

VYASA

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Prototipazione di artefatti interattivi
a.a. 2008 / 09
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AIMS AND FUNCTION



The main aim of this project is to allow two distant lovers to exchange messages while doing an act emotionally closer to the distance they feel. Physical objects like the basin, the floater and the wall become powerful metaphors, opposed to the anonymous clicking a “Send” or a “Call” button.

In the history of all cultures and civilizations water has ever been both a powerful barrier and a way of communication. We applied this principle to a human-scale installation, remembering the social value public fountains ever had in pre-industrial societies, as places where it was possible to share memories, feelings and imaginations. The nature of the messages is sonic and it is vehiculed by a floater.



CONTEXT OF USE

Imagine our “pool” over a heavy table, inside a quiet and intimate room, or —outdoor— in a secret garden, where the user moves with mixed feelings of confidence and expectation. Ideally it may require an ambient all its own, a wellness-room reminiscent of roman (or, later Arabian and Ottoman) baths.



USERS

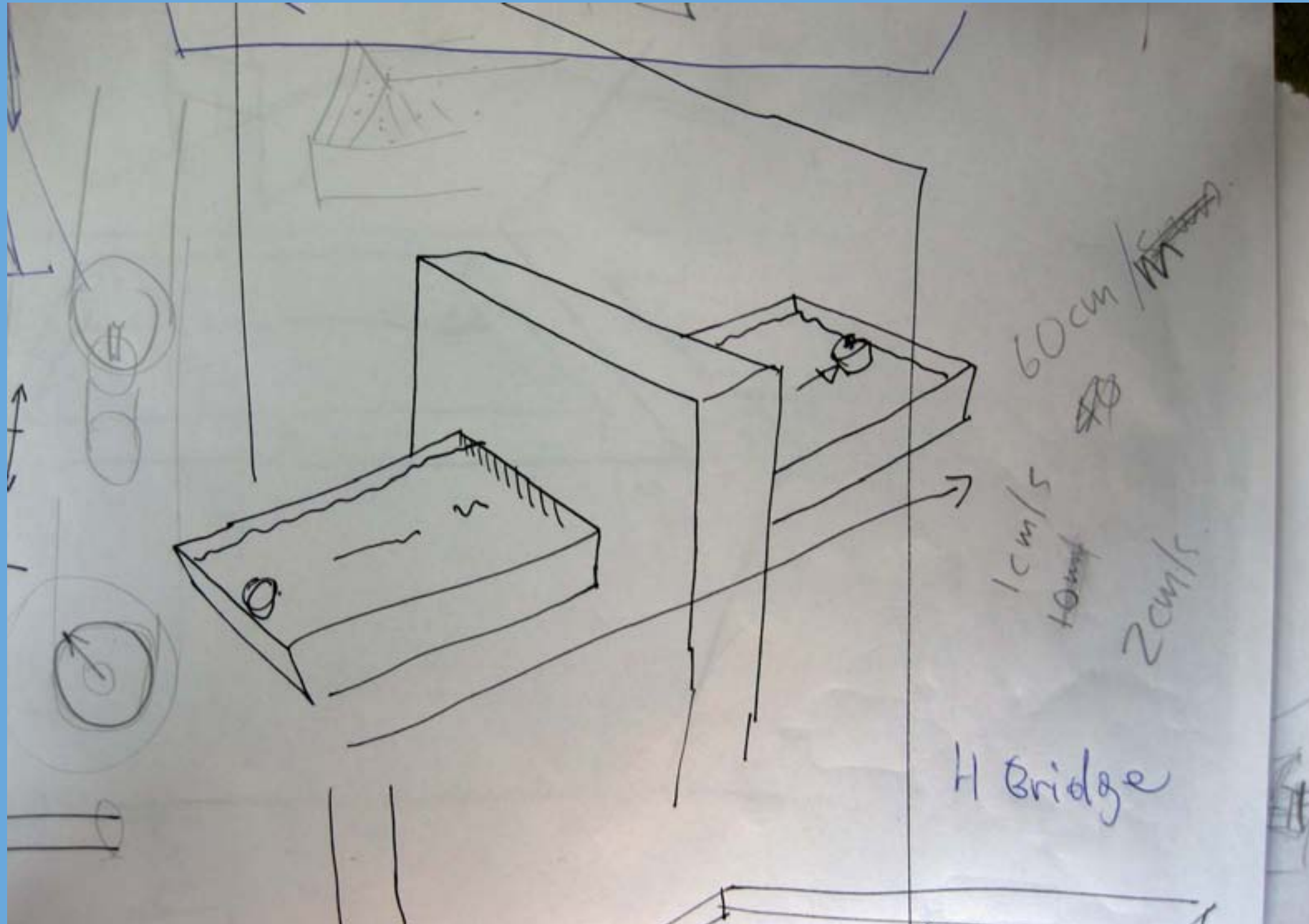
Users will be couples of distant lovers wishful to keep in touch quietly, in a way closer to the intimacy of whispers than to the loudness of a phone call. They are supposed to have plenty of room, or at least a significant part of their global room devoted to non-utilitarian purposes. Their home is their refuge, where they can gather stamina for their daily duties.

