TOLERANCE OF NOISE AS A NECESSITY OF URBAN LIFE

Noise pollution as an environmental problem and its cultural perceptions in the city of Helsinki

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This article is an English summary of a PhD study that was published in 2007.[1] The study looks at the noise pollution problem and the change in the urban soundscape in the city of Helsinki, the capital of Finland, during the period from the 1950s to the present day. It investigates the formation of noise problems, the politicisation of the noise pollution problem, noise-related civic activism, the development of environmental policies on noise and the expectations that urban dwellers have had concerning their everyday soundscape. Both so-called street noise and the noise caused by e.g. neighbours are taken into account.

The study investigates whether our society contains or has for some time contained cultural and other elements that place noise pollution as an essential or normal state of affairs in urban life. It is also discussed whether we are moving towards an *artificial soundscape*, meaning that the auditory reality, the soundscape, is more and more under human control. The concept of an artificial soundscape is used to crystallize the significance of human actions and the role of modern technology in shaping soundscapes and also to link the changes in the modern soundscape to the economic, political and social changes connected to the modernization process. The concept deals with theories on the meaning and influence of technology on society and on the modern, western relationship with 'nature'.

The study is interdisciplinary and belongs to the field of environmental history, history of technology and historical sociology. The analysis of source materials also benefits from environmental psychology. Natural scientific and medical studies concerning the health effects of noise pollution were used to indicate the nature and the seriousness of the problem. The most important sources were letters to the editor in the *Helsingin Sanomat* (the biggest newspaper in Finland) on noise and sound, official reports and surveys on noise, archival material concerning noise-related civil activism and political decision making, and interviews with the key actors.

The emergence of the noise pollution problem

In the first half of the study it is argued that the soundscape of the city changed in that noise pollution became its dominating feature. The main reason for the increase of noise pollution was the increase in cars, especially passenger cars. The number of

motor vehicles increased quickly after the second half of the 1960s. During the period from the 1970s to the early years of the 21st century, the number of cars more than tripled. The busiest streets of Helsinki have been very noisy at least since the year 1956 when the first decibel measurements were take in the main streets of Helsinki. According to surveys made from the 1980s to the present day, it was estimated that ca. 150 000 to 300 000 citizens have lived in areas where noise levels have been over 55 dB. Noise is caused by e.g. traffic (road and air traffic and trains), industrial and other commercial activities etc. Also other sounds were defined as noise pollution by citizens, but not by the municipality or officials. In the Letters to the Editor section of the *Helsingin Sanomat*, sounds produced by various motor-driven vehicles or machines such as lawnmowers, mopeds, leaf-blowers etc. were defined as noise pollution. Also, sounds made by children (when e.g. playing together), young people, neighbours having a party, and background music were often defined as noise.

The era of change

The years from the end of the 1960s to the early 1970s were the critical period defining noise pollution as an environmental problem. The politicisation of the noise pollution problem was however not a consistent nor logical process. The politicisation of noise required more than just an increase of noise pollution in the streets, yards, gardens, and inside citizens' homes. In the case of other environmental problems, it has been noticed that the implementation of new political decisions, without considering the contradictions that might be attached to these decisions, often launches conflicts. It is argued that in the case of Helsinki the critical point in the politicisation of the noise pollution problem was the huge, almost utopian traffic plans drawn up for the city which – if carried out – would have practically turned the city into one huge web of roads. It was criticised that these city and traffic plans would have changed the city so that it would only serve private car traffic at the expense of public transportation, pedestrians, cosy communities and the environment. It seems that the massive increase of noise pollution caused by road traffic and the introduction of the 'utopian' traffic plans was the key point that launched the moral protest against the increase of noise pollution, and in general, against the basic structures and mindsets of society, including attitudes against nature and the role of modern technology in changing the landscape, the soundscape and the environment. This, among other things, caused much moral disapproval and anger, and lead to debates between civil activists and city officials as well as traffic planners, who were mainly engineers. As a result, to put it simply, environmental noise was defined a major environmental problem.

