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**[N473] How Do Residents Describe Symbolic Noise? :  
A Case Study of an Area of Traditional Textile Industry in Japan**

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**ABSTRACT**

The present study aims to analyse residents' descriptions of factory noise in an area of traditional textile industry in Japan. In the area, the factory noise is a symbol of the community as well as a source of annoyance. The purpose of focusing on such symbolic noise is to observe community response to noise reflecting social context in a local area.

Results of the analysis indicate that there are three description types concerning the factory noise: (1) affirmative description regarding the noise as comforting, (2) description of negation of annoyance, and (3) description of annoyance. The important members of the community tend to present the types (1) and (2) descriptions because the industry is considered as integral to the identity of the community. In other words, common sense is formed among locals that the factory noise be accepted, which makes it difficult to use the type (3) description in the community.

The results suggest that symbolic noise is potentially a sort of resource and/or identity of the community, while annoyance caused by the noise can be repressed. This knowledge would be useful for the management of the sonic environment especially in areas having certain types of characteristic noises.

**KEYWORDS:** Symbolic noise, Factory noise, Community response

## **INTRODUCTION**

In many studies, community response to noise is considered as an aggregate of independent responses of individual residents. Thus the studies have focused on the noise exposure and other individual conditions in the analysis of the community response.

Each of the individual responses to noise, however, sometimes depends in part upon others' response and/or social contexts. For example, people's conversations about the noise may presumably affect the individual opinions in their daily lives. In cases such as a noise source being of high concern in a community, this social context in their local lives may affect the responses.

This kind of social context at the local level has been treated as a bias in many studies in the field of community response to noise. However, the social context may always affect the community response to some extent. In the case of management of the sonic environment in a certain local area, the social context of the area may need to be taken into account to make the policy effective. Accordingly, the authors consider that the social context at the local level is significant.

In order to observe community response to noise reflecting social context in a local area, the present study focuses on residents' descriptions of factory noise in an area of traditional textile industry in Japan. In the area, the industry has been an integral part of the identity of the community, so that the factory noise has been a symbol of the community as well as a source of annoyance. The community response to this symbolic noise is expected to contain a special attitude derived from the social context.

## **STUDY AREA AND METHODS**

### **Study Area**

The study area of the present study is located in the central part of Nishijin district in Kyoto City, Japan. The area is about 11 ha and having 1,363 inhabitants according to the national census in 1995. Nishijin is the best-known name of traditional weaving over the country. Main products of the textile industry of the area are materials for Kimono and Obi (Japanese sash used for Kimono), most of which are of high quality and luxury. Since the 17th century when the industry developed remarkably, the industry has supported people living in the area economically and spiritually. Thus the daily lives of the residents have been deeply connected with the industry.

The area is a residential-industrial mixed use area, having many small independent weaving workshops as well as residences. The workshops are often set inside or next to their wooden

houses of traditional style and operate power looms and/or handlooms. Power looms were introduced to weavers in the area around the beginning of the 20th century and then spread among more than half of weavers until the 1950s [1]. Although power looms make loud noise, the workshops are usually not sound insulated.

The area used to be filled with the loud weaving noise of power looms when the industry flourished in years around 1950s and 1960s. The weaving noise, however, is only heard in very limited places in the area these days because a fair number of workshops of the weaving process have moved out of the area or quit their businesses. This is due to an increase in land value of the area on top of a decrease in demand of Kimono.

## **Methods**

The present study analyses residents' descriptions of the noise of the weaving industry obtained in a free response questionnaire survey and interviews.

The questionnaire survey, a part of which has already been reported [2], was carried out in 1996. Questionnaires were delivered to 244 households among 328, and 208 answers were obtained. The questionnaire contained questions for which respondents were asked to make a free description. The present study analyses free responses to the questions about (1) their current sonic environment and (2) their past sonic environment. The questions were "Please describe your ideas freely about 'sounds' heard lately at your house or in your neighbourhood" and "Please write your idea freely about 'sounds' having been heard in former days in your neighbourhood," respectively. The present study analyses descriptions of the factory noise contained in the free answers to the questions.

The interviews were made with several residents in the area in 2002. The residents were asked to make descriptions on their experiences of the sonic environment of the area in the past. The present study takes up three cases to show typical attitudes to the factory noise.

## **RESULTS**

### **Description of the Current Factory Noise in Free Responses**

The number of respondents who made any description in their answers to the question concerning the current sonic environment was 185. Among them, 52 respondents (28%) described the factory noise. Table 1 shows the numbers and percentages of classified descriptions of the factory noise in the answers about the current sonic environment. The individual responses can contain more than one classification.

