Nature Sounds and the City: A Report for the CIRMMT Student Outreach Award

Christopher Trudeau September 2023

Event summary

Soundwalks are a means to discover sound-related aspects of urban living that normally go unheard and to gain awareness of sound-related urban issues. Entitled *Nature sounds and the city*, this soundwalk provided an introduction to some of the research of students and faculty from CIRMMT, specifically the Sounds in the City group. Given that the theme was on nature sounds in urban space, this walk was planned along the Verdun rapids and into the bird sanctuary, which provided an opportunity to reflect on and discuss the importance of the sounds of nature and to contrast natural soundscapes with ones dominated by traffic.

Event date: August 19th, 2023 Intended audience: General public

Location: Started at Park Archie-Wilcox in Verdun and ended at the Parc-des-Rapides bird sanctuary in

Lasalle.

Soundwalk method

The objective of this soundwalk was to raise awareness about natural sounds and their importance for human health and quality of life. Specifically, participants should have obtained 5 learning objectives.

- 1. Critically listen to an urban sound environment and recognize the desirable and undesirable sounds.
- 2. Define a soundscape and understand the critical role that sound plays in our everyday experiences.
- 3. Explain the roles that individuals play in creating soundscapes.
- 4. Differentiate between measured acoustic phenomena (notably, sound pressure levels and spectral content) and the experience of urban sound environments.
- 5. Connect specific sound-related outcomes with elements of the built environment.

The soundwalk was open to the general public and participants were recruited using a public event created on the Sounds in the City Facebook page. In all, 10 people participated in the soundwalk.

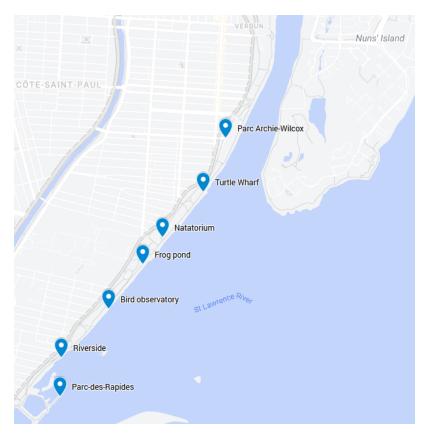


Figure 1: Path of the soundwalk along the Verdun riverside with stops indicated by blue pins.

The walk started at Park Archie-Wilcox next to the Manoir Verdun long-term care facility and proceeded along the waterfront, stopping in 6 locations. (See Figure 1 for location details.) At each location, participants were asked to spend 30-60 seconds listening actively to the sounds in the area and consider how these sounds made them feel. Participants were provided with a small sheet of paper on which to

record the sounds they heard and how loud they felt the location was. Once the active listening phase was completed, specific themes were discussed relating to characteristics of the area. Participants were encouraged to ask questions throughout the walk.

Outcomes

Meeting point: Park Archie-Wilcox

Despite the park, this location had an important presence of traffic sounds and was chosen as a counterpoint to many of the natural sound we would be hearing throughout the rest of the walk. I welcomed participants and introduced the structure of the soundwalk. This was also an opportunity to frame the importance of sound and hearing as a human sense. We ended with a moment of active listening.

Stop 1: Turtle Wharf

This stop was selected for the mix of traffic, human and natural sounds that can be heard. After a moment of active listening, we discussed the fundamentals of sound from a physical and an acoustic perspective.

Stop 2: Natatorium

This stop was chosen for the mix of sound-producing activities that take place in the vicinity: a busy public pool, a sand volleyball court, the bike path and picnic tables. We discussed the effect of noise on health and wellbeing and the principle sound sources that are linked with health outcomes.

Stop 3: Frog pond

The frog pond at this stop serves as a location to encourage biodiversity, specifically for frog and turtle populations. As such, it was a good place to discuss how animals use sound to communicate and the ways they adapt to anthropogenic sounds. On that particular day, the Verdun Dancing Terrace was occupied by a group playing Latin dance music and it provided an excellent example of how anthropogenic sound can out-compete natural sounds. In addition, we discussed restorative sound environments and their importance for health and wellbeing.

Stop 4: Observatory

This stop was chosen for the mix of traffic and natural sounds that could be heard. Specifically, participants could hear the sound of the Verdun rapids in the distance, but might confuse with the sound of passing traffic. We discussed some basic concepts on the interaction of sounds and masking.

Stop 5: Riverside

This stop was chosen for its location near the river, down a hill from the main path. This provides a physical separation from the rest of park and from passing traffic which, in addition to the sound of the

Verdun rapids, creates a sense of being completely outside of an urban environment. We discussed how these kinds of barriers – whether planned or naturally occurring – can be used to create protected sound environments.

Stop 6: Parc-des-Rapides

This final location was selected because of the proximity of the Verdun rapids that make this a very loud environment, despite the entirely natural setting and the distance from any traffic. We used this opportunity to bring together elements of each of the stops into a takeaway point: that sound is more than just acoustical measurements and our perceptions and experiences with our sound environments are important considerations.

Future directions

The soundwalk was appreciated by all of the participants and will be repeated in October 2023 for a French audience. (A previous soundwalk in French planned for August 26th, 2023 had to be cancelled due to a lack of interest.)

For future walks, I would provide better writing surfaces, as the pads used were not optimal for writing without a support underneath. I would also redesign the handout to allow for more comments from participants.

Looking forward to 2024, this soundwalk will be offered again in the spring alongside a new one that would look at some of the same topics but with less focus on natural sounds. Instead, it might focus more on urban planning for better sound or incorporate discussions about sound art.