


Beyond mere objects

The background of the entire page is a photograph of two goldfish swimming in a glass tank. The fish are positioned vertically, with their heads at the top and tails at the bottom. The water is clear, and the glass of the tank is visible. The word "Interscape" is written in a large, white, sans-serif font across the middle of the image, partially overlapping the fish.

# Interscape

Going beyond worlds

By Siew E lan

Under the supervision of Grace Tan

# Letting curiosity lead the way

Mirrors represent the boundary between the conscious and unconscious minds. Looking into a mirror allows one to peer into the profundities of their unconsciousness. As a result, the image produced by the mirror is symbolic and can be understood through both conscious and subconscious thought processes. The mirror as we know it today was invented in 1835. The process of adding a silver nitrate coating to clear glass was created by Justus von Liebig. Before this time, mirrors were mainly made out of polished glass, stone and even obsidian, dating back to the Egyptian times.

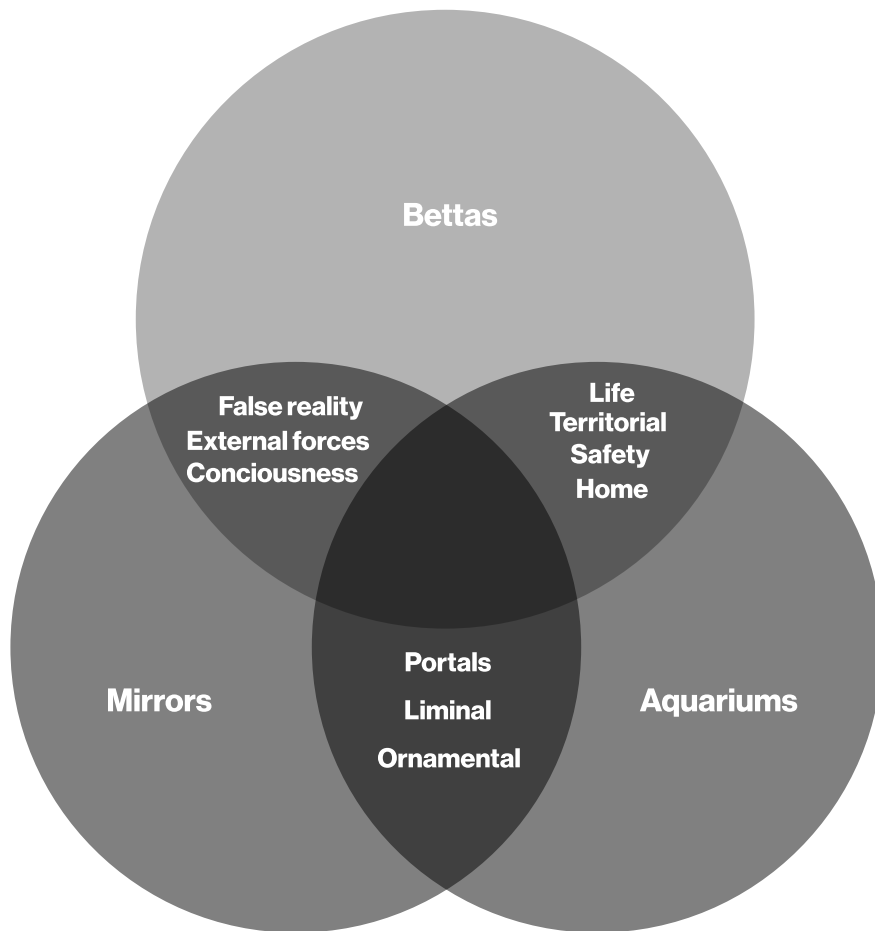
In today's society, viewing mirrors have become a subconscious behaviour. Every turn we make and every glossy surface there is, people would tend to take a glance at themselves. A quick glance in the mirror reaffirms our sense of self. Mirrors help us regulate our emotions and sync up with ourselves and others. It simulates face-to-face contact with others, and when there are face-to-face interactions, we get feedback on what they are experiencing internally from others' reactions to us.