The city activist movements *Meluntorjunnan edistämisyhdistys* (later renamed Meluntorjunta ry.), *Liikennepoliittinen yhdistys Enemmistö ry* and *Suomen luonnonsuojeluliitto* each had a role of their own in the noise-related issues arising in the public discussion and later in the politicisation of the matter. The *Meluntorjunta* association was active especially in issues of standardising the soundproofing of buildings. *Liikennepoliittinen yhdistys Enemmistö ry* was interested in the issues related to street noise and strongly opposed the traffic plans for Helsinki at the end of the 1960s and early 1970s. The activists in the association were worried that the increase in road traffic seriously threatened every citizen's right to a pleasant and healthy city. The activists promoted city and traffic planning, which would have encouraged the use of public transportation,

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walking and cycling instead of using private cars. *Suomen luonnonsuojeluliitto* was not very active in the question of noise pollution at that time. It was at the end of the 1990s that the association became more interested in the matter. SLL protested against the increase of snowmobiles, Jet Skies and all other motor vehicles used for recreational purposes. The association was worried that the increase in the number of these vehicles was endangering the silent soundscape still existing in some parts of the country. In the study it is argued that *Suomen luonnonsuojeluliitto* tried to politicise the question of an endangered silence. Around the year 2000, some pioneering projects were launched on the conservation of silent areas. The aim of these projects was to map the existing silent and relatively silent areas in certain provinces or cities. This information was to be used later in city planning etc.

What was characteristic of the politicisation of noise pollution was the fact that it never itself became such a big issue that citizens would have e.g. marched in the streets to protest against noise pollution. This study argues that noise pollution was politicised as a kind of 'second class' environmental problem. Other environmental issues such as water and air pollution were seen as more important and urgent matters. But once environmental politics was developed in general, politics and legislation dealing with noise pollution were also developed. It is also possible that the lack of 'know-how' concerning noise pollution was one of the reasons why noise was seen as a 'second class' environmental problem. People acting against noise pollution did not have strong enough evidence on the health effects etc. of noise to help them promote their cause more effectively.

But once noise pollution was politicised, it was the officials and city authorities who took responsibility for issues of noise pollution and noise control. Gradually entire bureaucratic systems started to focus on the matter. Suddenly committees were working on the issues of noise pollution. The first committee to deal with noise pollution was established in Helsinki in the year 1969. Its task was to consider what kind of noise was to be defined as a problem and how it could be controlled. Gradually, more similar committees were formed, surveys on noise pollution were published, and legislation on noise control was developed. The study argues that after noise pollution was politicised and institutionalised, the urban soundscape gradually became the target of systematic interventions.

Towards an artificial soundscape

In this study it is argued that the increase of all kinds of motor vehicles, mainly of cars and traffic in general, was the main cause that led to the increase of noise pollution in the urban environment. Later, the increased number of all kinds of motor vehicles for recreational purposes has extended the sound of running engines, often defined as noise pollution, to areas which earlier have been quite silent. As a result, municipalities and officials have expanded their actions on issues of noise and silence. The possibility that the auditory reality, the soundscape, is more and more under human control is discussed. It is argued that due to e.g. technological development, the increase of bureaucratic systems and the economic, political and social changes linked to the modernisation process, it is meaningful to claim that the modern soundscape is gradually becoming *artificial* since human actions seem to fundamentally determine the characteristics of urban (and also rural) soundscapes.

What is vital when moving towards an artificial soundscape is modern technology. Technology itself seems to be less and less of a limiting factor in how we shape reality. Because of technological development, it is possible that even the most remote corners of our planet are no longer beyond the reach of technological sounds. Perhaps the most striking example of our capacity to shape auditory reality is the underwater sonar system LFA, which was tested by the United States Navy in 2002. The sound of the sonar could cover over 80 per cent of the underwater areas of the world. It is obvious that there have always been societies and soundscapes where different technological sounds and even noise were known. The point is, however, that in modern societies technological sounds have reached a geographical magnitude and a sustainability that has never been possible before.

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Also supporting the idea of moving towards an artificial soundscape is the politicisation of noise pollution problems. Since noise pollution was defined as an environmental problem and was politicised, the number and volume of noise-related actions have expanded and increased. Therefore the soundscape has become the target of systematic interventions. In the current situation the things we are able to do depend on the development of technology and political decisions – we are moving towards an artificial society as Finnish soci-

ologist Risto Heiskala argues[2] – as well as towards an artificial soundscape.

In the study, issues such as the increased number and volume of noise-related actions, the development of the legislation of noise control, our ability to shape and design our auditory reality by city and traffic planning etc. are seen as a part of our attempts to shape and design our auditory reality to serve our economic and political needs, and our cultural values and expectations. However, due to various reasons, such as the inconsistency of decision making concerning the soundscape and of the actions of noise control, cultural perceptions where noise was seen as a symbol of progress and economic power relations, moving towards an artificial soundscape has not meant what many citizens of Helsinki may have expected and hoped for. It seems that our increasing capacity to shape the soundscape has not resulted in a healthy or pleasant sonic/auditory environment. As noted, the situation seems to be quite the opposite: living in an artificial soundscape seems to mean – irrespective of laws and thousands of pages of resolutions – that more and more people are being exposed to noise pollution. As a result it seems that our culture has gradually developed the idea that citizens should tolerate and accept noise pollution as a normal state of affairs in a modern society.

