcements.

The following paper examines two cases in which electric sirens or musical chimes and public announcement systems are used in rural Japan.

Case 1 – Futaoi Island [3]

An electric announcement system has been used on Futaoi Island in Yamaguchi Prefecture since 1970. Speakers are set at three points to inform all residents throughout the area. The main aim of this system is to inform residents about notices from the community association and from the fishery cooperative association. But all islanders have free access to this equipment, so more trivial or even rather personal matters may, from time to time, be broadcasted.

According to a questionnaire distributed to all adults on the island [3], 79.5% of the residents felt announcements were never noisy. Others pointed out that only some types of announcements are noise, for example those that were shouted out, or repeated too many times, or were of a very personal nature. Moreover, one of the most common answers in the free comment section of the questionnaire was that the announcements were very useful for acquiring important information from anywhere on the island. And only nine people responded negatively about announcements with all negative answers resembling the following: "I want our community to stop using the announcement system for personal purposes, because no one can distinguish between personal announcements and other important announcements without listening carefully. We also have to listen to announcements that don't apply to ourselves". This comment shows that residents think they have to listen to announcements carefully because they *may* deliver very important information for all.

This questionnaire shows that all of the residents think the announcement system is one that delivers important messages for everyone. The residents basically do not consider these announcements noise. From view of Truax's expanded concept of "Acoustic Community", one can say that there exists here an "Acoustic Community" in which the announcements play a pervasive role on Futaoi Island. And one can also say that the reason why very personal announcements can be labeled as noise is because this kind of announcement does not play a large enough role in the "Acoustic Community" that exists among all residents.

An electric siren has been used since 1957 for the purpose of waking the fishermen who took part in cooperative fishery work. At that time, each household had a member who was involved in the work. Nowadays, however, only nine out of 40 fishermen do the cooperative fishery work, but the siren is still used every morning shortly before sunrise. Since 1957 there have been no complaints that the morning siren is noise pollution. According to the questionnaire, almost all adults have found a way of incorporating the morning siren into their daily lives: for example, as an alarm, as a cue to go to work, or to finish organizing shipments. Thus, for these reasons the morning siren is not regarded as noise. At one time, the siren had also been used at noon, but some people complained that it disturbed their nap, so the noon siren was stopped.

What has to be noticed is that all adults found a way to use the morning siren according to their daily schedules. Thus, the morning siren plays not only one role but several roles depending on the lifestyles of the residents. We can regard the set of people who gives their own meaning to the morning siren as one group here: the whole island. The difference between this group and the previously mentioned "Acoustic Community" is that the siren, as opposed to the announcement system, plays several roles. This means that the definition of "Acoustic Community" should be expanded to "any soundscape in which acoustic information plays *positive roles* in the lives of the inhabitants". In an "Acoustic Community", because all members recognize that the sound plays positive roles and is therefore valuable, no one regards it as noise.

Let us next consider the noon siren that was stopped. As we have seen, the reason was because some people complained. From the standpoint of an "Acoustic Community", the noon siren failed to play any positive role in the lives of the inhabitants.

These cases show that the existence of an "Acoustic Community" is required for a sound which can be heard all over a certain region.

Case 2 – Hazama and neighboring villages

In Hazama in Miyagi Prefecture, a public announcement system has been used since 1986. The main

aim of its foundation was to inform residents, especially farmers, of storms and floods. Speakers are set at fifty-six points all over the village to inform all residents throughout the area. These systems are managed by the Hazama village hall.

The Hazama system broadcasts: (1) musical chimes to tell the time at morning, noon, evening, and night, (2) information from the village hall, (3) agricultural information from the agricultural cooperative association, (4) emergency information about natural disasters, and (5) other information that is thought to be useful for all residents. All information except emergency information is broadcasted at 7:10am or 3:15pm. A few years ago, broadcasts about fires had to be stopped, because the information drew crowds even night.

Almost all complaints from residents to those in charge the broadcasts mention sound quality. It is often difficult to hear the announcements because of the wind or some other reasons. Complaints that these sounds are actually noise pollution have been few. Such complaints are made by people who moved into the village recently with babies or little children; all complaints have to do with babies or little children being awakened by the sound of announcements. Nothing has been done about these kinds of complaints, but no one has ever complained twice. These facts suggest that to accept the broadcasts, in other words to join the "Acoustic Community" in which the broadcasting plays a pervasive role, is prerequisite to joining this village community. This suggests that "Acoustic Community" can help construct other kinds of communities, similarly, other kinds of communities can help construct "Acoustic Community" as R. Murray Schafer pointed out [1].

In Nakata, a nearby village of Hazama, a similar public announcement system has been used. They broadcast not only similar issues, but also morning calisthenics programs, and election results. The election results are broadcasted as soon as possible, even in the middle of the night. By contrast, however, the maintainers of the system in Hazama said that if they broadcasted election results in the middle of the night like Nakata, a lot of residents would complain. The idea to broadcast the election results as soon as possible has never been considered in Hazama.

In Minamikata, another nearby village, a system similar to Hazama's has been used. However, the announcements made in Minamikata also include lost pet announcements. These issues could never be broadcasted in Hazama, because such information is thought not to be useful for all of the residents.

From the comparison of issues that are permitted to be broadcasted between these three villages, we realize that peoples' sensibilities toward broadcasts and even broadcasting standards themselves are quite different between each "Acoustic Community" even if they are in the same area. This suggests that even if similar sounds seem to play pervasive roles in some "Acoustic Communities", the actual issues that play pervasive roles may be quite different. These differences originate in the particular characteristic of communities, such as their historical backgrounds or geographical features.

4 - CONCLUSION

These cases suggest that the concept of "Acoustic Community" should be expanded as "any soundscape in which acoustic information plays *positive roles* in the lives of the inhabitants." The properties of the "Acoustic Community" are shown as follows: (1) the existence of an "Acoustic Community" is required when sounds designed for a public can be heard all over a certain region, and (2) even if similar sounds seem to play pervasive role in some "Acoustic Communities," the actual issues that play pervasive roles may be quite different. These properties show that researches focussing on studies in soundscape (an environment of sound with emphasis on the way it is perceived and understood by the individual, or by a society) [4] are required to solve community noise problems like sirens and announcements.

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