

AARO MURPHY — FICKLE (GRITTY) MEMORY

What was the starting point of your research project?

In early 2022, Studio for Immediate Spaces sent out an open call with an overarching theme "Climate changes, air is conditioned." I sent my proposal to explore questions around the aroma industry and the ways in which interior climates are being conditioned through smells. I was particularly interested in the dichotomy between our exterior and interior climates. On one hand there seems to be an increase in purifying, analyzing, and scenting air, while on the other hand, the exterior is becoming more uninhabitable.

I started the project with an intention to research digital aroma technologies and climate control systems, hoping to understand how they are being utilized in our urban fabric. Through the process I became particularly interested in how aromas are captured and detected through sensors and headspace technology to analyze and replicate aroma molecules in air.

I spent much of my summer in 2022 at the British Library, London scouring through articles, books, and journals related to aroma technologies. It was during this time that I came across the Japanese scientist Takamichi Nakamoto, who has been working with aroma sensing and machine olfaction since the early 90s. I was lucky enough to go on a residency to Tokyo that same autumn to deepen my research into the subject by visiting several laboratories, including that of Professor Nakamoto. It was only after my residency in Japan that I realized I was in fact more interested in the mechanisms that detect odor molecules—particularly the relationship with odor detection and atmospheric air quality sampling.

What has been your approach for the fellowship research project and how does it relate to the role of research in your practice?

My intention from the start was to write a research text about the above. I spent the first



Aaro Murphy, *Fickle (Gritty) Memory*, 2023, Video projection with stereo sound, 10min

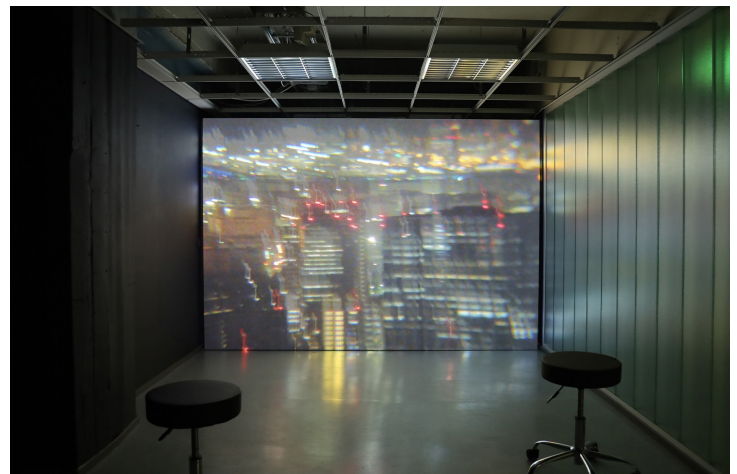
few months reading and gathering material around recent developments in aroma technology, focusing particularly on aroma sensing. It was only a matter of time before I would realize the connection between headspace, gas chromatography, and electronic noses and their use in detecting volatile gasses. What was fascinating to realize was that the aroma industry—that produces most of the flavors and fragrances around us today—utilize very similar technology in aroma capture that climate scientists use to analyze air quality. It was this discovery that threw a spanner in the works of my research.

What had started as research into digital scenting shifted its focus to air quality analysis. In a sense, the connection between smell and climate became even more apparent. Furthering this research, I started to dig deeper into e-noses and their ability to sense atmospheric information and molecules in real time. For example the port of Rotterdam is equipped with over 250 of these kinds of atmospheric sensors to detect volatile compounds in the air.

I soon realized that the most suitable way to integrate this research into my practice was not through theory but rather through fiction. It was liberating to realize that the background research itself did not have to be the work itself but rather the supporting material for a new body of work that I was developing. With this in mind I started to speculate on where this new electronic nose technology could go and what it could be used for: from surveillance and medical industries to weather forecasting. I started building a fictional narrative around a city through the perspective of an electronic nose that senses and observes the aromas around it. I used my own fictional writing together with the research I had developed over the year. This soon turned into a script that I would experiment with to prepare the film that I have produced as an endpoint for the fellowship.

In this sense, my approach was somewhat organic, letting the research develop and lead the direction toward a new body of work. What was meant to be an essay for myself has now turned into a longer research trajectory involving scientists, coders, and other institutions. Through the process of the fellowship I learnt that, in my case, research is like a mushrooming appendix that can inform a new series of works.

