Making the Invisible Visible

Visualization experiment of sound as an invisible signal



Project 2

Definition

We are surrounded by overlooked design traces, noise, markings, and information that form an indispensable part of the urban system, but are often "invisible" due to habitual neglect. Therefore, the core feature of invisible signals is that they exist in the environment but do not actively seek attention; It carries information, but is often 'read' unconsciously.





My understanding

Before this, it was just an abstract concept to me, but after actual observation and experimentation, I believe that invisible signals are a systematic information that exists in our daily environment but does not actively seek attention. They are not completely invisible, but are "invisible" due to habits, neglect, or lack of interpretation mechanisms.

Process

In order to help us better understand what hidden signals are in class, the mentor requires us to explore and observe outdoors, analyze who did it, why did it, what we can do, and finally generate something new. Here are some hidden signals I have found.













In some hidden signs in daily life, some are signs and slogans, some are graffiti, some come from parks, and some come from streets. I guess the first picture is a communication board for children to learn from, because it appears in the children's playground area. The second warning sign is a requirement for people who want to enter the park. Interestingly, the garbage bin number on the third picture corresponds to the house number of each building, which is too interesting. The fourth picture should be a sign prohibiting parking. The fifth picture I have carefully looked at is an instruction for using a lifebuoy, and this sign is located by the river. I think this is very effective. I don't know why it is drawn like this yet, so I haven't decoded it.

Process

The above content has inspired my project. We are surrounded by sounds every day, but these sounds are usually "perceived but invisible propagation signals". Seemingly intangible noise, but it constantly convey rhythm, emotions, and environmental states. So this time I chose sound as a hidden signal for exploration.



Concept

The experiment of transforming auditory communication into visual communication.

This experiment establishes a simple rule - 'draw whatever you hear' - that allows players to convert auditory signals into visual forms while complying with conditions, thereby revealing the hidden rhythms, structures, and emotions in sound.

Create

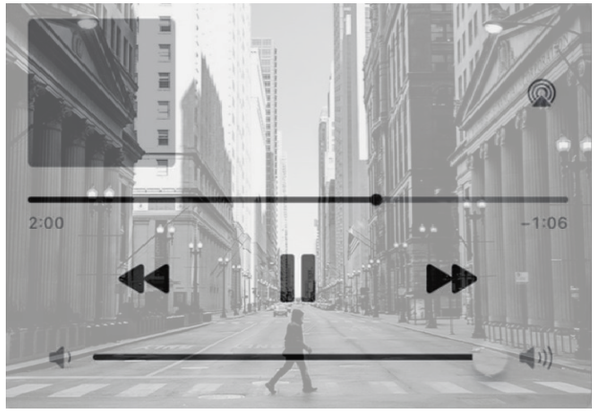
Game Rules:

Materials: White paper, colored pens, environmental recording

· Play with one to five players.
· Select a sound.
· Draw lines according to the rhythm and pitch of the sound.

These four sounds all come from typical urban living scenarios, which are in line with MITV's research theme. They have different rhythmic structures, and this diversity helps observe whether participants can capture the "structural differences" within the sound.







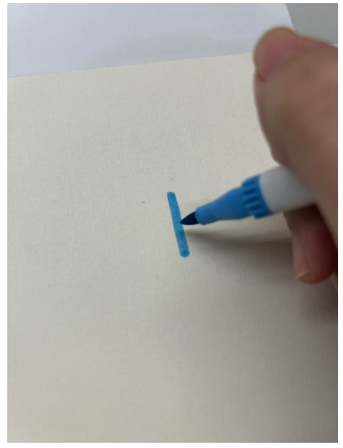


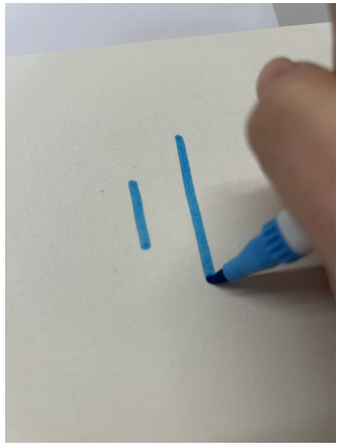
Provide four different sounds: the sound of a subway or train, the sound of a rainy street, the sound of a strong wind, the sound of a supermarket checkout.

