



The Influence of Socio-cultural Context on the Perception of Student Noise in the City of Groningen: A Qualitative Analysis

Kazuya Minoura

Department of General Policy, Yamanashi Prefectural University, Kofu, Japan.

Corné Driesprong

Department of Art, Culture and Media, University of Groningen, Groningen, Netherlands.

Karlijn Profijt

Department of Art, Culture and Media, University of Groningen, Groningen, Netherlands.

Kristin McGee

Department of Art, Culture and Media, University of Groningen, Groningen, Netherlands.

Tjeerd C. Andringa

Department of Artificial Intelligence, University of Groningen, Groningen, Netherlands.

Summary

In this article, we examine the relationship between people's response to their soundscape and the social and cultural contexts within which soundscapes are experienced. Our research draws upon qualitative analyses of interviews with 40 residents of Groningen, the Netherlands. Because students comprise 25 percent of Groningen's population, residents conceive of this city as a student city. In this social context, many informants perceived the noise made by students as typical for the soundscape of Groningen. The interviewees' attitudes showed a considerable acceptance, and sometimes even fondness of student noises. Their explanations supporting the acceptance of noisy students included the social context of the city as a historically established student city in combination with their personal backgrounds and connections to the university. The observation that local socio-cultural contexts can affect people's responses to local soundscapes may be used to improve the evaluation and management of sonic environments.

PACS no. 43.50.Qp, 43.50.Sr

1. Introduction

Research by soundscape scholars has revealed that people perceive their local sonic environments not only by the physical sounds heard, but also by other non-auditory factors [1-3]. Besides individual factors, the social context of sonic environments should be particularly examined, especially when considering the local sonic environments in which people live. For example, in his research in an area of traditional textile industry in Japan, Minoura showed that people tended to accept what some might conceive of as invasive industrial noise because of the various social and economic relations to particular soundscapes. In this case, the long-

term economic and social support afforded by the industry greatly impacted reactions to noise [4-6]. If such contexts significantly affect people's response to their soundscape, the local knowledge on the socio-cultural background should be applied to the management of the soundscape by a governance approach [7]. This study investigates the impact of local socio-cultural contexts upon people's affective relation to local soundscapes. In particular, we examine how local soundscapes colour individual feelings about local neighbourhoods and communities, especially when considering the unique histories and socio-cultural make-up of the city of Groningen as a student city. In order to gain insight on this relation, we interviewed forty people living in the city of Groningen and asked questions concerning the soundscape and the city.

In analyzing the answers, we are addressing the kinds of social contexts that existed there and the question of how the contexts affected people's attitude towards their sonic environment.

2. Methods

2.1. City of Groningen

The city of Groningen is the capital of the province of Groningen, located in the north of the Netherlands. The population of the city is approximately two hundred thousand. Accommodating the University of Groningen and Hanze University of Applied Sciences, it is a student city and one fourth of the population consists of students.

2.2. Methods of interviews and questions

During a six month period in 2014, we conducted interviews which inquired about people's impression of the soundscape of Groningen. Six interviewers, which included four of the authors, asked forty interviewees to answer questions about the soundscape. The three main questions were as follows:

- (1) What environmental sounds and noises do you hear at home? Please describe the sounds and noises, and your feelings when you hear them.
- (2) What environmental sounds and noises do you think are typical in Groningen?
- (3) Do you hear the sounds and noises made by students at home? If so, please describe the sounds and noises, and your feelings when you hear them.

Besides these three main questions, we asked complementary questions:

- About the general impression of the sonic environment
- About interviewees' connection with universities and students
- About other personal backgrounds

This paper focuses on the questions number 2 (typical sounds) and number 3 (student sounds).