Mirrors are beyond just physical objects. Across many cultures, mirrors hold on to many superstitions. One that particularly stood out to me are that how mirrors are portals. They can be portals that traps souls, portals to another alternate dimension, or portals to the future.

Mirrors are used to test self-recognition in humans and animals. Researchers infer that if subjects can tell that the image on the reflective surface is in fact them, then they have developed a cognitive sense of self. In 1970, Psychologist Gordon Gallup Jr. conducted a study on how chimpanzees would react to mirrors. When they came to and caught sight of their reflections, they did exactly what humans would do—they stared at their faces and touched their own eyebrows. The chimps recognized themselves in the mirror and that concluded that to recognise oneself, it would seem to require a rather advanced form of intellect. This study made me curious and wondered about the different reactions that animals would give off then they see their reflection. The Siamese fighting fish, better known as betta fish, is the one popped up at the top of my head.

Aggressive behaviour is prevalent throughout the animal kingdom. It happens most often when resources are scarce, which can have a direct impact on survival. Food, territory, and mates are all part of it. To avoid conflict, many animals will signal that something is theirs. After all, fighting requires a lot of energy. Of course, you might not be successful every time. Bettas will demonstrate their dominance by flaring. Flaring refers to the movement of male betta fins to make themselves look bigger. Their gills will also flare and their colours will intensify. Bettas exhibit the same flaring behaviour in front of mirrors. It nearly looks as though the ruse is deceiving them. They appear to feel they have a genuine adversary among them, which explains their reaction. Interacting and allowing a betta fish to flare for short periods of time is also good for it, because it's the only exercise it will get, to prevent them from becoming lazy.

I soon branched out into looking into a betta's environment, the Aquarium / tank that it resides in. Just like what a mirror can be, I soon saw the tank as a liminal and portal like object that we can peek into. This discovery was the start of my design journey, walking in-between this path of having a connection with another world / realm.

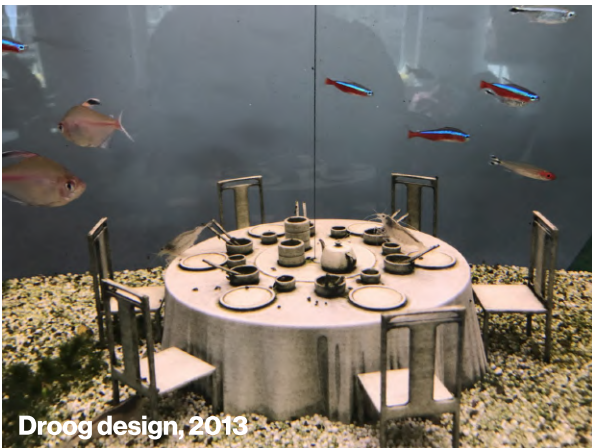


In my process to find what lies in the center of these elements, I was heavily inspired by **Olafur Eliasson's** mirror work in 2013. The gradient mirror gave off a really liminal feeling that plays with the context and environment very well. It looks very unexpected yet you expect to see oneself as the reflection.





**Misawa Haruka's** minimal aquariums ( Waterscape ) challenges the archetypal scape within. Many other designer's works have toyed along this grey area of what makes an aquarium an aquarium. Although these examples are very radical approaches, most of them still seem to be a vessel to observe and admire, rather than interact and connect. My design goal was to push for that interaction, connection, and intimacy between pet and owner.



**Droog design, 2013**



**Sébastien Cordoleani and Vincent Breed, 2010**



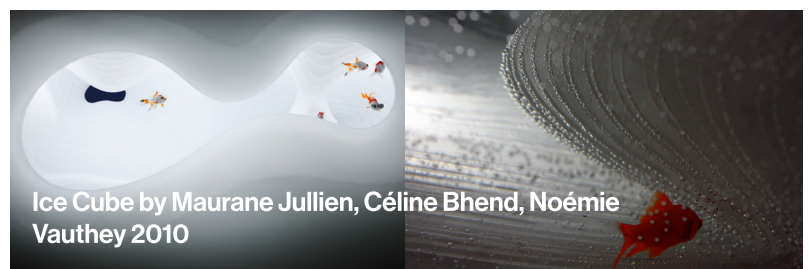
**Habitarium by Laura Ventura & Giancarlo Mino 2010**