*Table 1. Classification of description of the current industrial noise*

Classification	Number	Percentage
Annoyance	12	23%
Negation of annoyance	3	6%
Affirmative evaluation	4	8%
Nonexistence, infrequency, or decrease	18	35%
Description of the sound in the past	21	40%
Description of the industrial noise	52	100%

Twelve respondents described the annoyance of the factory noise as follows:

- “My next-door neighbour operates power looms in his house. The power looms are very annoying.”
- “The factory at the rear of my house is open until midnight. Even a small amount of noise bothers me at night. I cannot complain about the noise because it’s business, but I hope he would consider the neighbours.”

In the latter example, there is shown a respondent’s recognition that people living in the area should tolerate neighbouring factory noise.

There were also some descriptions of negation of annoyance and affirmative evaluation of the noise as follows:

- “The noise of the business is not painful.”
- “I don’t feel comfortable without the weaving noise because I was raised hearing it.”

Moreover, it is noticeable that there were many descriptions of a decrease of the noise (35%) and of the noise in the past (40%). Both of the types of descriptions shows the respondents were fairly aware of the sonic environment in the past. There were also several answers, which are not included in the numbers shown in the table, that do not mention the factory noise but describe quietness of the area compared to the past, such as “it has become quiet.”

### **Descriptions of the Past Factory Noise in Free Responses**

The results of the analysis of descriptions in the answers to the question concerning the past sonic environment is shown in this section. As mentioned above, there were a considerable number of descriptions of the past sonic environment in the answers concerning the current sonic environment. Accordingly, these descriptions are included in the following analysis.

The number of the respondents who made any description concerning the past sonic environment was 157. Among them, 128 respondents (82%) described the factory noise, and 124 respondents (79%) the weaving noise of handlooms and/or power looms. Many of the respondents described that the factory noise used to be always heard in the area. The fact that

*Table 2. Classification of description of the industrial noise in the past*

Classification	Number	Percentage
Annoyance	19	15%
Negation of annoyance	7	5%
Relation to liveliness of the area	26	20%
Description of the industrial noise	128	100%

most of the respondents described the weaving noise indicates that the residents considered it as a representative noise of the area. Table 2 shows the numbers and percentages of classified descriptions of the factory noise in the past. The individual responses can contain more than one classification.

The number of respondents who described annoyance of the noise was 19, which was 15% of 128 respondents who described the noise. The followings are examples of the descriptions:

- "The noise of power looms. One of my neighbours operated two looms which annoyed me. In summer everyone used to open the windows. The loud noise was unbearable. The noise made me feel sick."
- "There were many weaving workshops in my neighbourhood. The noise from these power looms annoyed me from early morning till late at night. Now however it is quiet because the industry has declined."

These descriptions suggest that the factory noise was so loud as to annoy some residents.

There were cases that a respondent who used to be annoyed with the noise described a positive feeling of the noise:

- "I used to hear the sound of power looms because my neighbours were engaged in the weaving industry. I felt it was annoying at the time. However now I feel this same noise is a good sound that reminds me of the good old days."

Several respondents made descriptions containing negation of annoyance as follows:

- "The sound of power looms was a daily sound. It was quite usual."
- "What I remember the most is the sound of weaving. It was so loud that I couldn't hear what people said. However somehow it was not annoying and it became a natural part of our lives."

These descriptions suggest that some residents regarded the noise as usual and natural. The number of the respondents describing this kind of description was seven (5%).

Moreover, the following cases suggest another type of attitude to the noise:

- "When the town was very lively, we heard the sounds of power looms from early morning till late night even on Sundays and on holidays."
- "The weaving noise was always heard. The town was full of life."

- “When I came back after a few days away, the noise of power looms made me realise I was home. It made me feel at home.”

The first and second examples describe the noise as a symbol of liveliness of the area. Third example shows that the respondent regard the noise as what characterises the area. These descriptions suggest an affirmative attitude of residents to the factory noise.

This type of attitude to the noise was often described as sadness and/or worry when the respondents related the decrease of the noise as follows:

- “I feel sad that there is no weaving noise in this town. It used to be heard everywhere in the town.”
- “When the weaving industry was active, I always heard the noise of weaving because most neighbours ran weaving shops. But the industry has reached a deadlock and many shops have been closed. So I cannot hear the noise. I feel very sad about it.”
- “Around 1971, when I got married and came here, the weaving noise was heard here and there. This area was lively. But these days the noise is not heard at all. I am worried about this town’s activity.”