2.3. Attributes of interviewees

The forty interviewees were not randomly sampled but selected by the interviewers in their personal network. Thus the interviewee-samples include a certain bias and we recognize that this somewhat limited scope might limit the implied applicability of this study. However, this somewhat limited scope might also prove

Table I. Age and gender of interviewees

	18-19	20-24	25-29	30-34	35-38	Total
Female	3	6	7	5	1	22
Male		3	8	3	4	18
Total	3	9	15	8	5	40

Table II. Length of residence of interviewees

Years	Current address	Groningen
0-1	16	7
2-4	12	8
5-9	6	11
10-19	2	7
20-	1	4
Unknown	3	3
Total	40	40

advantageous because interviewees felt comfortable candidly expressing their opinions. The list below shows the distribution of attributes of the interviewees.

- Age: From 18 to 38
- Gender: 22 females, 18 males (see Table I)
- Length of residence: 15 less than 5 years and 11 more than or equals to 10 years in Groningen (see Table II)
- Nationality: 34 Dutch, 1 German, 5 Japanese
- Language: 28 in Dutch, 6 in English, 5 in Japanese, 1 in Frisian
- Occupation: 13 students, 3 PhD Students, 18 diverse occupations, 6 others
- Connection with the universities: Most have some connection with one of the two universities at least (working, studying, or having studied)

3. Results

3.1. Typical sounds for Groningen

Answers may mention one or more kinds of sounds as typical sounds for Groningen. As a result of categorization, we found three prominent themes; bicycles, bells and carillons, and students. Among the 40 interviewees, 19 mentioned bicycles, 15 bells, and 14 students. Other sounds mentioned included voices of people talking, cars, trains, cultural events, trauma helicopters, etc. Some also mentioned the quietness of the city due to low traffic density in the city centre.

Table III. Samples of description about typical sounds for Groningen

Classification	Samples of description
Bicycles	<ul style="list-style-type: none"> - <i>Bikes. Bike noises. Bells, ringing the bells. Just cycle sounds. Sometimes you can just hear the wheels turning. Because there's definitely a lot of cyclers in Groningen, so that's a general sound you can hear.</i> - <i>In the city centre, the sound of a lot of people riding their bikes and they ring and shout.</i> - <i>A lot of bike sounds. I think it is typical of Groningen, that it's a bike city.</i> - <i>In the city of Groningen you also have a lot of cyclists. So you hear a lot of bells ringing and people talking while riding their bicycles. So it's really lively out there.</i> - <i>You hear like bicycles riding or people talking.</i>
Bells and carillons	<ul style="list-style-type: none"> - <i>The carillon of the Martini Church, which sometimes plays songs within a theme, which I find very typical.</i> - <i>The chime of Martini Church is very typical sound for me, which makes me feel like that I am really in Groningen.</i> - <i>The bell tower at the academy-building, which is also quite unique.</i> - <i>I like the carillon. Because I think that is the sound of the city.</i> - <i>The ringing of the bells I don't really like that much, because it is always very loud. Especially when the church rings its bells early in the morning on Sundays. That's quite unnecessary.</i>
Students	<ul style="list-style-type: none"> - <i>Of course the drunken students who parade along your window at night, which is quite typical for Groningen.</i> - <i>At night drunk students, screaming. Just typical city sounds.</i> - <i>Actually I am surrounded by student-houses. And you can hear music or noise very often.</i> - <i>Drunk screaming students. City Sounds. Night Sounds.</i> - <i>That's mostly the sounds of students or teenage boys or girls that are cycling by, singing and blustering and such. I find that's part of the city centre.</i> - <i>Some screaming students. It has some kind of charm. I mean, I'm not a student myself anymore but it does remind of that time, so I find that kind of nice.</i> - <i>I guess drunken students, singing. That's just annoying.</i>

Table III shows samples of descriptions about the three typical sounds in the interviews. Descriptions such as “a lot of cyclists” or “it’s a bike city” indicate that people find the city characteristic for bicycles. Some interviewees described people talking loudly while riding their bicycles.

References about bells and carillons mainly concerned the Martini tower and the bell tower of the Academy building of the University of Groningen. Both are historic symbols of the city of Groningen. In both towers, clock bells are rung on the hour and carillons are played regularly. Many informants evaluated the bells and carillons positively but some evaluated it negatively.