MOOD

Differently than current communication devices with their ring-a-tune paraphernalia this physical installation is meant to convey a silent and calm mood, no matters if it's active or not. It has been observed that aquarium watching lowers blood pressure: this may suggest further developments both for an indoor and an outdoor version.



PHYSICAL ASPECTS



The pool develops in length much more than in width, to emphasize its function as a “waterway”. Ideally the whole structure would have to be stone-made, to remember a traditional basin/fountain, with strong ritual connotations. All the mechanics and electronics is concealed into the thickness of the basement —below the basin— and into the wall.

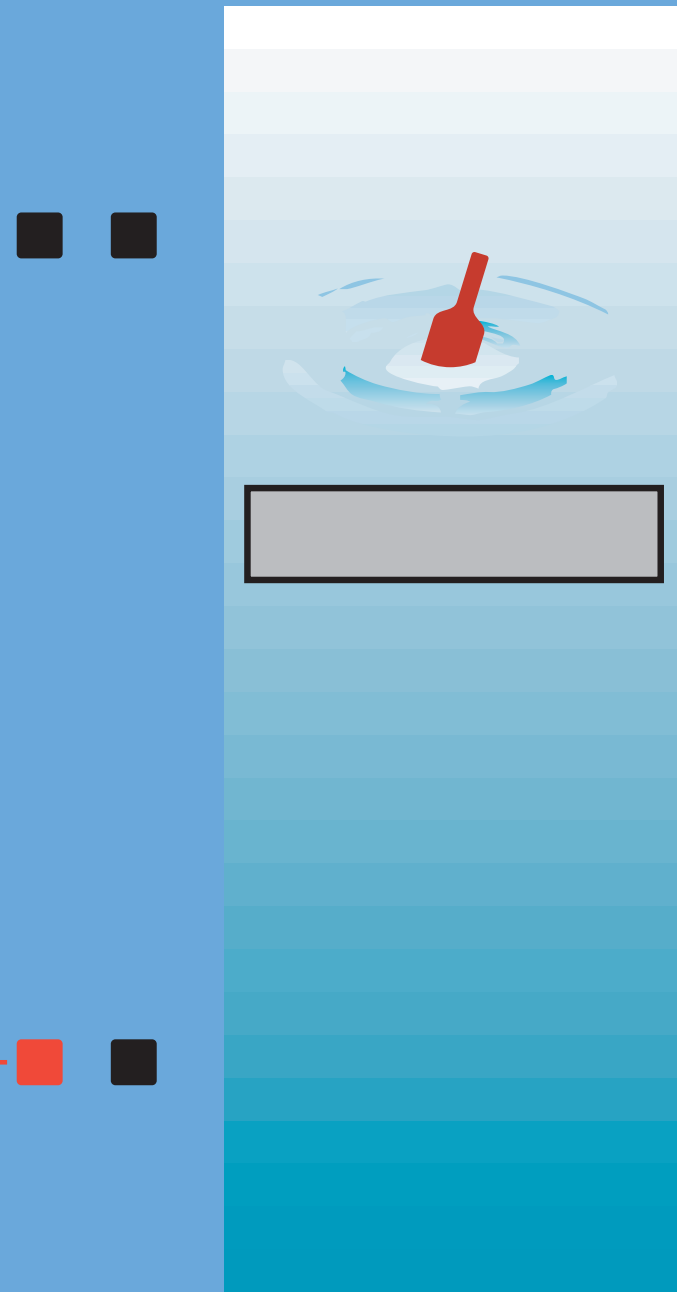
BEHAVIOURAL ASPECTS



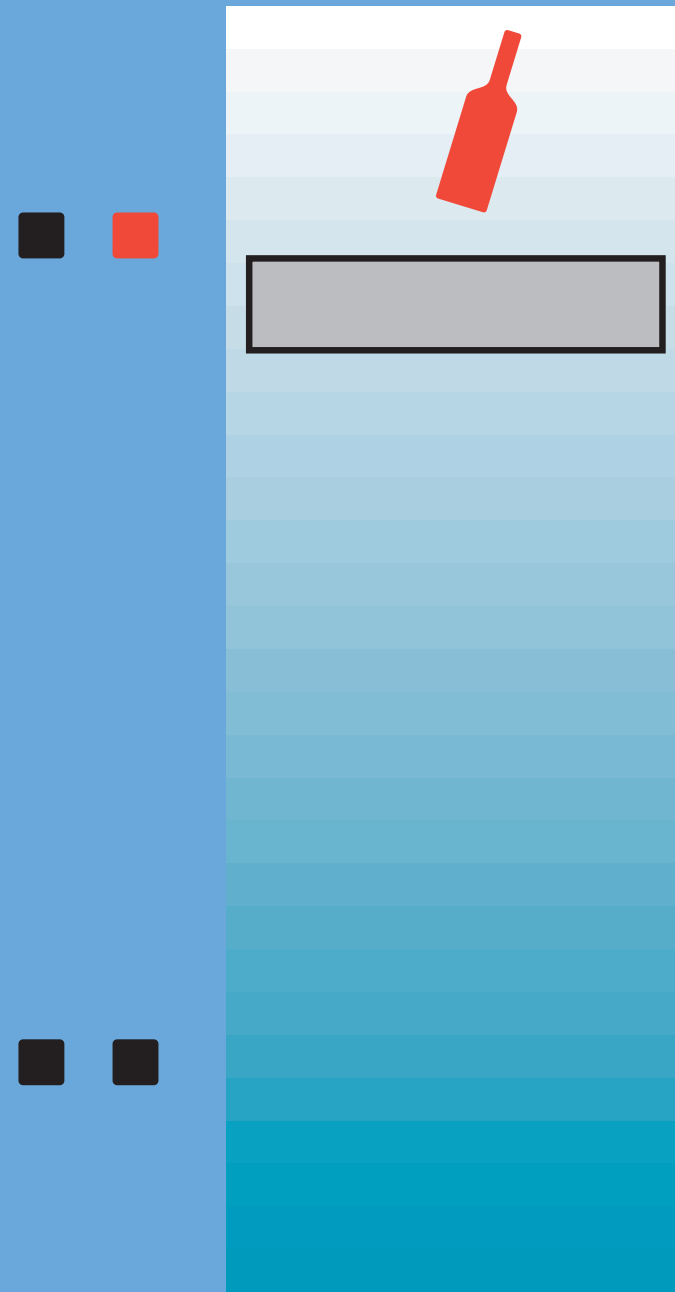
The act of sending is halfway between the practice of sending a message in a bottle and those ritual offerings usually taking place on riversides. The sender whispers onto a floater and lays it down on the water, where it is “caught” by an invisible, benevolent stream, taking care of the delivery. As the floater reaches the opposite end of the pool, it vanishes into a “wall”, representing the material nature of the distance separating the partners.