**Infinity aquarium by BCXSY 2008**

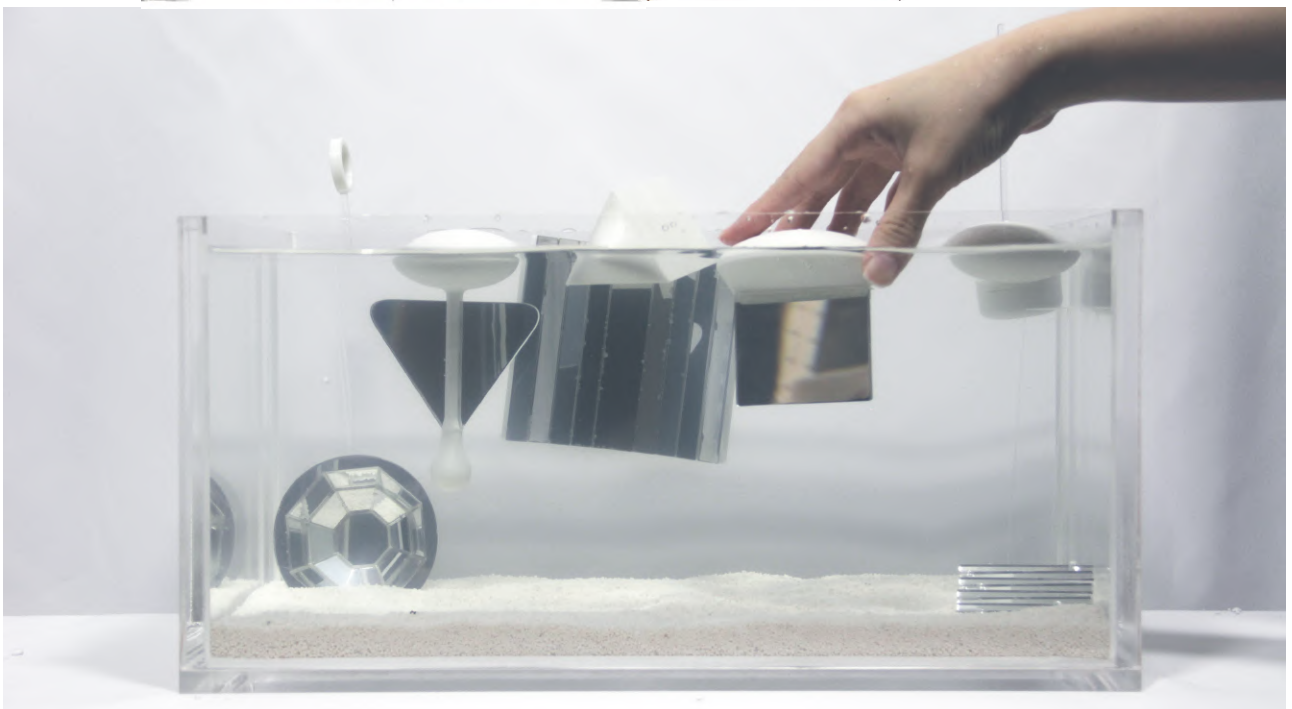