Regarding student sounds, many informants described the noise of drunken students at parties or bars. This topic was sometimes associated with music. The informants who regarded the student sounds as being typical for Groningen tended to accept the noise as liveliness, even depicting these sounds as contributing to the charm of the city, while some experienced drunken sounds as annoyances.

3.2. Student noises

By extracting descriptions of student sounds from longer answers to all the questions, we were able to examine how people evaluated student sounds. Table IV shows samples of descriptions evaluating student sounds heard in Groningen.

Table IV. Samples of evaluation about student sounds

Evaluation	Samples of description
Negative	<ul style="list-style-type: none"> - <i>There were some drunken students roaring, I didn't like it very much.</i> - <i>Party noises [from a student house] are always very crazy.</i> - <i>Often if weather was nice they would turn on the music right away and that really annoyed me.</i> - <i>They talk at a very loud volume. It's more shouting than talking, at least for me. And it's in general a very negative feeling because I feel they don't take in account that they have neighbours.</i> - <i>This [party noise] is annoying but it is more because of the people because they don't care about other people and they just exaggerate.</i> - <i>I think it's really annoying. They have no idea there are people living here and children asleep. I find it super antisocial. People also do not realize how noisy it gets in this street.</i>
Neutral/Accepted	<ul style="list-style-type: none"> - <i>It is kind of environmental noise that I just don't hear that much unless it is really bad.</i> - <i>It can be funny at times but it can also be annoying if you're not in the mood.</i> - <i>I don't care about that, like "they seem to enjoy and it's okay".</i> - <i>The town makes noise. Because it has a lively downtown where the partying continues until quite late. That's Groningen.</i> - <i>It's fine. I like that Groningen is a student city, so I think it's supposed to be like that.</i> - <i>I accept them, because we live in Groningen, and that's a good thing. And there are good and bad sides to it. I understand some people suffer from it. So in that sense you should perhaps try to keep a balance. But I have no negative association with students.</i>
Positive	<ul style="list-style-type: none"> - <i>I would find that nice rather than annoying. That didn't bother me. In fact, I actually liked it.</i> - <i>I don't really mind. I actually like it. Then you really know that you're living in a student city.</i> - <i>I mostly find it rather cosy and pleasant.</i> - <i>It has some kind of charm. I mean, I'm not a student myself anymore but it does remind of that time, so I find that kind of nice.</i> - <i>It creates a certain atmosphere in the city. You get the idea that you really live in a student city. And that is nice.</i>

Several informants linked negative evaluations mainly to noises made by drunken students. Some of them revealed that they were annoyed not only by the physical sounds but because of students' related behaviour, stating "they don't care about other people" or they are "antisocial".

On the other hand, several informants expressed that the student sounds should be acceptable. Underlying some informant's acceptance was the recognition of Groningen as a student city, stating "That's Groningen" etc.

Some informants even revealed their positive evaluations in relation to the student sounds,

claiming that such noises lend a "kind of charm" or "a certain atmosphere", etc.

3.3. Groningen as a student city

Thirty-three interviewees evaluated the situation that Groningen is a student city. Among them, 28 evaluated this facet positively, 5 neutrally, and none negatively. Cumulatively, we can conclude that the city recognized as a student city is evaluated quite positively.

Table V shows samples of descriptions about Groningen being a student city. Many of them related this unique facet to the liveliness of the

Table V. Samples of evaluation about Groningen being a student city

Evaluation	Samples of description
Positive	<ul style="list-style-type: none"> - <i>I think it's a very cosy, nice town. Just the right size. The students make it very nice. There's just so much to do culturally and yet it is very cosy and organized. I like that a lot about Groningen.</i> - <i>It is quite a busy and frisk city. There is a lot to do here. A lot of music festivities are being organised and there are many museums.</i> - <i>You can be very cynical about the presence of students, but Groningen wouldn't be Groningen without students.</i> - <i>A student city just brings a lot of liveliness along with it and also a lot of activity. Groningen has a relatively small city centre, of course, so when the weather is nice the entire city is full. Well, I generally find that rather cosy.</i> - <i>"Part of the charm." I really do think it's making Groningen more fun. There's a young population. There are so many things happening around that target group. And that's what makes Groningen quite unique.</i>
Neutral	<ul style="list-style-type: none"> - <i>We accept the noisiness by being a student city. If it were that noisy in a rural area, people would be more sensitive. It is often concluded it can't be helped in a university city when I talk about the noise with others. So they are forgiven by being students.</i> - <i>Because they have a very different lifestyle and things that matter in life. When you get older you just don't feel that connected to that anymore. It's very neutral. I don't mind it anymore. So it's not bad but not good.</i>