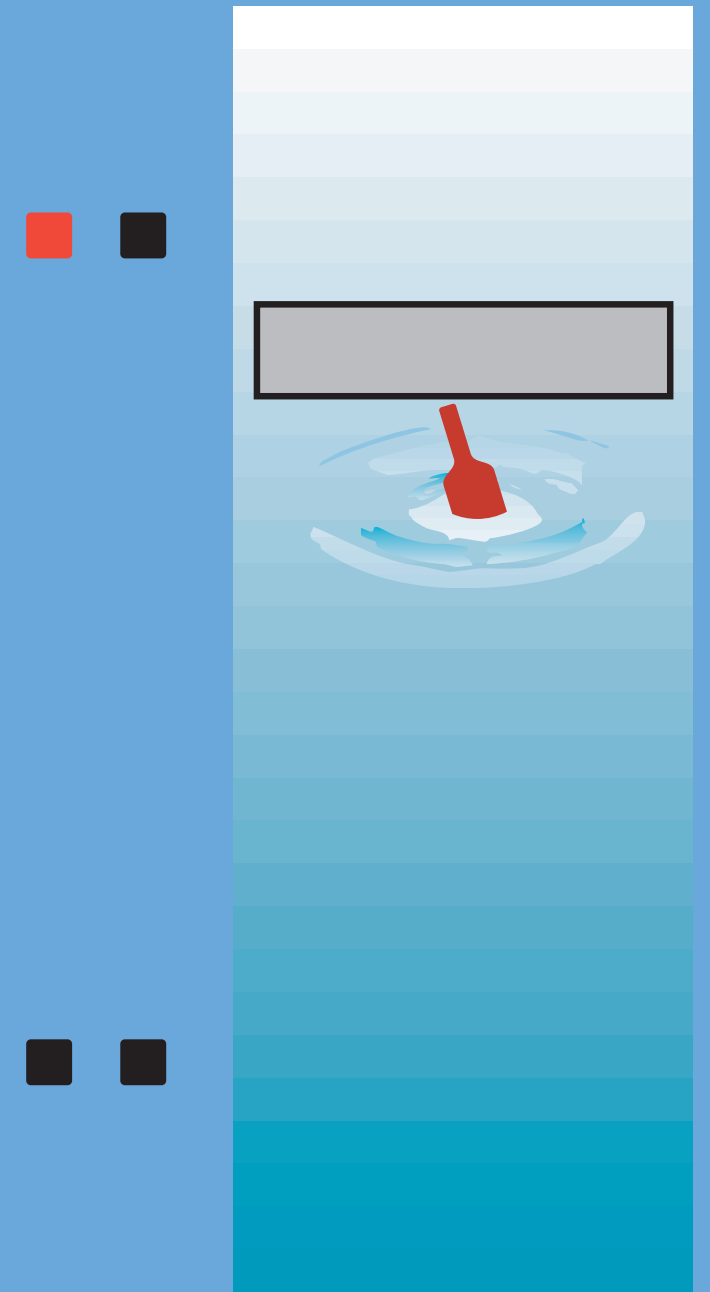
The user throws the floater beyond the first line of sensors: the magnets start moving



