

# World Forum for Acoustic Ecology 2006

## International Conference on Acoustic Ecology

in Hirosaki, Aomori, Japan  
November 2—6, 2006

The WFAE Board encourages member participation in this year's International Conference of the World Forum for Acoustic Ecology.

### Presented by

The Japanese Association for Sound Ecology (JASE)  
The Hirosaki University International Music Centre (HIMC)

### Supported by

The World Forum for Acoustic Ecology (WFAE)  
The Soundscape Association of Japan (SAJ)

**Venue:** The Hirosaki University's International Music Center (HIMC) established in 2005. Many of the events will take place in the Center's beautiful 50th Anniversary Auditorium "Michinoku Hall"

**Nov. 2:** Opening Ceremony, Keynote Speakers, Symposium  
The West Meets the East: Physical, Spiritual and Postcolonial Perspectives of Acoustic Ecology.

**Nov. 3 and 4:** Papers and Workshops, Evening Concerts

**Nov. 5 and 6:** Two-day listening tour through the surrounding areas of Hirosaki.

### Welcome to WFAE 2006 in Hirosaki, Japan

On behalf of the organizing committee, I am very pleased to invite you to the *International Conference on Acoustic Ecology: WFAE 2006* in Hirosaki, Japan.

The old castle town of Hirosaki is the cultural centre of the Tsugaru District located on the northern tip of the main island of Japan. The city of Hirosaki is well known for the traditional townscapes, for Tsugaru shamisen, the three-stringed Japanese musical instrument, and for the surrounding natural environs such as Oirase ravine with its hot spring, one of the *100 Soundscapes of Japan*. We believe that Hirosaki will provide you with an enriching spirit and environment in order to present and exchange ideas in the field of acoustic ecology...

We very much look forward to your participation.  
**Keiko Torigoe (JASE)**

### Welcome to Hirosaki

Greetings to everyone participating in the WFAE Conference in Hirosaki, Aomori, Japan! This is the first time that the world comes to Asia via the concept of soundscape. Hirosaki University is pleased to bring this important moment to Japan after the Banff event in 1993. Traditional Western aesthetics based on Platonic and Aristotelian mimesis, for example, has exerted a great influence on Japan. In the Japanese aural tradition, however, people regarded sound as a psychological image rather than a pragmatic acoustic event. The concept of "man", for example, creating "meaning" through rational thought was absent in Japan (e.g., Karatani, 1989). Some confusion, at the same time, still surrounds

the relatively new field of postcolonial studies. This is mostly because, similarly to the concept of soundscape, the term postcolonial has become so heterogeneous and interdisciplinary. However, it is the only theory, which has been developed by non-Anglo-Saxon thinkers such as Said, Bhabha and Spivak in the late 20th century. I, therefore, believe that the term postcolonial is indispensable to the City of Hirosaki in order to explain the situation of fusion, hybridity and deculturation in Japan. Through the symposium on the first day, we are looking forward to proposing an approach to acoustic ecology that incorporates the notion of sound as a physical, spiritual as well as postcolonial phenomenon.

Chair of Organizing Committee  
**Tadahiko Imada (Hirosaki University)**

Source (and for more information): [www.saj.gr.jp/en/hirosaki2006.html](http://www.saj.gr.jp/en/hirosaki2006.html)



# A Tiny Field for Soundscape Design: A Case Study of the Soundscape Museum in Osaka, Japan

By Atsushi Nishimura

### Abstract

The author worked out his idea of the 'soundscape museum' as an experiment in order to put into practice ideas on soundscape design that can be executed by any individual citizen. He ran the Hirano Soundscape Museum (HSM) from 1998 to 2004 as part of a grass-roots activity for community development in Hirano, Osaka, Japan. In this paper, the author reports on the activities of the HSM and discusses his concepts and methods of soundscape design he has gathered as part of this case study.