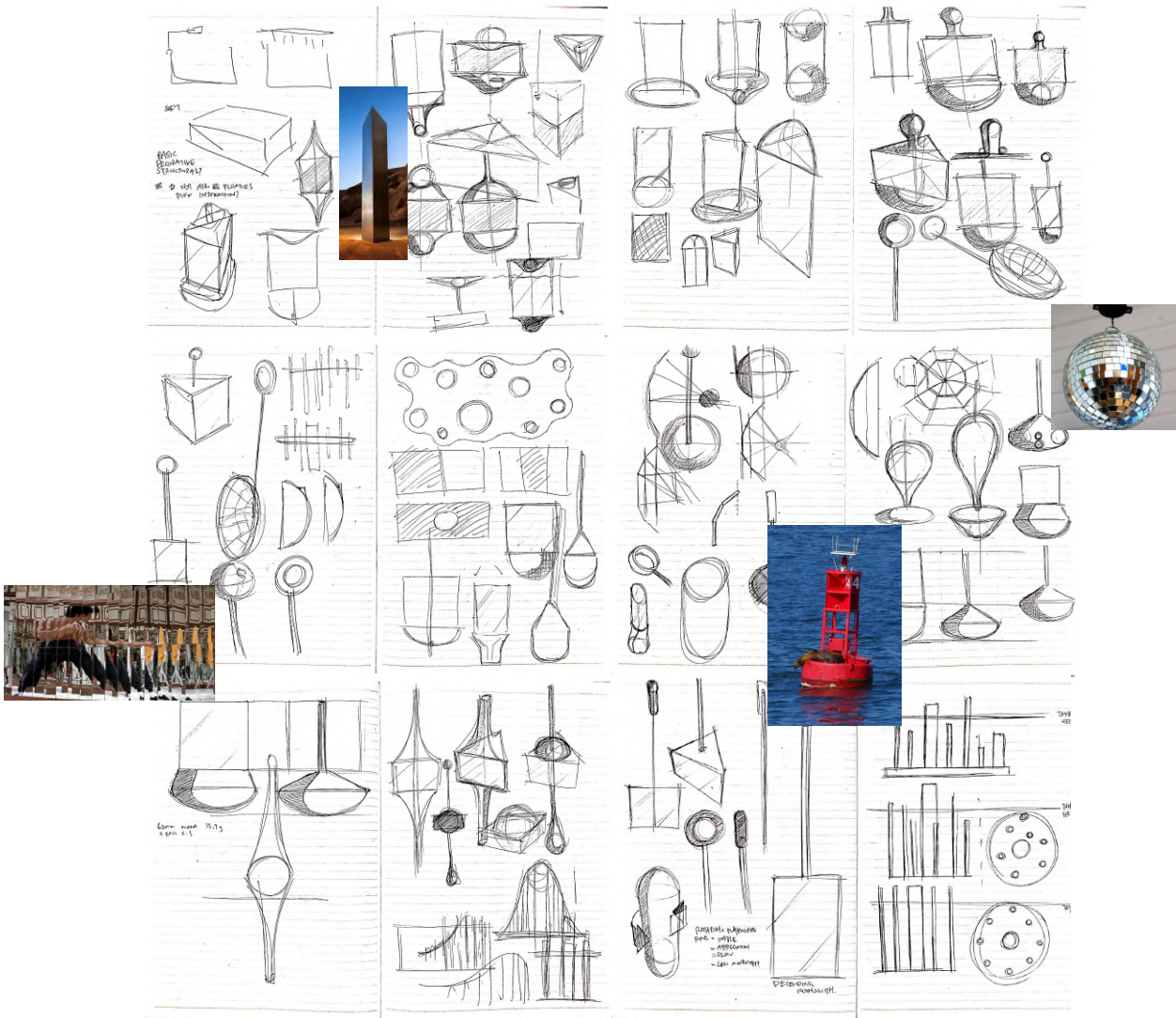