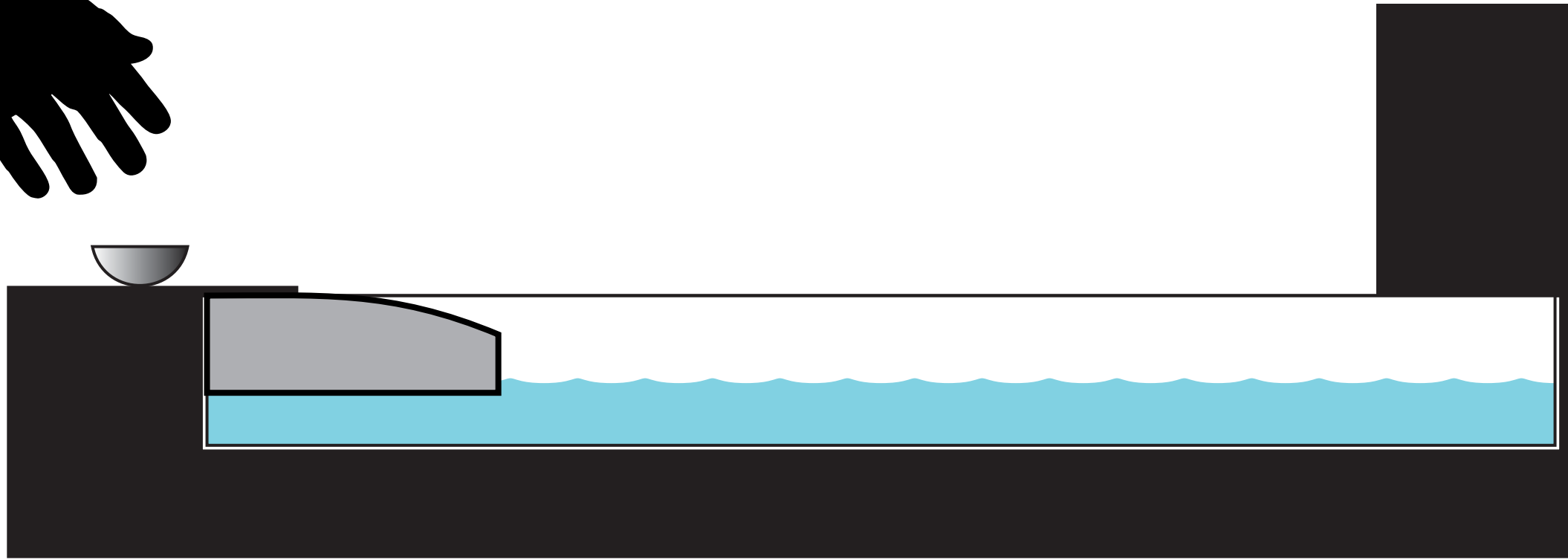
Magnets keep going

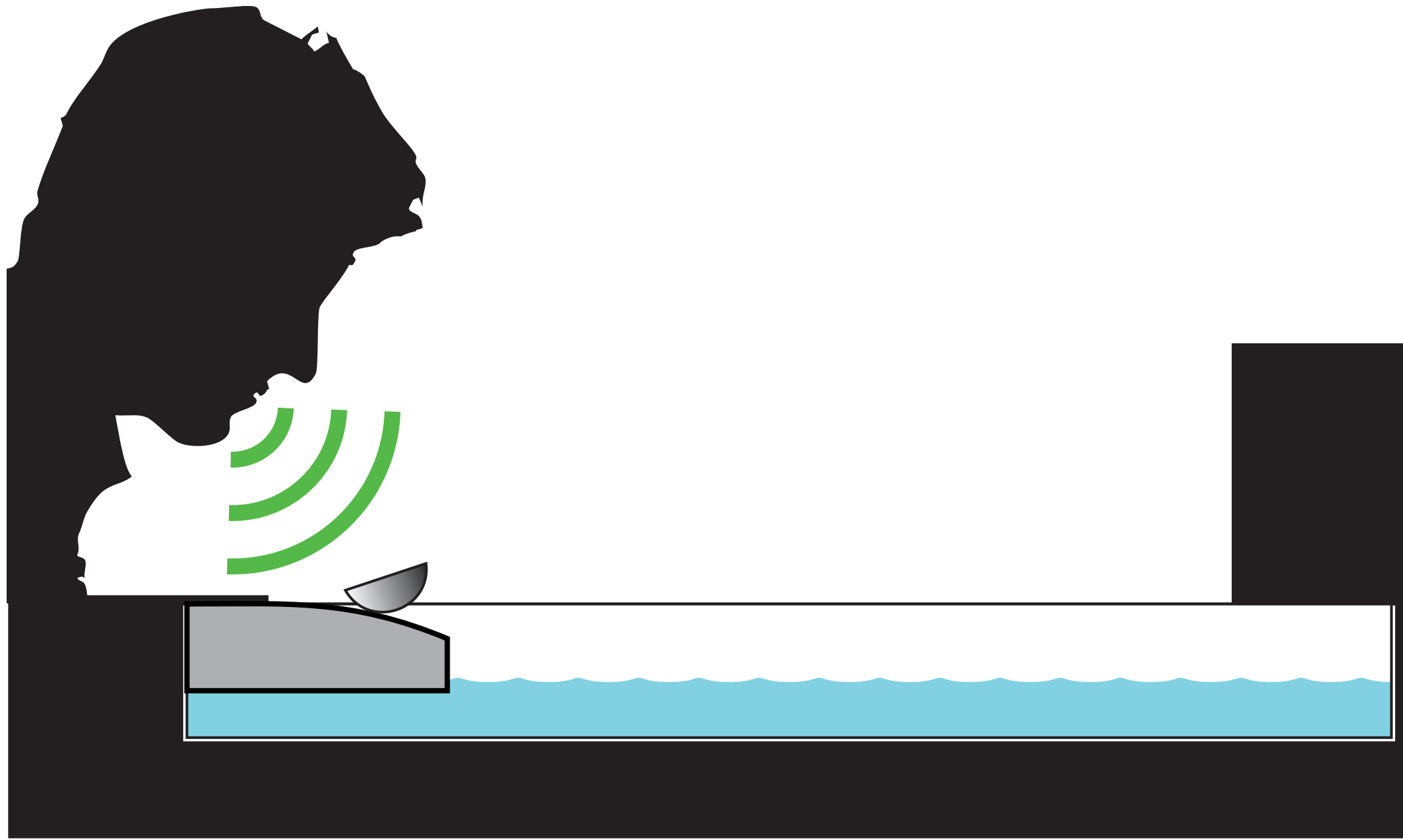