This type of attitude connecting the noise with the liveliness of the area was described by 26 respondents (20%), which was more than the number of the respondents describing annoyance.

### **Descriptions in the Interviews**

In order to depict typical residents’ attitude to the weaving noise, three interview cases are shown in the following part.

Case 1. M.H. (male, born in 1937) has resided at the house in the area all his life. Although he has never engaged in the textile industry, his father used to weave with power looms in his house when he was a child. He seemed to feel accustomed to the weaving noise. He described the sound of power looms in the area as follows:

“Power looms make noise, but the noise is not bad for me at all. I feel almost like I cannot live without it. The noise is close to our daily lives, so it isn’t annoying but pleasing. With it, I feel they are working with energy. And without it, I miss it. It’s a very characteristic sound of the area. So no one will say it is annoying if someone is making the loud weaving noises of power looms.”

He showed a considerably affirmative evaluation of the noise in his words. Moreover, he described the liveliness of the area, whose attitude is the same as shown above.

Case 2. Y.H. (female, born in 1931) moved to the area in 1957 because of marriage. There was a workshop operating about ten power looms near her house, so that she heard the noise of the power looms even inside her house. She, however, did not relate to annoyance:

“I heard a pretty loud noise. But we had gotten used to the noise, so we came to feel nothing with the noise.”

Her attitude was similar to the negation of annoyance shown above. She explained the reason why she was not annoyed with the noise by habituation.

Case 3. M.T. (female, born in 1927) moved to the area in 1953 with her husband. When she moved there, a neighbour operated handlooms in his house which abutted upon her house, so that she heard the sound of the handlooms. Several years later, the neighbour brought in a few power looms. Then she was annoyed by the noise of the power looms for years until the neighbour quit weaving. She said the noise was considerably loud and hard on her. The power looms also made vibration, so that lids of pans put on a rack in the kitchen sometimes clattered.

“ I sometimes thought, ‘I want to move somewhere else. I’m getting a neurosis.’”

However, she never complained to the neighbour. She explained that the noise began to decrease because of depression before she became unable to bear the noise. This attitude is similar to the description “I should not complain about the noise because it is business.” This suggests that there was a common sense that the noise be accepted.

## **DISCUSSION**

Although there was loud noise that can annoy some residents, the complaints of annoyance were not many. There was, rather, an affirmative attitude regarding the noise as an indicator of the liveliness of the area. The descriptions of the noise of the weaving industry can be divided into three types: (1) affirmative description regarding the noise as comforting and/or a symbol of liveliness of the area; (2) description of negation of annoyance; and (3) description of annoyance.

The types (1) and (2) descriptions were considered to be derived from the social context that the industry had been an identity of the community. Especially those who were born and raised in the area, such as the interview case 1 (M.H.), who have an influence in the area, tended to describe these types because they had been more deeply connected with the industry and more proud of it than those who moved into the area. Thus, the social context caused common sense among locals in the area that the factory noise be accepted.

While the common sense caused the residents’ attitudes of the affirmation of the noise and the negation of annoyance on one hand, the common sense possibly functioned as a repressor for residents who were annoyed with the noise on the other hand. It was shown in the descriptions that people should not complain about the noise of business.

The results suggest that the descriptions of the noise in the area reflected not only present

noise exposure but also common experience of the sonic environment in the past and social context that the industry had been important for the community. It was shown also in description of the sonic environment of today referring to the past.

The knowledge on a symbolic noise would be useful from a viewpoint of sound management. A symbolic noise can be an identity of an area on one hand so that it is a potential resource which is applicable to community development and/or sightseeing policy. On the other hand, in case annoyance of a symbolic noise is considered to be repressed in a community due to shared mind that the noise should be accepted, a measure of the latent annoyance would be required.

## CONCLUSIONS

The present paper showed results of analysis of residents' descriptions about the noise of the industry which had been an identity of the area.

The results indicated that there were three description types concerning the factory noise: (1) affirmation of the noise, (2) negation of annoyance, and (3) complaints of annoyance. The types (1) and (2) descriptions were considered to be derived from the social context that the industry had been important in the community. In other words, common sense had been formed among locals that the factory noise be accepted. The common sense would also make it difficult for them to represent the type (3) description in the community.

The results suggest that a social context shared among residents can affect their response to symbolic noise. As a result, symbolic noise is potentially a sort of resource and/or identity of the community. On the other hand, annoyance caused by the noise can be repressed. This knowledge would be useful for the management of sonic environment especially in areas having certain types of characteristic noises.

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