city, to the ample cultural activities, and the cosy atmosphere.

4. Discussion

4.1. Common association for the typical sounds

In this study, we have found that there is a common association of typical sounds to particular sentiments for Groningen among local people. This is of course partly based on the experience of the sonic environment. That is, they actually have heard some specific sounds in their everyday life. However the commonality could also be explained by other reasons beyond the physical experience. We can deduce this from the fact that all the three sound sources described as typical are symbols for the city regardless of their sounds. Groningen is called a "student city" or "bike city", which means that students and bicycles are symbols for the city. The Martini tower has been an icon of the city for centuries, and is located at the very city centre. Local people therefore consider those sound sources as symbolic for the city and this shared knowledge would certainly affect their responses. In this respect, these three sounds should be regarded as "key notes" in Schaefer's terms [8].

4.2. Acceptance of student noises

Though sounds made by drunken students are generally considered annoying, a wide range of attitudes to the sounds was shown in the answers of the informants. The majority of the informants even happily accepted the sounds.

This would show that the socio-cultural context of Groningen conceived of as a student city affects people's affective and cultural relation to local soundscapes; and in particular it stimulated them to accept the student noises. This acceptance arises in part from personal preferences and individual experiences. However, the fact that Groningen was positively evaluated as a student city would likely affect informant's considerable acceptance of noise to some extent, as some informants directly mentioned the influence of this context upon their reactions.

5. Conclusions

Based upon the results of analysing interviews with local people concerning their sonic environment, it was found that many deemed the noise made by students as typical for the soundscape of Groningen and therefore they accepted it. Beyond the physical sonic environment, their explanations depicting this acceptance included the social context of the city as a student city. The observation that local socio-

cultural contexts can affect people's response to the local soundscape may be used to improve the management of sonic environments.

However, because the informants of this study were biased, further investigation is needed which takes into account a greater scope and number of informants including people who are elderly and who exhibit no connection to the universities.

Acknowledgement

This study is supported by the Grant-in-Aid for Scientific Research (C) by the Japan Society for the Promotion of Science (No. 24510054).

References

- [1] T. C. Andringa, J. J. Lanser: How Pleasant Sounds Promote and Annoying Sounds Impede Health: A Cognitive Approach. *Int. J. Environ. Res. Public Health* 10(4) (2013), 1439–1461.
- [2] A. C. Bolders, G. P. H. Band, P. J. Stallen: Evaluative Conditioning Induces Changes in Sound Valence. *Frontiers in Psychology* 3 (2012).
- [3] E. Maris, P. Stallen, R. Vermunt: Evaluating noise in social context: The effect of procedural unfairness on noise annoyance judgments. *J. Acoust. Soc. Am.* 122(6) (2007), 3483–3494.
- [4] K. Minoura: How do residents describe symbolic noise? A case study of an area of traditional textile industry in Japan. *Proc. inter-noise 2003*.
- [5] K. Minoura: Social norms concerning local soundscape: A case of an area of the textile industry in Japan. *Proc. inter-noise 2007*.
- [6] K. Minoura: Life with weaving noise in Fujiyoshida: A soundscape as a commons. *Proc. 14th Global Conference of the International Association for the Study of the Commons* (2013).
- [7] T. C. Andringa et al.: Positioning soundscape research and management. *J. Acoust. Soc. Am.* 134 (2013) 2739–2747.
- [8] R. M. Schafer: *The tuning of the world*. Knopf, New York, 1977.