

The Sounds of Silence

An Attempt at Documenting Noise Pollution in Vienna

Sirens, shouting, music, honking, and rolling cars on the streets - the noise never seems to stop. How do people manage to sleep and get some rest in London? Upon my late arrival in Shoreditch, East London, I was tired and wanted to go to sleep at my friend's place I was going to be staying at for a week. It was impossible, I could have sworn the walls were paper thin, I felt like I could hear his roommates breathe. I could hear neighbors leaving their apartments and the door shut close. And the collective zooming of the cars driving past on the highway would not give me a break. It was impossible for me to sleep.

However, sleep disturbance is just one of many negative effects noise pollution can have on humans. In the 2011 publication *Burden of disease from environmental noise - Quantification of healthy life years lost in Europe* of the World Health Organization, other problematic effects of noise are listed: cardiovascular disease, cognitive impairment, tinnitus, and annoyance are some of the health effects mentioned (WHO Regional Office for Europe, 2011, 5). The publication includes calculations for "the burden of disease in terms of disability-adjusted life-years (DALYs)" indicating "that at least one million healthy life years are lost every year" from traffic related noise alone in the western part of Europe (WHO Regional Office for Europe, 2011, 5). They add that sleep disturbance, as well as annoyance, command the biggest share of environmental noise.

There has been plenty of research done on the effects of road traffic noise on sleep, as well as the habituation to the noise during sleep, however, there are still many differing views among investigators. A study published in the 2001 *Journal of Sound and Vibration* investigated the

habituation of eleven young male students' sleep over the course of 17 nights. The experiment used a questionnaire and concluded that when sleep is subjectively evaluated, habituation is to be detected - "sleep quality recovered to the level on a silent night by the fifth noisy night during the experiment" (Kawada, Kuroiwa, Xin, Sasazawa, 2001, 169-178). Another similar study conducted by some of the same authors in 2000, however, reveals different results. The results of the testing of seven young male students suggested that "road traffic noise had an effect on sleep" and "sleepiness, sleep maintenance, worry and integrated sleep feeling, which are subjective assessments, became worse and reaction time after sleep increased due to exposure to the noise" (Xin, Kawada, Sasazawa, Suzuki, 2000, 20). And though "habituation to road traffic noise during sleep was observed clearly in subjective sleep scores" polygraphic measurements "showed little habituation to the noise with considerable individual variation" (Xin, Kawada, Sasazawa, Suzuki, 2000, 20).

After a couple of nights in London, the noise was not as present as when I first arrived. Unknowingly, I had become used to the various sources of noise throughout the day and night and I was no longer as aware of them as when I first heard them. I could sleep, however, overall, I did not feel well rested after my week in London.

Upon my arrival in Vienna I was startled by the relative silence the city enjoys. Even in the height of tourism at Stephansplatz I was surprised by how quiet the area felt compared to the loud streets in London. It seems as though people generally are more aware of the noise they make in Vienna, which most likely can be attributed to cultural differences, an environmentally conscious populous, and city-planners who are adept at following through on the 'green' expectations. No wonder Vienna has been ranked as the city with the highest quality of life for the tenth time in a row. However, the sudden silence to my ears after my trip to London was overwhelming.

In order to make sense of the fresh noise and sounds I was experiencing I decided to organize for myself a listening journey from the eighth to the first district, in which I film and

record the sounds I become aware of along the way. Flags hitting the poles, strange loud noises doors make when they close, as well as high-pitched frequencies being emitted from trams - these noises, which one is not normally cognizant of, all contribute to the overall level of noise pollution, which we can read of in studies from city to city.

I was planning on recreating the video with a better microphone, as the wind hitting the iPhone microphone sounds louder than it actually is. It is quite difficult to record sounds and play them back the way we would truly hear them, because quite simply of the limitations of technology.

The ear is such a delicate organ, allowing the mind to become aware of minuscule degrees of sound. From the first chirp at dawn to the ambulance blaring at your side. Various sounds and levels of noise can affect us both psychologically, physiologically, and emotionally - it is vital that we create an environment which offers serenity for life on earth.

Bibliography

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