The core question was how to make a clear distinction between soundscape and sound. If not addressed, it would not be possible to properly treat the soundscape as an object of study or design. Therefore, the author regards the term "soundscape design" as a design of soundscape. Special emphasis will be placed on the processes by which individuals form a philosophy of relating to sounds. (Nishimura 2002)

### A Brief Review Of The Case

The author was involved in the case study from 1996 to 2004, in which he attempted to develop a museum for soundscape study as one of the community development activities in Hirano, Osaka. This section provides background information and an overview of the case study.

### Study Area: A Lost District

Hirano is an old district of Hirano-go which prospered as a self-governing town until the early twentieth century. At present, the area is located in Hirano ward, Osaka City, Japan. Hirano-go covers an area of approximately one square kilometer. New buildings such as factories, shopping centers and residences are rapidly growing while historical buildings are disappearing. Preserving the historical landscape here has become an important problem in need of resolution.

In the period of *Sengoku* (the age of civil wars in Japan, approximately 1467—1568), the people of *Hirano-go* had constructed a moat for their self-defense from enemies and plagues. Figure 1, an old map of the district, shows the moat around the town.

In 1925, the name of *Hirano-go* was lost in the process of the area's incorporation into Osaka City. Most of the moats have been filled through land reclamation for further urbanization. And in 1949, most of the administrative districts were modified following the establishment of Hirano ward. Once *Hirano-go* disappeared from the maps the name remained alive mainly in the memories of some residents.

### A Grassroots Activity for Community Development

Since 1980 a community development movement has been addressing local issues. The citizen's group Hirano People's Network for Community Development (HPN) started its activities with a campaign for the preservation of a train station in the district, when the line was abolished in 1980. Although the preservation campaign was not successful, the solidarity among the participants resulted in the continuation of their community development for over twenty years. A lost district has survived because of such community efforts.

HPN has a unique motto: "no representative, no rule and no membership fee." Such volunteerism has been valued highly in the activities of the *Hirano People's Network for Community Development*.



Fig. 1—An old map of Hirano-go published in 1763.

### Introduction

The purpose of this study is to illustrate how the soundscape exists in our real life. Although the soundscape has been an object of study for a long time, it seems that there is little agreement as to what the soundscape actually is. In this paper, the author will report on his experimental activities in community soundscape design and will discuss his underlying concept as a way of demonstrating a method for approaching the study of soundscape. He will use the term "soundscape" as defined by the World Soundscape Project:

SOUNDSCAPE: An environment of sound (sonic environment) with emphasis on the way it is perceived and understood by the individual, or by a society. It thus depends on the relationship between the individual and any such environment. The term may refer to actual environments, or to abstract constructions such as musical compositions and tape montages, particularly when considered as an artificial environment. (Truax, 1978, p.126)

As will become clear later in the article, the author felt it necessary to make the applicable area of the above definition narrower.



Figure 2—One of the 15 museums' Hirano Film Archives. The top picture shows an exterior of the museum. The bottom shows the museum's director.

HPN started the *Hirano Ecomuseum Project* in 1993. The project consists of a lot of tiny museums utilizing the ordinary facilities such as temples, shrines, stores, public spaces and private houses. Each director develops a plan for each museum's exhibition. The plan is based on the director's own understanding of the community and what is important to include. The aim of the museum project is to transmit to visitors—while strolling around the district visiting the many small museums available—a kind of holistic sense of the area, an image or atmosphere of the town.

### History of the Soundscape Project

The first HPN project for the soundscape started in 1994. The group gathered various kinds of sounds found in their every day life, such as traffic noises, music in traditional festivals, sound streams in supermarkets, voices of cash dispensers in city banks, etc. Any sounds were potential objects for field recordings. The HPN, however, could not find a way in which to utilize the recordings at that time. Although some tapes were archived, the project was discontinued.

In 1996, the author began participating in the HPN. At the time, he was a graduate student who studied the soundscape and was especially interested in researching the sound archives. He thought that the collected field recordings, which appeal directly to our aural sense, are indispensable for soundscape study. At the same time, however, both the members of the HPN and the author recognized that the recordings alone were not sufficient and that something more than sounds alone needed to be studied.