Create

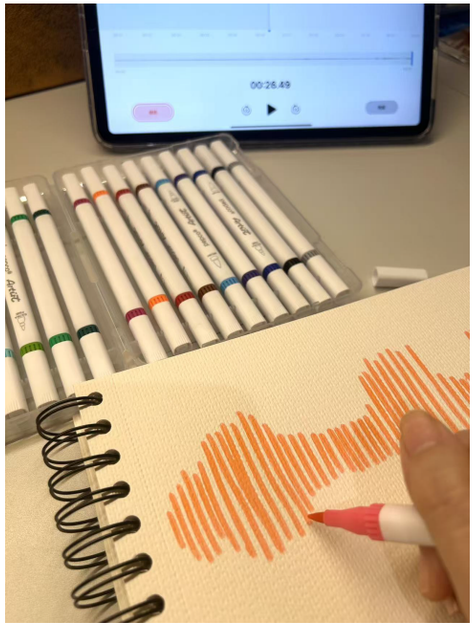
Tips:

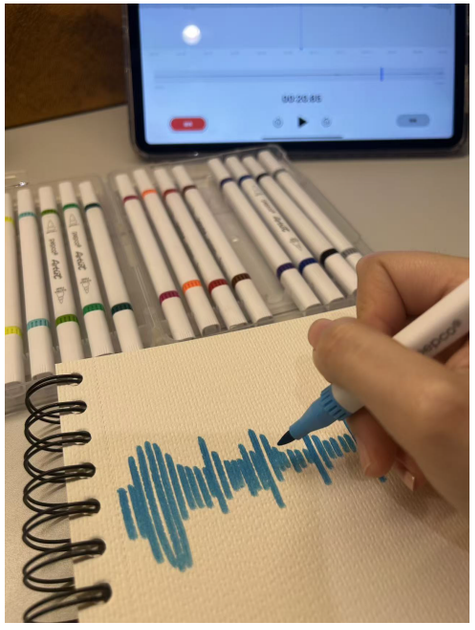
- High pitched or fast-paced ⟶ draw rising lines
- Bass or slow rhythm ⟶ draw a descending lines

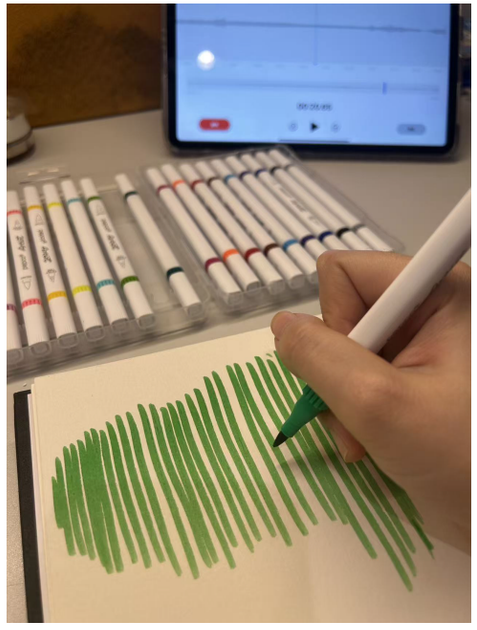


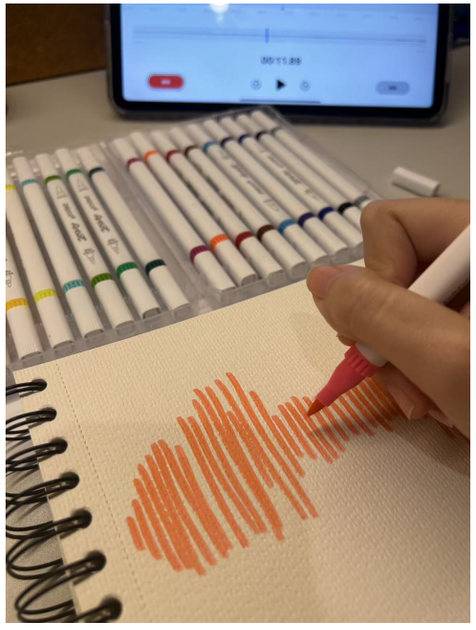


Draw different rhythms based on different recording clips.