**Mobile aquarium by Clovis Duran & Nicolas Rivet 2010**



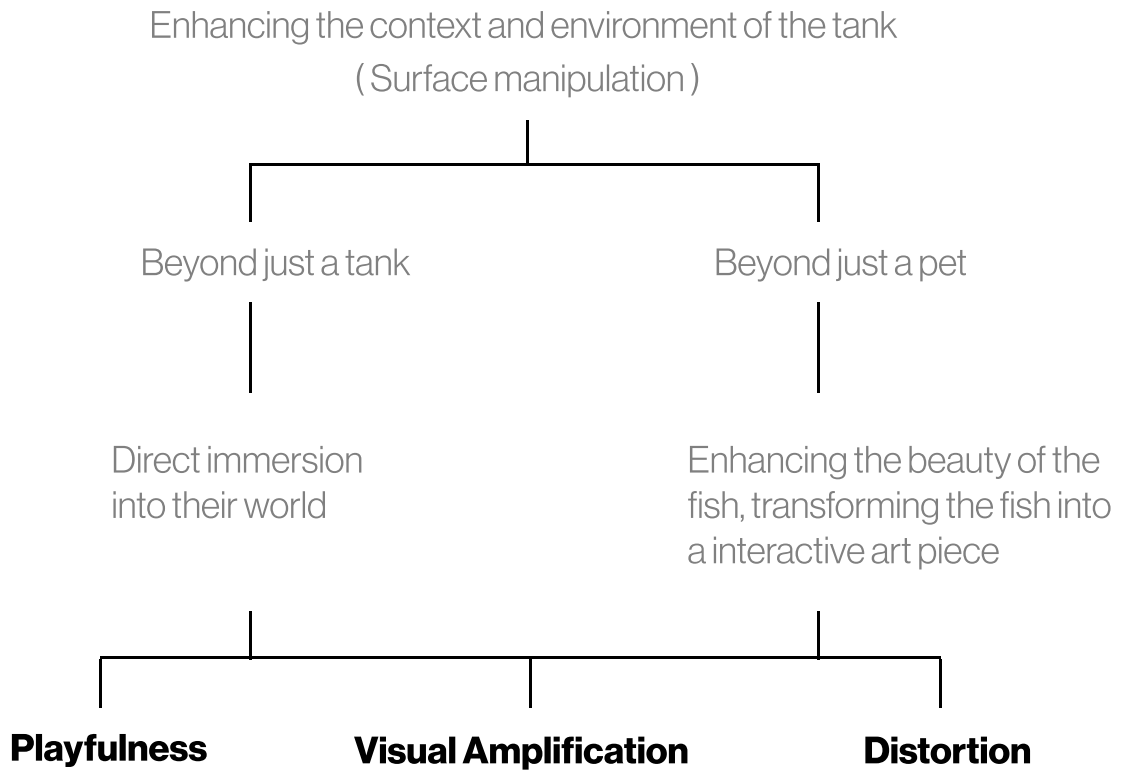
**Ice Cube by Maurane Jullien, Céline Bhend, Noémie Vauthey 2010**

Through many explorations, a set of tools were created to go along the aquarium.





This led up the final design, Interscape. Interscape is a tank with additional tools that can be used to bridge the gap of interaction between the owner and pet.



The tank took on the basic archetype of a regular aquarium, to hold on to familiarity and value. The only difference between Interscape's tank and regular tanks are the gradient mirrors that are on the surfaces of the front and side panels. The gradient mirrors meet at the corner and fade out along the surface. This serves to bleed the environment of our world with theirs and evoke a stronger connection as 2 single entities disappear and reappear in each others sight. As the fish swims across the tank they disappear into the reflection of our world, leaving us to view our own reflection until they swim across again.



The set of tools comprises of 3 objects, Monolith, Bloom, and Scatters respectively



The Monolith has 3 faces of mirror surfaces for the betta to flare. Inspired by metal monolith structures, this design provokes a sense of alienation and arrival within each other's world. With a cylindrical handle, this encourages the user to spin and rotate it gently, which is a playful gesture towards the betta fish as the reflections rotate.

The Bloom is a faceted concave mirror surface that amplifies the colours and patterns of the betta fish. With a ring as the handle, it signifies stability and patience, while being lowered into the waters, and to experience the colours that bloom. With its faceted mirrors, recognising itself can get confusing for the betta fish. This encourages the user to be patient to be able to observe the spectacle that will happen.

The Scatters is a set of acrylic rods that distorts our view of the fish by refraction. This builds on how the movement of the fish would affect how we see it as it crosses different "realms". The rods can be rearranged, and be changed out for a different base to create various distortions to admire. This makes the betta fish more than a betta fish and can be seen as an interactive art piece for the observer.

Interscape can be seen as a highly conceptual idea, but it does hope to elegantly connect people to the small worlds that they might have in the comfort of their home.

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