At the beginning of his participation, the author thought that the old town and the HPN activities would be the sole focus of his soundscape study and that the concept of soundscape could be useful for the HPN activities. The reality, however, was entirely different. Because the members of the HPN had always considered the community as a bundle of experiences it was initially difficult for the author to conceptually understand the area. The answer to the question "what does the area mean for someone" depended upon what individual inhabitants had seen, heard, felt, imagined, considered and done there. Therefore, the first task for the author while studying the soundscape was to feel and encounter the area for himself and become totally involved in the sights, sounds, smells and tactile features of the community.

As a result, the *Hirano Soundscape Museum (HMS)* started as part of the *Hirano Ecomuseum Project*. The author thought he could find a focus for his soundscape study by positioning himself on the same footing as the members of the HPN community.

### Overview of HSM

The Hirano Soundscape Museum has six facilities for exhibiting its original soundmonograph. One of them in the Senkoji temple, became the core facility in which all HMS information is integrated. At other facilities, the soundmonograph for each site is displayed and various types of CD players are used—visitors can listen to CDs using an FM radio receiver (see figure 3).

HSM exhibits the soundscapes of the area using a variety of media. The sound map indicates the geographical locations of the facilities, describes the purpose of the HSM, transmits the testimonies of "earwitnesses" [Schafer 1974], shows a sound walk route around the area and listening points where characteristic sounds can be heard. The website has given participants a lot of opportunities to communicate with others. The World Wide Web is especially useful for international exchanges and in the future, it will constitute an interface between users and the digital archive section of the HSM.



Figure 3—CD listening system in the core facility at Senkoji-temple. A multi disc player is combined with an antique phone.

## Concepts And Methods of the Case Study

Through his HSM activities, the author discovered several concepts as well as methods to put these concepts into practice. They took shape in the form of the *soundmonograph* and the *soundscape museum* (Nishimura and Hiramatsu 1999a, b), both of which will be discussed in this section.

### Soundmonograph

The author calls the documentation of a soundscape a soundmonograph and defines it as a monograph in the recording medium. (Nishimura and Hiramatsu 1999a)

Sounds often excite our imagination and bring back vivid memories. When a sound is heard as background to a visual image, the sound often hides away from our consciousness. But when we listen to a sound consciously, it takes us into a world of images and meanings that exist behind the sound.

The directness of a sound recording can reveal things to us that are impossible to discover through other media. The soundmonograph is not only for acquiring knowledge, but also for sharing the great feelings that can never be described visually, such as the animated sounds of a bustling street, the charm of children's voices, the sounds of nature that often relax us, and so on.

In soundscape studies the relationship between an environment and its subject can be understood from a holistic point of view in which image, mood and memory are included. Therefore, the descriptions of a soundscape have to include elements by which listeners' experiences and imagination can be evoked.



Figure 4—A recording session for creating a soundmonograph. A lot of important information was acquired from such free discussions.

To make a soundmonograph, it is necessary to gather both the sounds and listeners' comments. Figure 4 shows a recording scene where information is gathered about a specific sound. The following story is a typical example that illustrates the quality of such information. In a recording, the author tried to capture the sounds of a well. He operated the well's pump himself and created various sounds in the process. On another day, the author made recordings around the same well, but this time with an informant who used to use the well. When he asked her to operate the pump he realized that the sounds she made while pumping and those on his first recording were completely different.

The soundmonograph has been defined as the documentation of a soundscape on tape, disc, or other recording media. (see Figure 5) It consists of several elements. The first is the actual sound which includes a wide variety of material, from live sound recordings, to ear witness accounts, explanations and finally even synthesized sound effects. The second element is composition.

It includes scripting, montage of sound materials and arrangement of interviews. The third element is subjectivity, referring mostly to the recorder's, editor's and informant's subjectivity. The "soundscape" concept places special emphasis on the perspective of the listener and, more importantly, this subjectivity stands in a mutual relationship to the subjectivity of others. It means that any soundscape descriptions or documentations consist of two or more subjectivities and that any soundmonographs can be accomplished through the collaboration of two or more persons. (Nishimura and Hiramatsu 2003)

**SOUNDMONOGRAPH:**  
A Description of Soundscape on recordings

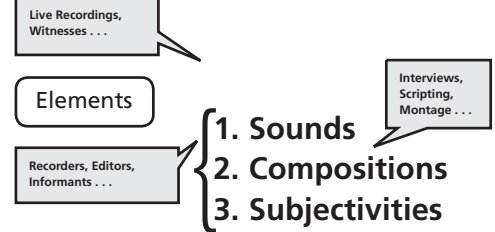


Figure 5—The definition of soundmonograph in the case study.