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Expectations concerning the urban soundscape

The latter part of the study investigates the expectations that urban dwellers had concerning the urban soundscape. The issues discussed include what kind of auditory environment was expected at homes, yards and gardens and also in the streets and what kind of noise was experienced as less irritating compared to other noises. It is also discussed whether our culture contains elements that urge or even require citizens to adapt to noise. The end of the study deals with the kind of yardsticks that citizens have used to evaluate the nature and quality of the urban soundscape, and the effectiveness of the actions of noise control. In the last chapter it is discussed whether 'nature' was used as a yardstick when evaluating the quality of the soundscape or rather the culture that urged citizens to see noise pollution as a normal part of the urban environment.

After the Second World War, privacy was no longer exclusive to the upper classes of society. Many working class people were able to move to dwellings or flats that would provide at least some kind of privacy. For many citizens of Helsinki, the dream of moving socially upwards from working class to middle class was (in some respects) fulfilled when they aquired new and modern flats in the suburbs. In the study it is argued that the dream of middle class living included not only a new and modern flat with privacy but also a relatively noise-free or silent home. However, it seems that this dream of a silent home did not materialize for all city dwellers, at least according to those writing to the Letters to the Editor section. Various kind of noise nuisances were experienced inside urban homes. The noise caused by traffic, children, young people, drunk or other 'anti-social people', or neighbours celebrating or playing e.g. the

piano was experienced as unwanted sound, which insulted the expectations of privacy that a modern middle class home should have offered.

Inadequate soundproofing was seen as the reason for the undesirable situation. Neighbours were also often accused of causing noise. The soundproofing of houses was standardised at the end of the 1960s. Since then, soundproofing seems to have improved, but according to some surveys, there are still buildings with inadequate soundproofing. It is possible that soundproofing had in some respects become the responsibility of the citizens themselves since the soundscape both outside and inside the citizens homes has not always met their expectations. People in a better economic situation may have had better opportunities to choose the soundscape they preferred while the less well-to-do people did not have the same opportunity. When, or if, silence becomes a luxury, there is a danger that exposure to noise pollution will be socially unequal. It already seems that the prices of apartments located in peaceful areas are higher than dwellings situated in less quiet parts of the city. According to a Finnish study published in 1996 on people exposed to aircraft noise, those living in the noisiest areas had the lowest incomes.[3] Furthermore, people with higher incomes are able to live the furthest away from their places of work. The reason for this is their wish to live in peaceful and silent rural areas. Commuting is expensive and not everyone has the financial resources to do it.

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Cultural perceptions concerning noise tolerance

In a society where people are exposed to noise pollution and may not be in an equal position to choose a home in noise-free or at least relatively peaceful environments, discourses concerning noise, especially in urban areas, seem to partly concentrate on something that in this study is called 'the cultural forms of regulation concerning the acceptance of living in a noisy environment'. In other words, it seems that our society contains and has for some time contained (cultural and other) elements that urge us to see noise as an essential or normal part of urban life. Letters to the editor are one primary form of historical source material in which the reasons why people should accept a noisy environment as an inevitable part of their everyday life were expressed quite directly. Several arguments on why noise complaints are unnecessary or even undesirable recur in the letters decade after decade. Most often these arguments are found in replies to earlier letters.

Over the past 50 years in the area of Helsinki, the most common arguments against complaints about noise were that firstly everyone was seen as being individually responsible for choosing a place to live that mathced his or her expectations. In other words, the person who moves to an area that is too noisy has only him- or herself to blame and should therefore live with the consequences. Secondly, criticisms of noise-causing hobbies were seen as being negative since the urban soundscape already included so much noise that no one could

seriously be annoyed by a tiny amount more. In some of the replies, the writers objected to the willingness of some people to ban the writer's hobby or form of transportation because of the noise created. These demands were perceived to threaten individual autonomy or freedom. Thirdly, some of the writers could be regarded as suffering from 'the technological fix syndrome' as, according to them, there was no point in complaining about noisy vehicles such as Jet Skis and other technical devices because their motors would be silent in the near future anyway. Some thought that some minor faults occurring momentarily should be tolerated in the name of a better future which would dawn soon because of the fast technological development of the society. Finally, aircraft noise among others was sometimes seen as indicating international connections and domestic potential in the worldwide economic competition. According to this argument, aircraft noise – or noise pollution caused by other functions creating jobs etc. – is not such a serious matter that it should be used as an excuse to set limitations on air traffic and the functioning of airports or other economic functions.

