

Soundscapes: A scholarly view of our sonic environment

Some refer to it as 'noise pollution', but a leading Japanese academic argues that our sonic environment and how we perceive it can be a lot more complex than it first appears.

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Staff writer

The astonishing capacity of human hearing is able to help us negotiate our way around our environment – the state of our minds and bodies can either flourish or founder in response to the soundscape, a sound or combination of sounds that forms or arises from the environment that surrounds us.

A soundscape therefore can provide meaningful information, while playing an important role in life. Through the perception of a combination of sounds, people are able to identify their immediate environment, whether they're on a street, in a temple, or on a beach.

The idea of a soundscape refers to both a natural acoustic environment, including animal vocalizations and the sounds of natural phenomenon; as well as sounds created by people, including conversation, or the sounds generated through work, or of a mechanical origin.

Since a soundscape comprises welcome and unwelcome sounds, and in other cases - pleasant and unpleasant sounds, studies to promote a better understanding of soundscapes have been carried out around the world as part of an academic effort to help support a campaign to raise awareness of a 'balanced' soundscape, which could add value to modern life.

Our perception of sound

According to Dr Keiko Torigoe of Aoyama Gakuin University's School of Cultural and Creative Studies, the study of soundscapes is essential since it helps us to understand acoustic ecology and auditory culture.

She says that soundscapes represent a wide array of aspects of life, including culture, time, memories, emotions, and our imaginations, in which the perception of a soundscape lies, based a great deal upon our personal as well as cultural and social backgrounds.

“A soundscape involves the way it [a sound or group of sounds] is perceived and understood by an individual or by a society,” said Dr Torigoe, who visited the kingdom recently to share her insights and experience from an academic perspective at a conference called 'People, Music, Life' held at Princess Maha Chakri Sirindhorn Anthropology Center. She has worked in this particular field now for almost 30 years.

Since soundscapes relate to every member of a society, justifications can be fairly complex, as the following example demonstrates.

Dr Torigoe says that the sound of a modified motorcycle muffler can bring pleasure to the ears of a teenager who loves racing, yet it is likely to be considered a nuisance to neighbors or local residents.

Another example of how we perceive sounds may raise a few eyebrows among those who find the sounds of engines or construction work to be offensive. Dr Torigoe pointed out that these kinds of sounds were once greatly welcomed by the people of Japan following the end of World War II. The population considered them in a positive light since they were a symbol of development, which reassured them that their lives were moving away from the devastation caused by war.

“We should not rush to judge another person's perception of sound,” Dr Torigoe says, “In fact, we should try to understand, establish the reasons and observe in a deeper way why people perceive sounds differently and how they find meaning in each sound.”

In search of balance

Regardless of how an individual perceives sound, it is generally agreed that a well balanced sonic environment rarely exists in any urban or rural setting once modernity arrives.

The sound of construction work, loud music emanating from speakers in restaurants and department stores, as well as vehicle engines are widely considered to be forms of noise pollution.

Dr Torigoe says that promoting a proper balanced soundscape does not mean denying the existence and usefulness of such inventions or activities, but rather it is a case of people in society needing to learn to live together in a more cooperative way.

In this case, a better understanding of the acoustic environment comes into play and could be an important part of developing understanding within communities.

Dr Torigoe says that mass production and commerce are likely among the main factors causing people to 'lose balance' within a soundscape, leading them to lose any sense of balance in their approach to things.

One sonic experience that most people have shared is the sound of music. Dr Torigoe says that music should generally be a pleasant sound, however, it can become a nuisance if the volume is set too high.

“An abundance of technologies are available but we have to choose whether or not to use a particular invention and if we decide to use it we need to use it appropriately with a clear understanding of its meaning and how that will impact on the soundscape,” she said.

Soundscape in practice

An example of Dr Torigoe's work is a soundscape design for the garden at the Memorial House of the late Rentaro Taki, a nationally renowned composer, which is located in the castle town of Taketa City in southern Japan.

The project, which was conducted in 1993, involved using sounds she thought might have been part of the acoustic environment when the composer was still alive.

After conducting thorough research, she decided to reproduce a number of sounds naturally by reconstructing the materials that would originally have generated the sounds without man-made interference.

Rather than artificially generating the sounds and use speakers to amplify the sounds, she chose to naturally recreate an environment the composer may have at one time experienced around his garden. So the sounds generated are all natural and produced through the way the garden area has been organized. The sound of traditional Japanese keta shoes is made when visitors wear them and walk in them around the garden. So in this case, no artificial sounds whatsoever were used and broadcast through loudspeakers.

Dr Torigoe's objective was to help visitors imagine the composer's immediate sonic environment, which may have, to a greater or lesser degree, influenced the artist's work.

In short, the main thrust of Dr Torigoe's work is to reconstruct a natural sonic environment that is as close as possible to the environment the artist once occupied.

"To preserve the sounds of the olden days is to preserve the natural environment," she says.

Nature's soundtrack

Natural settings offer a rich source of acoustic sounds that can help balance our day-to-day sonic experiences, which in an urban setting tend to be generated by technological appliances or machines.

Dr Torigoe uses the example of Dohkanyama in Tokyo, where people gather to listen to the sounds of various kinds of crickets.

She says that while it can be immensely enjoyable to listen to natural sounds, the experience can occasionally be somewhat disturbing. The fact that the sound of some cricket species have disappeared, for example, points to the fact that there are ecological threats that pose threats to their existence.

According to Dr Torigoe, the resurgence of the Big Camphor Tree at the Sanoh Shrine, a one-hundred-year-old tree in Sakamoto Town, Nagasaki City, is a wonderful example of a community effort aimed at preserving natural ecology.

The tree, which once appeared to be dying due to the effects of the atomic bomb dropped on Nagasaki by the US in 1945, has been carefully nurtured with the cooperation of villagers and ecologists. Through numerous studies and a good deal of patience, those involved discovered that they needed to try and return the ecological system to its previous state in order that the tree could regain its former strength.

After a few years the tree had returned to its previous healthy condition, and it was found that the acoustic environment around the tree had also improved. Now the area is filled with natural sounds, such as those generated by insects, birds and rodents.

The resurgence of the tree has not only revived the acoustic environment around the tree, but also improved the spirits of local residents, she said.

The Big Camphor Tree's soundscape at the shrine was listed as one of the town's 'precious soundscapes' in the Nagasaki Soundscape Project, which was carried out during the 1990s.

To add to the prospects for the study of soundscapes in Japan, Dr Torigoe has recently initiated a project to preserve '100 soundscapes of Japan'. The project aims to collect 100 sounds that are considered to be of great value to the Japanese people. The sounds are expected to come from both rural and urban settings, while they will represent the past, present and future of the nation.

Social impacts

Dr Torigoe says that individuals need to take responsibility for creating 'balanced' soundscapes within their communities. It is important that people voice their concerns prior to beginning projects that may involve an impact upon the sonic environment.

Dr Torigoe is willing to further share her academic experience, as well as her experience of Japanese practices with reference to this subject with Thailand and its people.