### Soundscape Museum

As mentioned above, the HSM was not only a sound archive but also a soundscape museum. The author realized from the beginning that any sound could potentially be perceived as a mere sound without context, not inspiring imagination, not sparking memories. So, whatever relationships existed in the actual activities themselves, came to be realised by the author.

Sounds are most certainly the result of some event. To know the sounds of a specific context is to know the other things in the same context. All the sounds we hear each day, that we have heard, and everything we wish to hear in the future are the key to discovering our history, to recognizing our present situation, and to thinking about our future. It became clear that the purpose of HSM should be based in a more comprehensive context, in which a series of soundscape tasks, such as gathering sounds, were initiated as part of a community development project.

The author's concept of a soundscape museum is partially derived from the new museum movement, which produces places such as ecomuseums, community museums, integral museums, and so on. The HSM seems to resemble mostly the neighbourhood museum where people not only study but actually create their own culture. (Riviere 1974)

To produce a soundmonograph for blind people became an important issue for our project. The recording medium seems to be suitable for blind people. However, it should be noted that blind people have a different set of contextual sensory relationships with sound than do those who are sighted. Consequently, this difference needs to be understood and integrated into the production of a soundmonograph for the blind.

### Conclusion

The *Hirano Soundscape Museum* was a tiny progressive step in the experiment of community soundscape design. Therefore it was impossible to fully estimate its effectiveness and validity for

soundscape design. However, the significance of HSM can be summarized in the following two points: (1) the problems of the sonic environment have been treated in an actual project for community development, and (2) HSM was interested not just in sound itself but also in the meanings of sound. (Nishimura 2001)

The author considers the most important aspect of the case study to be his direct experience with the voluntary nature of the community development activities in the HPM. He believes that voluntarism is one of the most important concepts of soundscape design, because in that context any individual can participate in a soundscape project.

There are a lot of things that we cannot see without hearing. There are, however, a lot of sounds that cannot be heard without knowledge. The goal of HSM is to provide a conceptual base and some methods and tools for soundscape design. In the author's opinion an audio production, or soundscape, may be designed in a way that listeners can create their own unique set of associations during the listening experience. Those associations will be based upon their daily interactions with particular sounds, or—in the case of listeners unfamiliar with the context of the recording—associations will be triggered in their imagination based upon their life experiences in general.

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- Truax, B. (ed.) 1978, *Handbook for Acoustic Ecology*, Vancouver: A.R.C. Publications.
- ATSUSHI NISHIMURA, born in 1968, studied musical engineering at Osaka University of Arts. With a background in arts, psychology and environmental science he received his PhD of science in home economics at Mukogawa Women's University in 2001. His dissertation was entitled *Soundscape Design for Lifestyle and Community*. Since 2005 he has been an Associate Professor of Media at the Okinawa National College of Technology. His research now focuses on the environmental influences of the construction of a new U.S. Marine Corps Air Base in Okinawa, Japan.

## Perspectives

### Acousticians walked through the Soundscape

By Carlos Alberto Augusto

The 12th International Congress on Sound and Vibration took place in Lisbon, Portugal in July 2005. This annual Congress is dedicated to the engineering sciences and this year featured a significant number of innovations in its program. One of the important contributions to this innovative character was the inclusion of the fields of acoustic ecology and soundscape studies.