For example, if one had to choose between the creation of new jobs and a silent environment, a silent environment would appear irrelevant. The work-related arguments were interesting in that not only those asking others to tolerate noise used them, but also the citizens complaining about noise argued that they needed silence in order to be fit to work the next day.

'Nature' and the question of a good and healthy soundscape

The last chapter of the study discusses whether 'nature' was used as a yardstick when the quality of the urban soundscape and the effectiveness of actions of noise control were evaluated by citizens. The key question was whether there is a 'nature' that exists outside human influence which could be used as a standard to measure how human actions have changed reality, the (artificial) soundscape, and how good, healthy and pleasant the environment in which we live is. The question of using 'nature' as a yardstick when evaluating reality and evaluating a culture that urges citizen to see noise pollution as a normal part of urban life relate to whether we see 'nature' as a pure/radical social construction or not. In this study it is seen that reality and nature is indeed to a certain point always culturally constructed but that there still exist unchangeable boundaries which are dependent on e.g. our evolutionary-shaped physical and psychological characteristics. These 'ontological' boundaries become visible e.g. in medical and natural scientific studies concerning the health effects of noise pollution.

The writings in the Letters to the Editor section where citizens discussed the quality of the urban soundscape and expressed their personal experiences, feelings, hopes and needs concerning the urban soundscape are interpreted via three environmental psychological concepts. These concepts are 'nature as a restorative environment, 'breathing spaces' and territorial behaviour.[4] This interdisciplinary approach was used to gain a deeper understanding of how noise pollution was experienced and to trace out some kind of ontological boundaries concerning what kind of soundscape could be healthy and pleasant. In environmental psychology it is seen that these ontological boundaries are dependent on our evolutionary-shaped physical and psychological characteristics. These characteristics set limits to the extent in which we can be culturally shaped e.g. when it comes to living in a noisy environment.

The question of 'nature' became relevant when investigating how citizens them-

selves evaluated the urban soundscape and the actions of noise control. The evaluations of urban soundscapes from the 1950s until the present day were characterised by a yearning for silence or a naturally quiet environment. In other words, the possibility of experiencing natural, silent soundscapes seems to be the yardstick against which people measure how successful we are in designing them. The soundscape of Helsinki and the effectiveness of noise reduction were evaluated on the basis of the availability of peaceful parks in the city or gardens where one can hear the sound of the wind in the trees or hear bird song and not just the rumble of engines. In other words, 'nature' (e.g. parks) was used as a restorative environment. Another commonly used yardstick for evaluating the soundscape among urban dwellers was the possibility to experience silence at home. What was expected and hoped for from 'a good home' was privacy, which included a relatively silent soundscape inside the flat and in its immediate surroundings. It is interpreted that home was expected to provide a 'breathing space'. It is argued that the possibility to choose between noise and silence was one of the most important criteria used among citizens to evaluate both the quality of the artificial soundscape and the effectiveness of the actions of noise control. It is then concluded that the possibility to choose between noise and silence increased citizens' well-being. In this we can see the boundaries related to 'nature' and how they may affect our well-being.

At the end of the study it is discussed whose interests it serves when we are asked to accept noise pollution as a normal state of affairs. It is also suggested that the quality of the artificial soundscape ought to be radically politicised, which might give all citizens a better and more equal chance to express their wishes and needs concerning the urban soundscape, and also to decide how it ought to be designed.

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[1] Ampuja, Outi, Melun sieto kaupunkielämän välttämättömyytenä. Melu ympäristöongelmana ja sen synnyttämien reaktioiden kulttuurinen käsittely Helsingissä. *Bibliotheca Historica 110*. SKS, Helsinki 2007.

[2] Heiskala, Risto, Kohti keinotekoista yhteiskuntaa. Gaudeamus, Tampere 1996.

[3] Höglund, Krister, Lentomelu asuinympäristössä. Kyselytutkimus lentomelun vaikutuksista Helsinki-Vantaan lentoaseman ympäristössä. Vantaan kaupungin ympäristökeskus, publication C 15:96, Vantaa 1996, pp. 10.

[4] see eg. Kaplan, R. & Kaplan, S., The Experience of Nature. A Psychological Perspective. Cambridge University Press, Cambridge 1989; also Hall, E.T., The Silent Language. Anchor Press, New York 1973.