What during your research in Japan has



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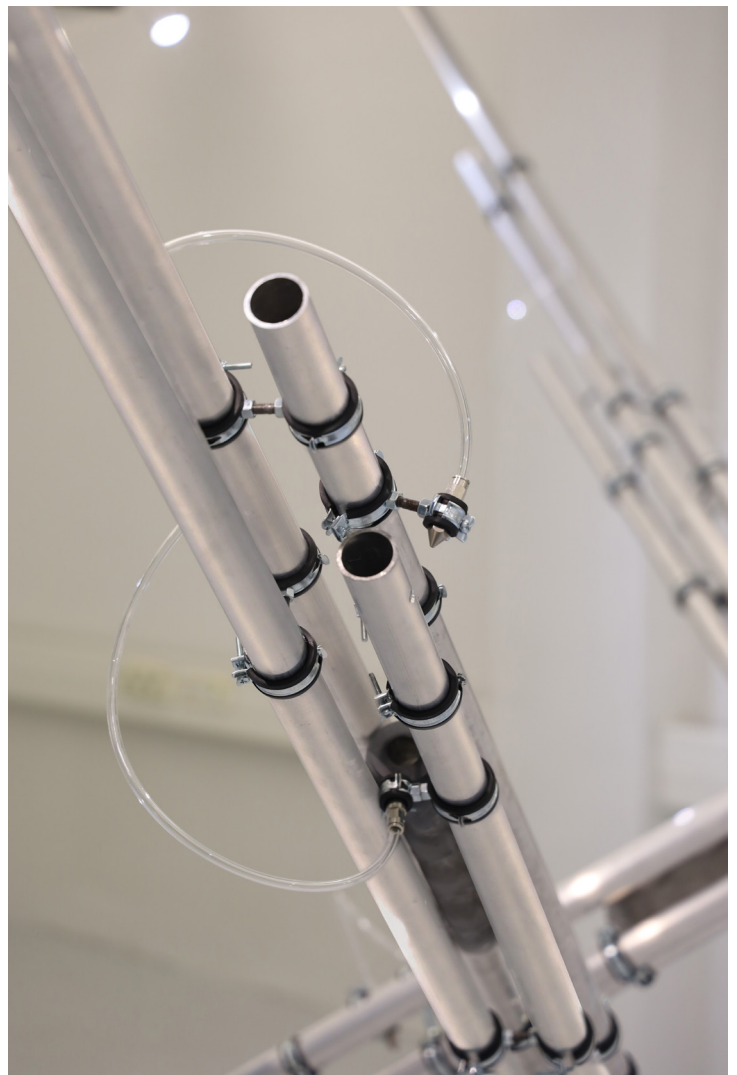
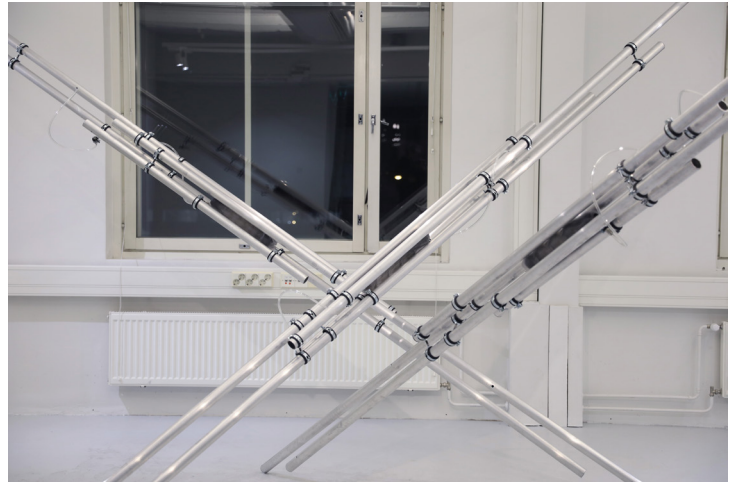
shifted your way of thinking or approach in this trajectory?

The main turning point for my research was when I got back from my residency in Japan and started sifting through video and sound material I had rather haphazardly captured in Tokyo. At the time, the images didn't mean so much to me, but on closer inspection the scenes from Tokyo Harbor had a direct link to the industry that produces volatile compounds in the air. During my trip I had also been writing a journal, which drifted into auto-fictional writing around a city and its smells. I experimented with overlaying this writing with the video and realized there was something quite interesting happening. My own olfactory observations of the city started to bleed in with the images of the night-time harbor, creating a strange narrative between fiction and fact. It started to excite me and I thought I should follow this tangent for the remaining six months.

This experimentation with video was happening alongside my research into electronic nose technologies and atmospheric sensing. I started to edit my journal from the perspective of a fictional e-nose sensing and observing the city. It was this writing that started to excite me as I was able to encompass questions around air conditioning, atmospheric sampling, as well as wider themes of computer sensing. By bringing all these elements together I feel I managed, to a certain degree, to blend the many questions that I had been circulating around the past year into quite a specific endpoint.

In the end, I worked together with a voice actor to read my script and created a short video as the final result for the fellowship. With this video I wanted to ask how a computer might smell its surroundings and what kind of relationship it might build with people. Furthermore, this was an opportunity for me to experiment with language, bridging science- and auto-fiction together. The video work will be exhibited at SOLU in Helsinki this winter, together with a pneumatic sculpture that gently blows aroma molecules into the space. I think the combination of film and sculpture is something new which I did not expect to come out from this research year, but it is something that feels natural to my work.

The research has also led to a new project which I will develop during a three month artist residency at TOKAS Residency, Tokyo in Autumn 2024.



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Your work takes you across several countries and continents. How do the different geographies, territorialities, cultures, and local idiosyncrasies affect your research methodologies, and what challenges do you face while working through these differences?

Despite its detractors, the term “Anthropocene” remains a fertile ground for contemplating the interconnected webs of humans and more-than-human entities that transcend borders and cultures. Delving into different issues related to the climatic crisis implies exploring different scales and geographies. This is a challenge that exists not only for my research but for any other methodological approaches for working around anthropogenic consequences and infrastructures.

For example, on 11 June 2022, meteorological services in Barranquilla recorded 15% of a year’s rain. On the same day, a tornado struck near Istanbul in Turkey, and a storm wreaked havoc in Ankara while wildfires raged in San Bernardino, California. All these multiplicities and temporalities engendered by anthropogenic forces expose the interconnectivity produced by the weather and our patchy relationship to the environment. Although we all experience weather events locally, when significant meteorological and geological forces take place, they also lay bare the unbalanced levels of exposure that different bodies and communities have to the different political and ecological climates. Despite the ubiquity of experiences poured by atmospheric events, the depiction of climate change and climate policy as a consolidated, unified idea reinforces the assumptions that enable the urbanization of natural resources and environmental injustices in the Global South. Therefore, the big challenge isn’t working with different geographies but recognizing how the bigger narratives of climate change tend to ignore the people exposed to it.



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