The Congress takes place in a different location each year and is organized by the *International Institute of Acoustics and Vibration (IIAV)*, [www.iiav.org](http://www.iiav.org) and a local institution. In Lisbon the Congress was co-organized by the *Instituto Superior Técnico (IST)*, the largest and most prestigious school of engineering in Portugal. The World Forum for Acoustic Ecology (WFAE) was one of the co-sponsors of the event. The local organizers have total freedom in establishing the program of the Congress. The Portuguese organizing committee in accordance to its "Atlantic vocation" defined as one of its main goals the need to introduce new approaches and new views to the traditional engineering disciplines which this Congress usually addresses. The opportunity to present the concepts of acoustic ecology and soundscape studies to such an audience seemed challenging and exciting. This was the first time that the WFAE was formally involved in a prestigious scientific event of this kind.

Acoustic ecology and soundscape studies, together with related areas such as sound architecture and sonic tools for architecture design, were part of a program which also included the more traditional fields of noise, acoustic signal processing or underwater acoustics. These different disciplines were present throughout the technical sessions, keynote speeches and special events organized within the realm of the Congress program.

Apart from the Technical Sessions where papers were presented and discussed, the acoustic ecology community's presence comprised a panel discussion organized and directed by WFAE chair Nigel Frayne which addressed the theme "How can people's experience of soundscape be included in the urban planning and design process". R. Murray Schafer delivered a keynote address titled "I have never seen a sound" to a packed and attentive audience in which he analysed sound and its role, delivered in his usual and often provocative fashion. Finally acousticians and acoustic engineers were given a chance to walk through and listen to the soundscape of uptown Lisbon. The soundwalk was lead by myself, R. M. Schafer and Nigel Frayne.

By giving the WFAE visibility within this context a dynamic was created that allowed these themes to be incorporated into the discourse and practice of the professionals involved in these areas. The visibility may in itself be important but is not sufficient as Prof. Bento Coelho, the Chair of this Congress and a member of the IIAV, pointed out. The presence of the WFAE, its members, themes and special events were an important aspect of this Congress and thoroughly confirmed the organization's expectations. But to ensure that the promise created by this presence be fulfilled, Bento Coelho further remarked, that the WFAE must strengthen itself and maintain this dynamic.

This year the 13th International Congress on Acoustics and Vibration will take place in Vienna. A perfect setting for the strengthening of the WFAE's visibility initiated in Lisbon.

More information on the 12th International Congress on Acoustics and Vibration at [www.icsv12.ist.utl.pt](http://www.icsv12.ist.utl.pt).

CARLOS ALBERTO AUGUSTO: Portuguese composer, sound designer, video director, multimedia/graphic designer, musician, radio producer. Studied communication at Simon Fraser University (Vancouver, Canada). His musical work centers around music-theatre. Augusto worked in the area of noise control and curated the Music and Sound Arts Program of "Coimbra, Capital Nacional da Cultura 2003", which included *Coimbra Vibra!*.

More info at [www.euphonium.pt/augusto](http://www.euphonium.pt/augusto).

### Ziggurat Vertigo

#### Soundscaping the Digital World

By Eliot Britton

The artificial sound palate that has spilled over the ears of my generation is remarkable. The shuttle bus to my university is crammed with students, each packing giga bites of pirated, compressed audio. Dozens of tiny devices pumping thousands of mp3s into their ears at dangerously high levels. These sounds drown out the bus, the possibility of conversation and any real-world sounds. When we go home, we can turn on our stereo systems (most likely 5.1) and enjoy rich, carefully balanced media. If we turn on our computers, we are welcomed by any number of immersive audio-visual experiences. Should we go to the movies, the bar, the mall or a coffee shop, a mixed and mastered sound experience awaits us.

Thanks to new technologies involving carefully controlled lights and sounds, we are able to chose and determine a large portion of our daily perceptual experience. And as new technological breakthroughs allow for more convincing immersive experiences, we are faced with an interesting question: How will increasing exposure to virtual environments affect our perceptions of sound?

I have an interesting first hand account that answered this question for me. After being inspired by artists like Robert Ashley and Nan Jun Paik who commented on the role of media in their societies, I composed a piece for Saxophone and Tape called *Ziggurat Vertigo*. It was inspired by the strange repercussions I suffered from descending too deeply into a virtual world.

The story of this piece begins with my 14-year old digital self running through the twisted halls of a virtual reality bloodbath called *Quake*.