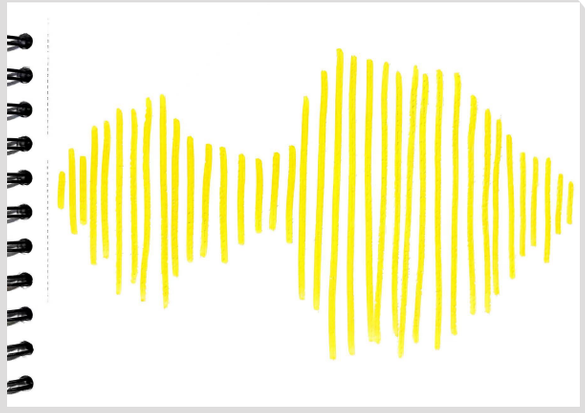
Create

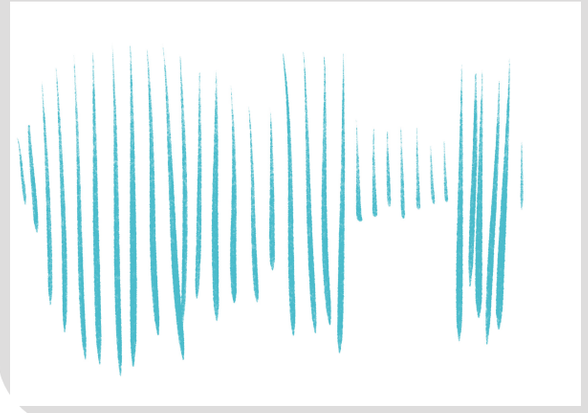
I found four classmates to help me complete the game.

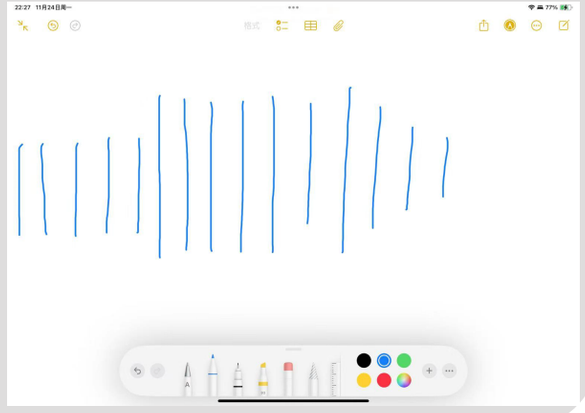
Present the results and observe:Are everyone's shapes similar? Is there a commonality (hidden signal)?

In Subway Or Train:

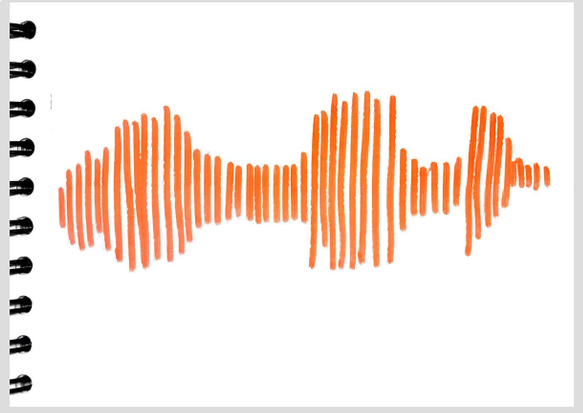


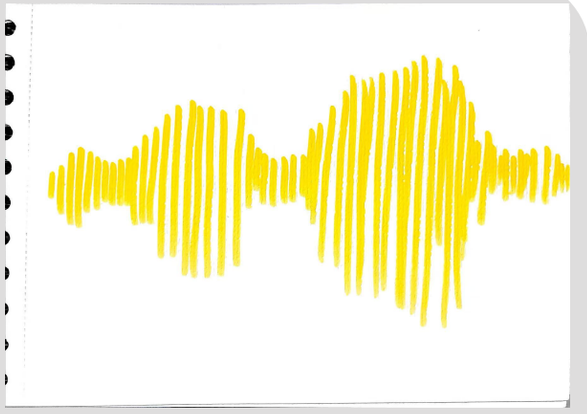


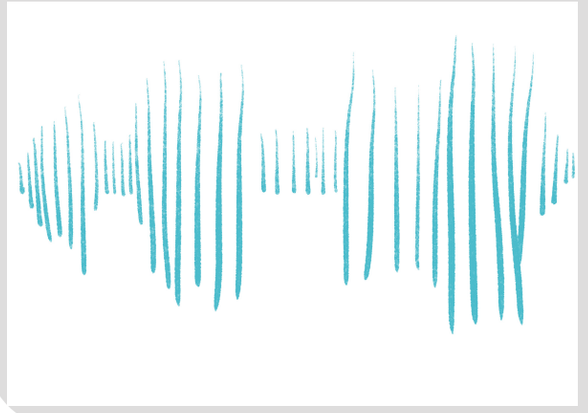


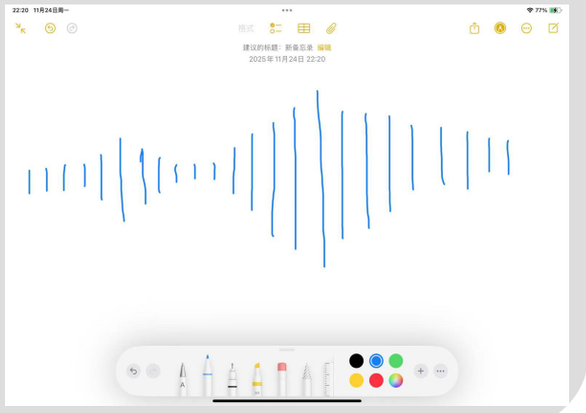


In Rainy Street:



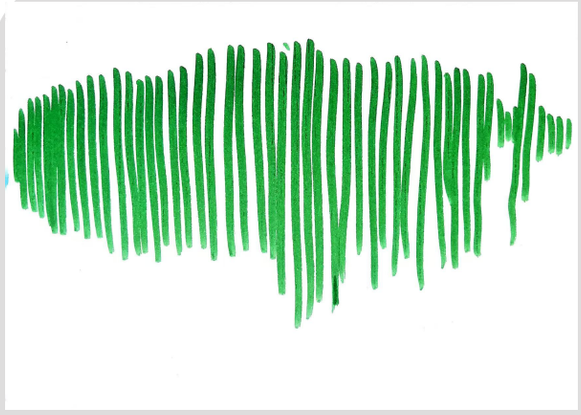


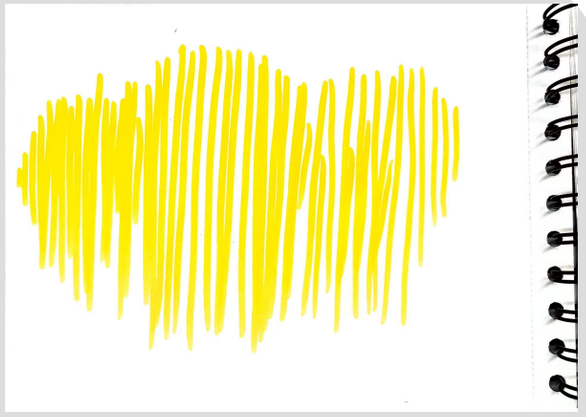


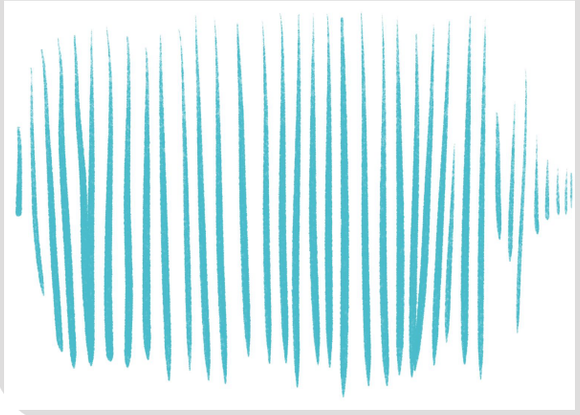


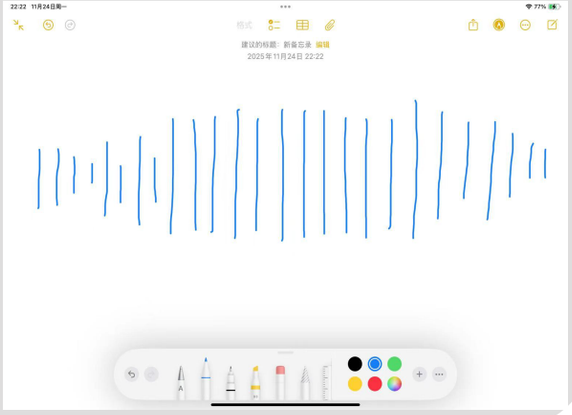
Create

In Strong Wind:

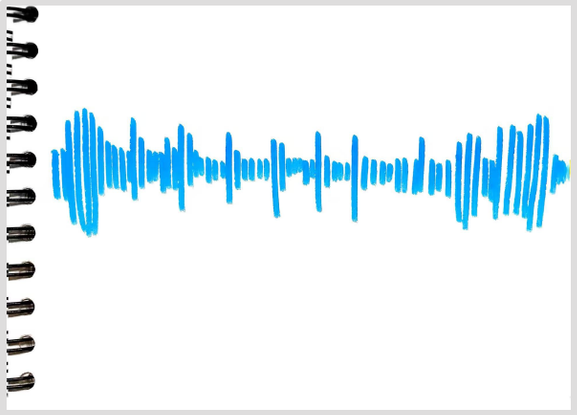


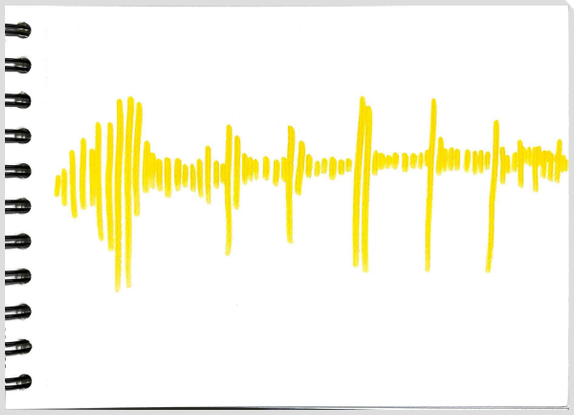


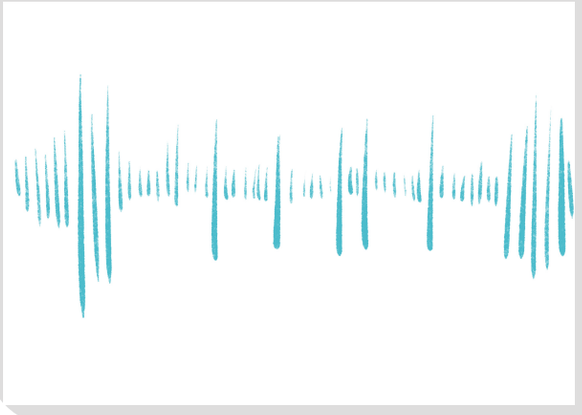


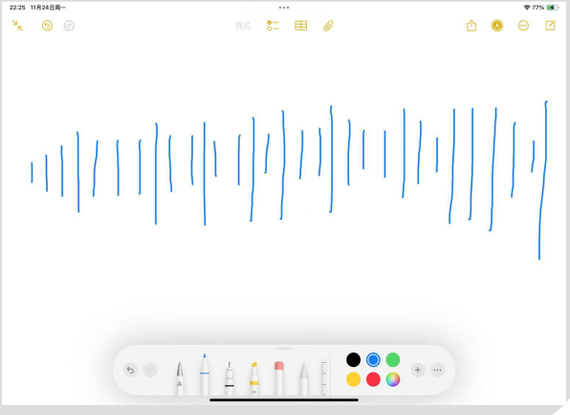


In Supermarket Checkout:

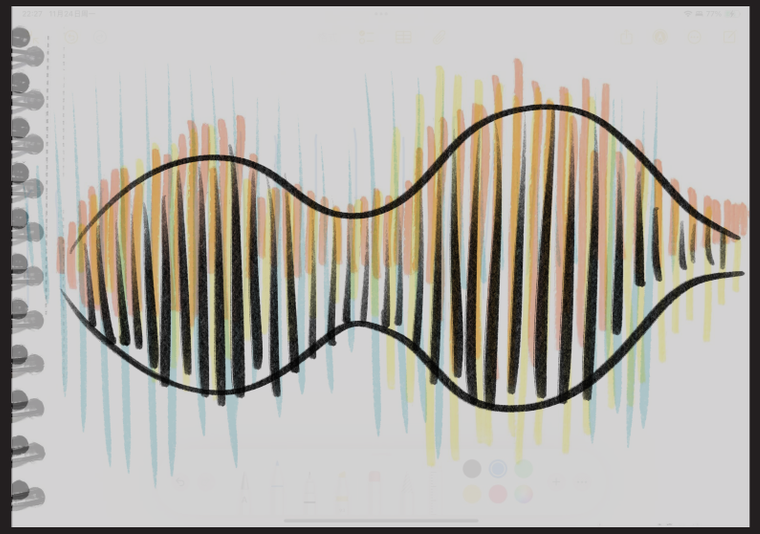


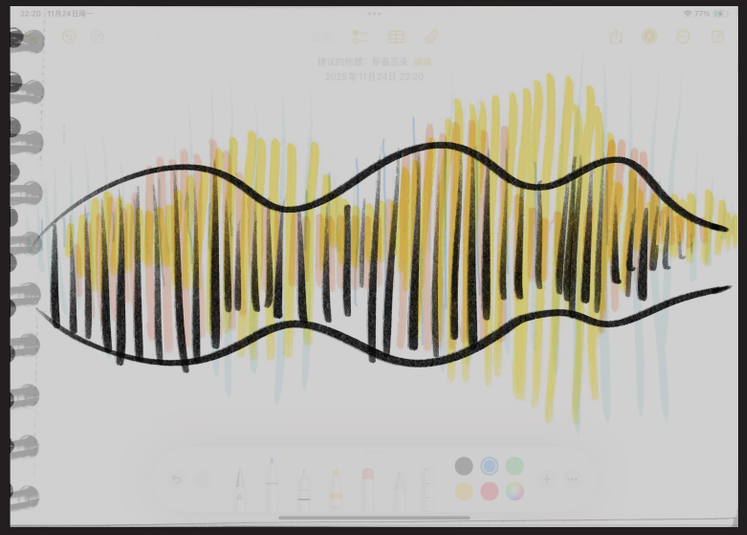


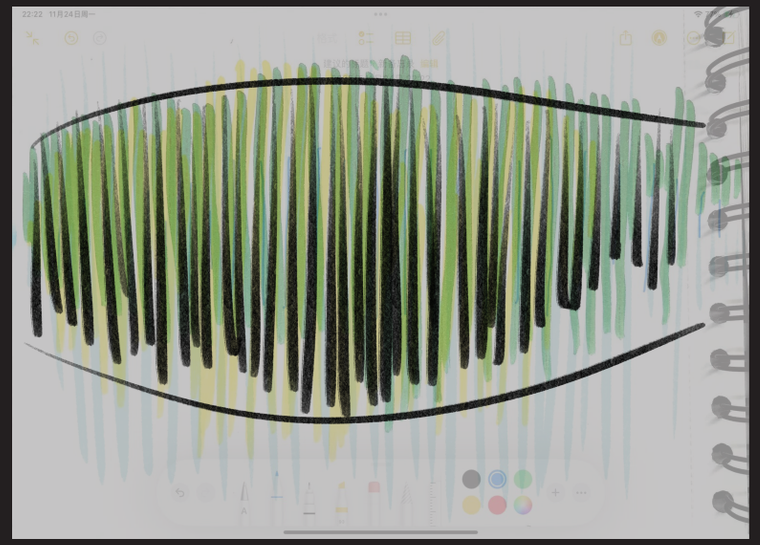


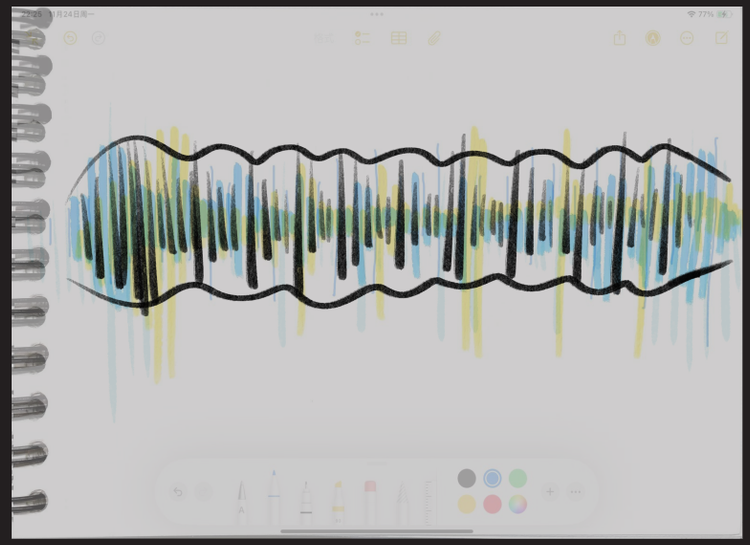


Analyze







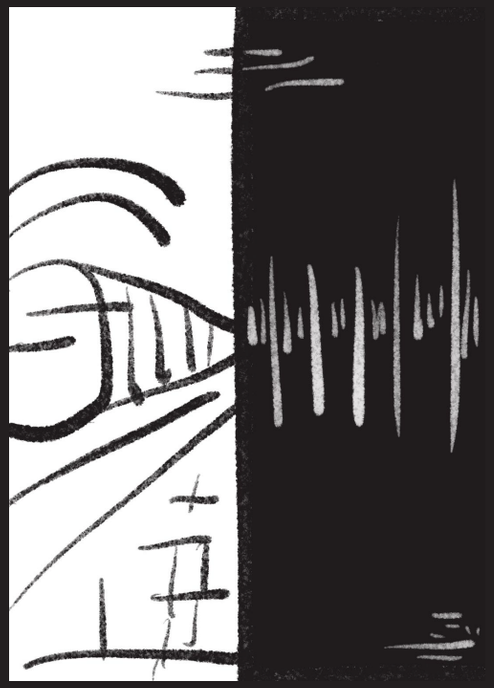


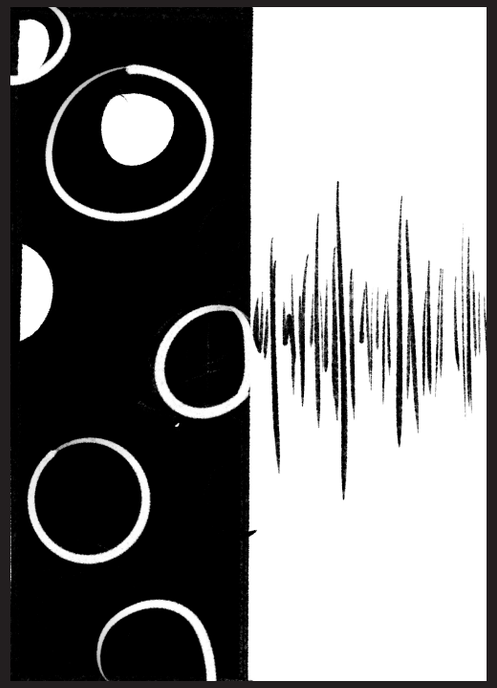
From the comparison in your pictures, it can be seen that the sound patterns of the subway all have a common structure of "dense in the middle and narrowing at both ends". The street graphics present a "uniform vertical line density" with slight jumping variations. The wind sound pattern presents a "continuous long line segment" with significant fluctuations. The supermarket checkout sound appears as "discrete short line segment +repetitive rhythm", and is consistent with the interval of the sound. This indicates that invisible signals