Task #4a: Psst!

SCHOOL SPACE
kooliruum.ee

Listen to the Sounds of the Schoolhouse.

Architecture is a multidimensional art. You can't enjoy it with your eyes alone; you also hear it with your ears and connect with it through your feet as you walk (the floor, the streets) or with your hands as you open the doors or use the stairs (door handles, stair railings). It is also experienced through different activities that are encouraged or enabled. In this exercise, our tool of measurement will be the ear.

Sound is a spatial phenomenon, just like architecture. The human voice acquires its resonance from the oral cavity, and the spoken words echo back from the walls, ceiling, floor, tables, cupboards, and stairs. Every building is also a sound box – a bit like the body of a guitar that gives resonance to the vibration of the strings. Buildings don't always perform acoustically as successfully as the musical instruments designed for that purpose, but every building definitely has its distinctive sound and resonance. Something is roaring, something is buzzing, something is throbbing, something is squeaking, something is creaking... Each building has its own acoustic repertoire.

Warm-Up Exercise for the Ears

To warm up and tune in to the topic, you can perform a simple and engaging exercise. There are three audio files in the task folder. Make yourself cosy in a comfortable room where you can enjoy listening. If possible, use a good sound system (something bigger and higher quality than regular computer speakers). Create a setting that supports concentration on the audio. For example, you can try to darken the space and close your eyes. Start the audio clips and focus on what you are hearing. Let your mind roam free and notice the spaces and environments that arise in your imagination. What is the space of that music like?

The sound files are accessible on the webpage and the compositions behind the fragments are introduced in the file entitled task #4a_for listening.pdf (take a look at this once you have heard all the clips and shared impressions).

After finishing each clip, try to put the imagined spaces on paper. You can use words, schemes, sketches, and, if you have plenty of time, you may also draw more elaborate pictures. Share your thoughts and impressions with each other – it is fascinating how differently or similarly people can experience something. Once you have warmed up your ears, you can proceed with one of two options: observe the natural sounds and voices of the schoolhouse or explore how different sounds produced on purpose echo in the building and what kind of effect they have.

4.1 Sounds of the Schoolhouse

Every school makes sounds. A majority of these sounds are created as a choir – along with the people moving around and through the spaces. You can explore ordinary everyday sounds, such as the rustling of legs and footsteps on the stairs, the creaking of doors, the squeaking of floors, or the sound of chairs that are moved closer to the table as the class begins and away from the table when the class is over. Some noises are there regardless of the people, such as the humming of the ventilation or automatic curtains rising up and closing down. It is important that the observer not intervene in the soundscape by making sounds or asking others to do so. This is an observation of the sounds that are already present in the building. The observer just has to be mindful enough to notice them.

4.2 The Sounds in the Schoolhouse

The second option is to explore the acoustic properties of the building by producing sounds yourself and observing their effect and the echo that they create. How do these sounds affect the listener? How do they transform the space? What are the spots with the most extraordinary echo in the school building?

You can sing and make music, but I also encourage you to experiment with sounds beyond the usual. How does a scream sound? How far does a hoot echo? What is the effect of a whisper? Short, improvised sounds are easier to observe while making them (while singing a song, you have to concentrate on the words, tempo, and pitch – you need to be able to notice many things simultaneously, and this can be difficult). Improvised, outrageous sounds are captivating to the listener as well, leaving his or her attention untouched by the lyrics of the song, and focusing instead on the sound and its effect in the space

Presenting the Results

Record the sounds and voices observed, make a selection of the most interesting ones, and edit them into a short sound file (one minute, for example). Equip the sound recording with a few sentences describing what you observed and discovered, and what sounds and in which locations they can be heard in the recording. If you find a space with extraordinary resonance, add a photo of it.

A Few More Notes

1. You may do both versions of the task (4.1 and 4.2).
2. You can try writing down the sounds and voices as words. Maybe the creaking of a door is spelt like this: krrrgiiiiääääää?
3. With the second version of the task (4.2), it is important to remember that the role of the listener is as important as the role of the soundmaker. Avoid mindless shouting and pay attention to every sound, listen to it, and observe the effect it has in the space.

[video examples on the next page]

Video examples on the topic:

Example #1
Efterklang — Piramida, trailer
www.youtube.com/watch?v=uiKK7ehFYtA

The musicians from Danish collective Efterklang take their recording equipment into an empty tank in an abandoned Russian coal mine on the isle of Spitsbergen in Norway. The video reveals where the band has been borrowing the bits and pieces making up its distinctive sound.

Example #2
The Wikisinger
www.vimeo.com/132408379

Joachim Müller sings the same song in 15 different environments, experimenting with natural reverb, early reflections, and short delays. Hear how the surrounding space affects the sound of the song!

Example #3
Architecture and sound
Arhitektuur ja heli
www.youtube.com/watch?v=rz6LTpK1ByI or
www.youtube.com/watch?v=NxquodsMQqE

Austrian electronic music duo Herbert Golini and Helmut Wolfgruber are creating music using the building of the Museum of Contemporary Art in Vienna, MUMOK, as an instrument. The first clip shows their musical experimentation on the basalt facade of the museum; in the second one you can hear the mixed and mastered version.

Example #4
If interested, listen to David Byrne's TED talk about how architecture has helped music to evolve:
www.youtube.com/watch?v=Se8kcnU-uZw