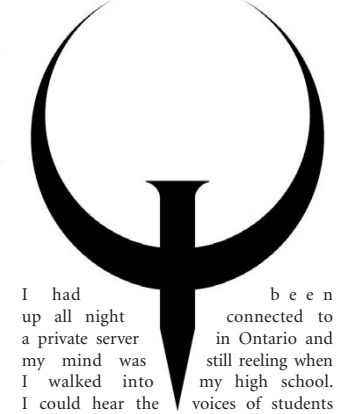
Before you dismiss me as some sort of technology crazed nerd, you must realize that I was a very active, well adjusted and balanced kid. I did well in school, had great friends, read a lot, played soccer, studied music and was in training to be a lifeguard. However, in addition to my daytime existence I would stay up at night honing my skills as an online warrior, challenging other players around the world via 56k modem. These war simulations would go on for hours, pushing the limits of my focus, reaction time and strategy. At first, *Quake* was more than I could handle. But being a stubborn and competitive kid, I didn't give up. I had to learn the rules so I could win in this exciting virtual world.

*Quake* was the first truly 3D virtual reality game to hit the mass market. Dark, lightning fast, violent and addictive, it took the world of video games by storm. It incorporated bleeding edge technologies developed by some of the best game designers and artists working in the field. I didn't know it at the time, but the people at *id software* were working hard to bring my worst nightmares to life. They accomplished this through a 3D environment filled with digital avatars controlled by human players from all over the globe. The game's twisted maze-like structures were modeled after gothic structures and industrial complexes, all maliciously designed to keep you fighting and running for your digital life.

And of course, there were the sounds. The sound designers at *id* developed new software that placed all sound sources in real-time 3D space. They then incorporated filtering and effects to create a sense of atmosphere and movement through time. No detail was overlooked—from the otherworldly sound of a demon sneaking up behind you to the hum of a broken fluorescent light as you run down an empty corridor. These sounds came together to create a stunningly vivid stereo image. As someone with very sensitive ears, I paid very close attention to these sounds. The real-time virtual soundscape was how I learned to win. I could tell from the sound where my enemies were moving, what they were doing, which types of weapons they were carrying. In a game where victory is based on the number of players you can hunt down and kill, creating sonic profiles of your enemies is very useful.

Before I knew it, I was playing too much for my own good. Eventually, as it is with any fast paced, demanding task, intuition, muscle memory and instinct begin to play a big part. Abilities that until then only manifested

themselves in my music performance began to come out in the game. Like with piano, my fingers would move without conscious thought. Eventually the thought patterns I developed while playing *Quake* worked their way into my real life. My descent into the world of *Quake* came to an abrupt end on a rainy day in 1999.



I had been up all night connected to a private server in Ontario and my mind was still reeling when I walked into my high school. I could hear the voices of students getting ready to start the day, the sound of countless different shoes hitting the polished tile floors, the bells, talking and laughing. Looking down one of the long hallways into the cafeteria I remember thinking "a well placed grenade could take out the entire cafeteria and I'd have three possible escape paths". I paled and stood there motionless for a few minutes. I rubbed my eyes and looked around. I knew that there was something wrong. The Columbine School massacre in Denver, Colorado had occurred a few weeks earlier. Only for an instant, a passing thought, far from turning my school into the next Columbine, but I think I may have had a glimpse into the minds of some of those troubled kids.

I stopped playing that day and watched with disgust as games increased their realism and disturbing violent content. Years later, the images and sounds of *Quake's* nightmarish halls were still burning in the back of my mind. During a particularly high stress period of my undergraduate degree my mind drifted back to *Quake*. By this point, I had had enough. I decided to compose a piece in order to exorcise myself of these nightmares. I dug out the *Quake* CD, deep from where it had been buried, set my soundcard to record the master output and started the program. I then logged onto a public server in Minneapolis. "Welcome to *Quake*" flashed on my screen for the first time in many years.

It was a unique experience, comparable only to going back to a hospital or some other setting of a traumatic childhood experience. A sense of nostalgia mixed with