have objectivity. Even if everyone's painting movements are different, they will still capture the same e sound. Although the structure is similar, there are differences in details such as the thickness of the lines, the angle of inclination, and the speed of rhythm control. This difference indicates that the "objective structure" and "subjective interpretation" of invisible signals coexist.

Purpose

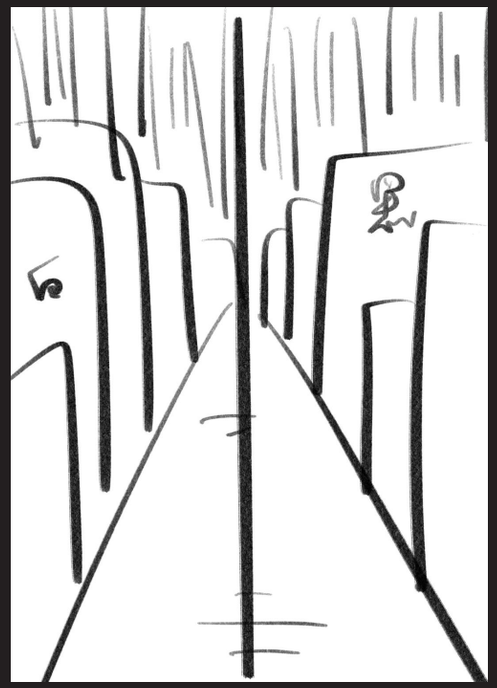
The poster at the corresponding location is like the DNA of that location. I want people to pay more attention to some small things, some small sounds that we overlook in our daily lives, and let these hidden signals be displayed in the public eye to perceive the world. Revealing that 'communication is not just about language and images, sound also spreads'.

