

Hi everyone! I'm Ashley, I have been conducting a short series of experiments in which I look through water, and today I am going to share my findings with you.

First off, some background, why was I looking through water? Last semester in Painting 2, I completed a diptych, two views, looking out from inside my car at opposite sides of a parking lot, with the photos taken about a year apart. My focus was on the double lenses of both the windshield and the weather, which was foggy (point) and rainy (point), there was a whole textural aspect as well, but most importantly in this context was the view, and how it changed the same, very familiar environment.

I am also tracking my water daily, because a doctor of mine said my potential dehydration was probably the source of my problems and I sought to prove him wrong. Also, you get confetti when you reach the daily goal, which brings a little bit of joy to my life. Surprisingly, this isn't the first time I've done a project about my personal experiences with water, I did a video on routines in grade 12 about how every time I drank water, I filled it to the top with ice, and so I had personal ice cube trays just for me, taking up space in my parents' freezer. If you're thinking hmm, that seems excessive, maybe you should ask someone about that—it was, and I did! Go get your iron checked people, it wasn't a fun personality quirk. So, I think about water pretty frequently, but this project has been the most I have thought in depth about water ever.

Full disclosure—I am not in the sciences. These are the courses I have taken that are science-related, and they either have nothing to do with this experiment, or I have forgotten any relevance they may have to this topic, which is also a possibility.

I first wanted to generally explain how human vision through water works, which is essentially through the splitting and distinction of what we see into multiple layers. "transparency perception [...] requires the visual system to recognize the material, detect image distortion, and casually attribute those distortions to the object or the transparent medium" (Dovencioglu et al, 2).

I also learned upon research that improved underwater vision is possible. There were studies that found that Moken children, a group of people living in South-East Asia, have much better underwater vision than European children. This was attributed to an increase ability to constrict the pupils, generally, and accommodation based on practice diving underwater. It would have been interesting to try and train myself to be better at seeing underwater, as the

European children who took part in this study of trained underwater vision did get better perception, but it's cold out, maybe I'd try this during the summer.

I researched the underwater perception of animals and found that while there is no official best underwater vision award, squids are definitely in the running. This is due to a proteins, S-crystallins, which link and clump on the lens of the eyes, allowing rays of light to bend differently in each region of the lens, and producing a clearer image.

It is important to note that my experiments were based on different forms, and materiality of water, rather than determining visual differences based on depth. There is actual, formal research on that already, and it's also fall, and that would've made for a much more uncomfortable experimenting process. I did consider asking a friend if I could use her pool, but it got cold, and honestly, unless I wore goggles, I would've only been able to report a white blob. I have awful underwater vision.

Here is the test sheet I used to conduct this experiment, which I wanted to be related to water, but initially wasn't sure how I was going to do it. I decided to do a free-flowing thought experience, where I just wrote anything about water that came to mind, at a period of the early morning which I do not wish to disclose.

This is my documentation sheet, which I based mainly on memory of doing scientific experiments in middle school. We have here: materials, whether I used a microscope slide to have a closer look at them, which ended up being all of them, but got risky there with the steam given the amount of it I was able to collect—you'll see. The most important part here to me were the three scales—how distorted the text became, how frustrating the experiment was, because sometimes there's a part of it that didn't work out like you intended, or took longer than you thought, and I think that impacts the results. I also have the squid scale which is because as we learned, squid have great underwater vision, and so I was aspiring to feel like a squid during the course of these experiments. We shall see if I achieved that.

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Microscope Match Up! When I was younger, I was into science and so my parents got me a little microscope. The following images are either enlarged 24 or 30 times, as the ocular lens (the one at the top) was 20 times magnification and the objective lenses were 4, 10 and 40, but 40 felt little too close. This will be vibe-based guessing, so please put your hand up for what you think the answer might be.