21M.380

Soundwalk Reflection

A soundwalk is exactly as the name implies: a person takes a walk and focuses the majority of his/her attention on one sense, *hearing*. The intention of this exercise was to develop our listening skills to become more aware of the sounds occurring around us that we might otherwise skip over in a hectic lifestyle.

The “tunnels” are the network of underground hallways that link many buildings around MIT. Thus they take some getting used to, but are especially useful for traversing campus during particularly cold or rainy weather. These circuitous passages wind around in erratic ways such that the basement layout doesn't necessarily correlate with the buildings above them. Sharp, right-angle turns physically compartmentalize the space, ensuring that once we turn a corner, the soundspace can transition into something totally different.

When we walked through the basement of MIT, there were many copper pipes overhead that carried a variety of gases and fluids. Some were for gas, some were for potable water and lab waste, and others were for heating and cooling. The various concoctions could be heard pumping through the pipes; some made airy 'whooshing' noises, while others made a loud 'hissing' sound. The sterile-white florescent lights that illuminated the hallways hummed, as the magnetic ballasts in them switched the current at high frequency to power them. Some lightbulbs along the way were burned out, and making faint popping noises as the ballasts unsuccessfully tried to start them up, over and over.

As we continued along, we encountered some metal plates that were used to cover up a gap in the flooring. Some of them were loose and bent concave upwards, so that when somebody stepped on/off it, would make a metallic 'clanging' sound. This, multiplied by the number of people in the class, made for a whole lot of clanging!

Some things I noticed that surprised me were the tiny, everyday noises that we intentionally and actively tune out in order to preserve our own sanity. If a person were always on the lookout for the minute sounds, they would quickly become overwhelmed by the deluge of stimuli. Just trying to listen and process it all at one time would ultimately lead to an unproductive state of constant paranoia. However the soundwalk experience allowed a brief, focused time for which this was this was possible without becoming too overbearing.

As we walked along the halls in our winter jackets and hats, the rustling of jackets and metallic jingle of zippers followed everywhere we went. The 'rips' of Velcro as people adjusted their pockets or hats also stood out prominently. As we climbed the stairwells up and down, I noticed that the footsteps of the class were not perfectly in sync (nor should they be, as we're not at an army boot camp). Instead, they blended together into a uniform 'pattering' sound and resulting resonance of the cement staircases around the walls.

There was also a distinct sonic difference between open and closed stairways. Open-type stairways, such as the incredibly wide ones along the Infinite had little echo, and a greater emphasis on the sounds of the rubber shoe soles hitting the metal surface. Whereas the closed stairwells which required opening a door to enter the stairwell and another to exit, had much more echo. There was also more emphasis on the low-pitched vibration of the stairs against the air in the room. The enclosed area behaved like a sealed chamber that occasionally had small, transient openings (people entering/exiting the stairwell). Since the stairs were not connected via a vertical side like the open-type, they were essentially shaped like separate 'planks' in theory, and each one thus behaved sort of like a xylophone key. So in principle, our class was playing a giant instrument, except it was neither exciting nor readily apparent because all the steps rang at the same pitch!

Mundane noises also impressed me with just how loud they were when I intently focused on them, but were subconsciously ignored by my brain otherwise. When we passed through the Stata

center, electronic noises such as the ringing of elevator bells, and ATM pin-pad beeps stood out as being too loud, almost approaching comically loud. Yet they faded into the background just like any other sound as we walked far away enough and new noises began to drown out the earlier robotic 'beeps' and 'dings.'

Passing by the farmer's market, which was just being set up for a weekly sale, I noticed the FM radio being played, while the vendors set up the tables. The music was loud enough that the people in the general vicinity could hear it, but not loud enough that it carried over to other parts of the building. This got me thinking about the inverse square law, and how that effect would create an imaginary spherical “sound bubbles” that varied on the intensity of the sound source. Thus a sound source that may be visible like the radio, yet not heard is possible, thus enabling the workers to comfortably listen in a 20 ft radius without disturbing classes in the other parts of the building.

I also expected to encounter at least one tour group along the way, but we (fortunately) did not encounter any. They likely would have been dropped off by a bus at 77 Mass Ave, and people would get out their cameras and snap pictures. They would also speak Chinese obnoxiously loudly and try to get pictures with what they assumed were MIT students. Although this type of behavior is generally disapproved of my most students, this might have added some more flavor to our soundwalk, as most of the conversations I was able to distinguish were all in English.

Our journey however, was not be considered complete without encountering some form of a tourist attraction. Surely enough, the automated TV-tour-guide in Lobby 7 blared a motivational introduction, and the demo videos looped over and over. The echoes in this area were particularly prominent due to the vast open space in the room. The reverberation level was high, as the delay time in between sounds was much more apparent than those in smaller rooms and halls. For example high heels on the lobby's marble flooring 'click-clacked' on the surface, sending sharp echoes back-and-forth towards the ceiling. The spacing of the beats made it feel like there were many more multiples of feet moving than actually were.

The smooth stone floors combined with people's wet boots made for a whole lot of squeaking noises too, as the water lubricated the surface of the floor and allowed the shoes to vibrate at the high frequency 'sqeeeek' noise that dies out as the shoes dry off upon walking a suitable distance. As we headed outside, our shoes crackled along the ground, as we stepped onto ice and rock salt.

When we headed into the garage, there was a big change in the atmosphere and acoustic qualities of the space. Echoes were significantly more pronounced, and engine noises would reverberate all throughout the garage. An air vent which we observed, was covered in metal plates that rattled as the air passed through it. When we exited the garage, we also heard very loud beeping that warns pedestrians that a car is about to exit.

There was also a plethora of bodily noises, such as coughing, sniffling and sneezing that occurred as we walked past people in the hallways. It did not surprise me that this would be the case, as it is wintertime, however it did make me even more germaphobic than usual. It is interesting to me, that as a result of this exercise however, I was able to make a rough estimate of the microbial content of my surroundings not by microscope, but actually via sound. There were also sounds such as throat clearing, that were lower in frequency, the difference being that this particular sound is normally ignored even in quiet settings where it may perhaps be the only sound in the room.

My predictions before we started the soundwalk were that we would hear echoes throughout the hallways, and indistinct voices would blend together into an jumble. However, this was not actually the case, as many of the hallways we passed thorough were surprisingly quiet and free of voices. This might have been different however, if we traversed during the period in between classes (i.e, roughly once an hour, on the hour).

Although the primary goal of this exercise was to listen to sounds, it was impossible not to help but notice input from any of our other four senses. At some point along the soundwalk, we passed some construction, and there was an acrid smell like melting or smoldering plastic. The basement also had its

own brand of particular musty and humid smell, which was oddly comforting.

I believe the effect of the soundwalk will last because I will now be trying to differentiate sounds around me in order to entertain myself on walks. It is sort of meditative, and can lead to some very ear-opening experiences such as the one during class.

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