Sketch



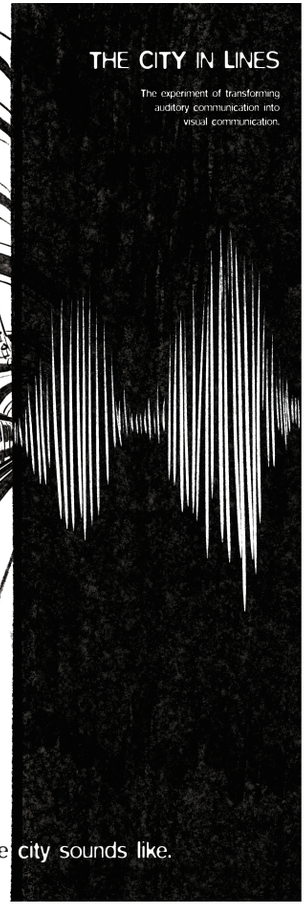


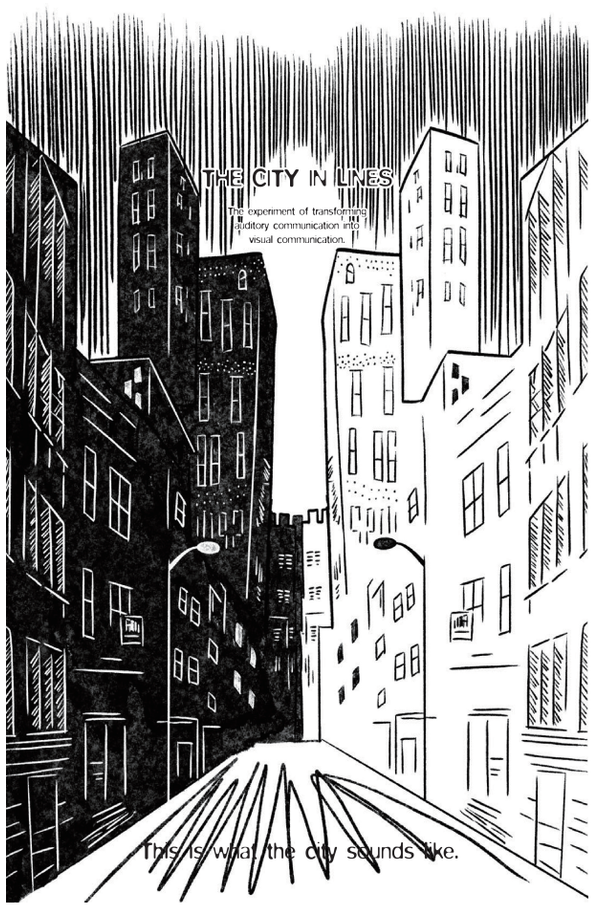




Outcome




THE CITY IN LINES
The experiment of transforming auditory communication into visual communication.
This is what the city sounds like.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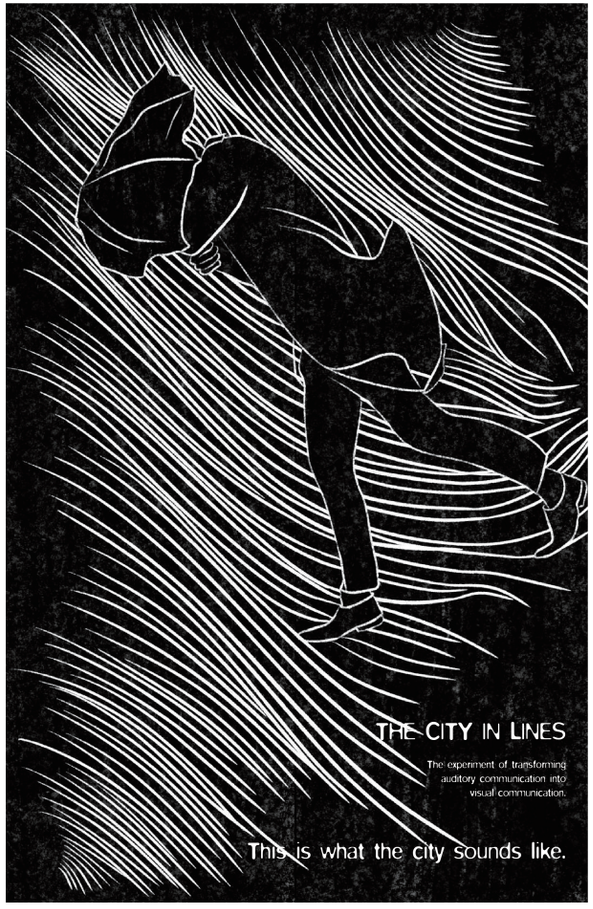
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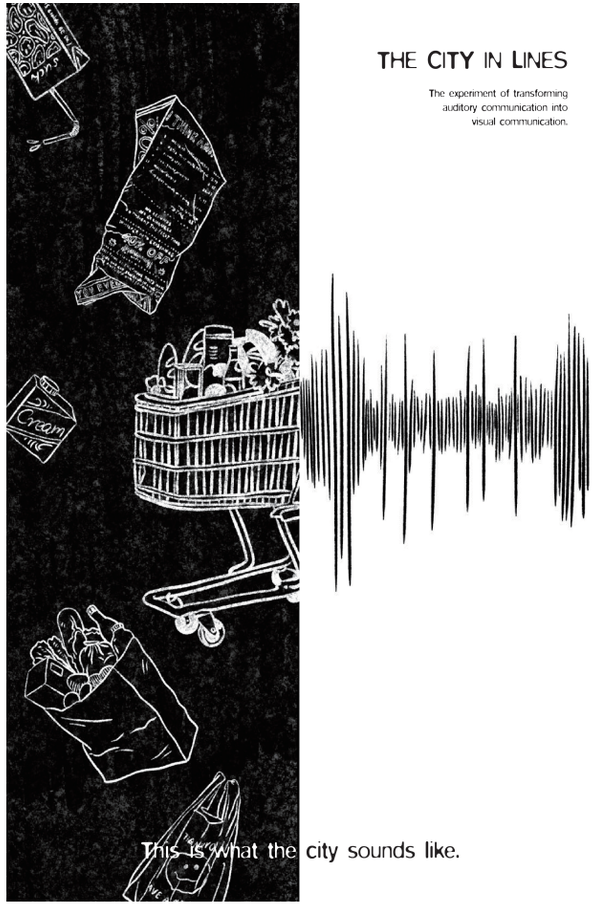
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Reflection

I realized that design is not just visual creation, but a process of "observation interpretation presentation". By translating temporal sounds into spatial images, I experienced the potential of design to establish connections between different media, and also realized that translation itself is an important design behavior.