

The subject I chose to observe was the Regent's Canal. Firstly I drew a mind map and then I chose three themes I was most interested in researching: communities along the canal, boat culture and water ripples on the canal. Through the use of drawing, photography and audio recording I began to continue to think about and explore these themes in depth. I was most interested in researching the relationship between nature and human activity. I then took the water ripples to represent nature and the activities on the human canal as man-made elements.

I initially wanted to observe more human behaviours and activities but due to time limited, I was unable to observe more and I chose to observe only some of them such as fishing, walking and boating. After that, my attention shifted from human activities to the visual and auditory patterns of water ripples. Inspired by George Perec's detailed observations in *Space Species* (Perec, 1974), my attention shifted to the immediacy of sound in the environment. I thought of ripples as a metaphor for sound waves. I was also inspired by the fact that Bill Viola's exploration of the movement and presence of water influenced my exploration of how sound waves interact with space and nature, (Viola, 1996). And I wanted to delve deeper into the relationship between sound and the environment. At the same time, I looked at the observations drawn from Agnès Varda's *The Gleaners and I* (Varda, 2000), my project gradually shifted from a focus on human activity to an exploration of sound in the environment. Like Varda, who discovered overlooked aspects of human life, I sought to visualise the invisible presence of sound waves through the movement of water ripples. This shift allowed me to capture the fluidity and immediacy of sound as a key component of spatial interaction.

Through observation and research, I have found many similarities between sound waves and water ripples; for example, their waveforms have similar shapes, with peaks and valleys. In addition, they have similar propagation patterns, expanding from the centre outwards. In the final stage, I focused on the visual and auditory relationships between sound waves and water ripples. Inspired by Fredrik Skåtar's interactive installation (Skåtar, 2015), I aimed to create a visualization that visualizes sound in an environment and combines it with water ripples. My final video combines sound waves and water ripples to show the dynamic presence of sound in space.

However, due to time constraints, I was not able to fully develop the interaction between sound and water, and although I found interesting visual approaches, my technical skills needed more time to experiment. If I had more time, I would have refined the video with complex animations such as waveform blending. This project has made me understand how to combine simple observations with method and how multimedia can generate new knowledge and express complex phenomena. Although I initially focused on human activities and nature, my research shifted to sound visualization, highlighting the importance of flexible and diverse methods to discover new directions. It has also expanded my understanding of the power of sound in space and deepened my understanding of the connection between sound and visual representation.

Referencing

Perec, G., 1974. *Species of Spaces and Other Places*. London: Penguin Books.

Varda, A., 2000. *The Gleaners and I* [film]. France: Ciné Tamaris.

Viola, B., 1996. *The Crossing* [art installation]. USA: Bill Viola Studio.

Skåtar, F., 2015. *Vibration Mirror* [interactive installation].