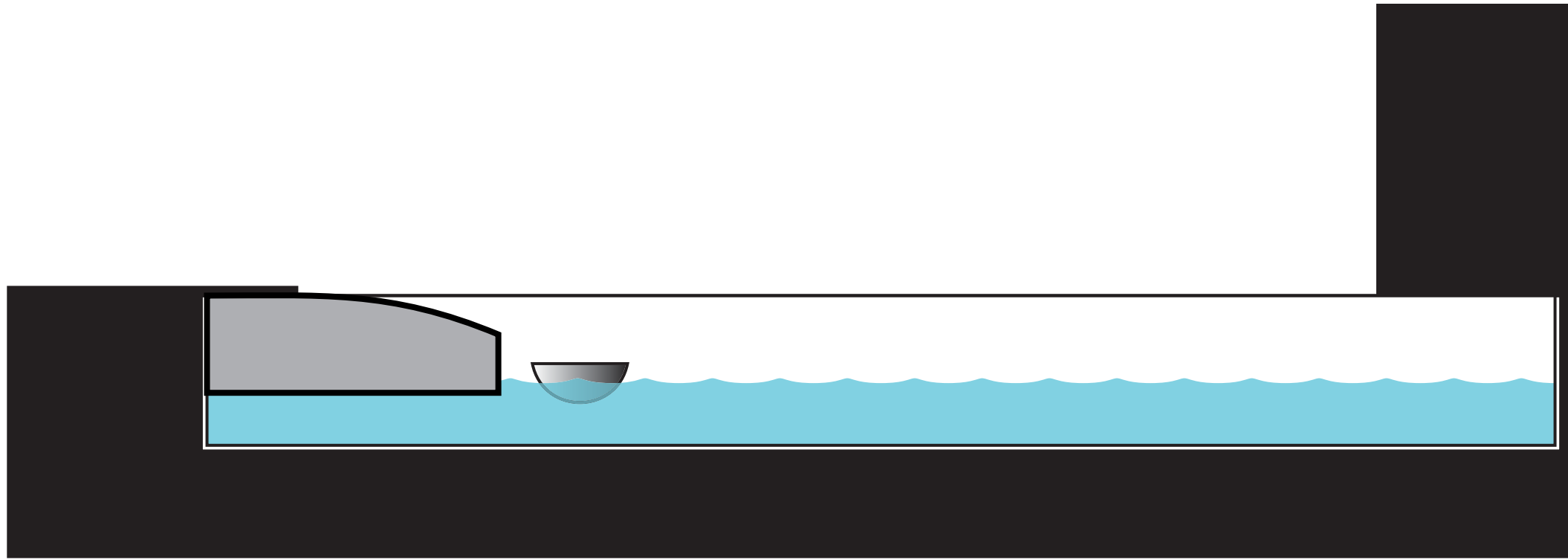
When the floater crosses the second line, the magnets' movement stops

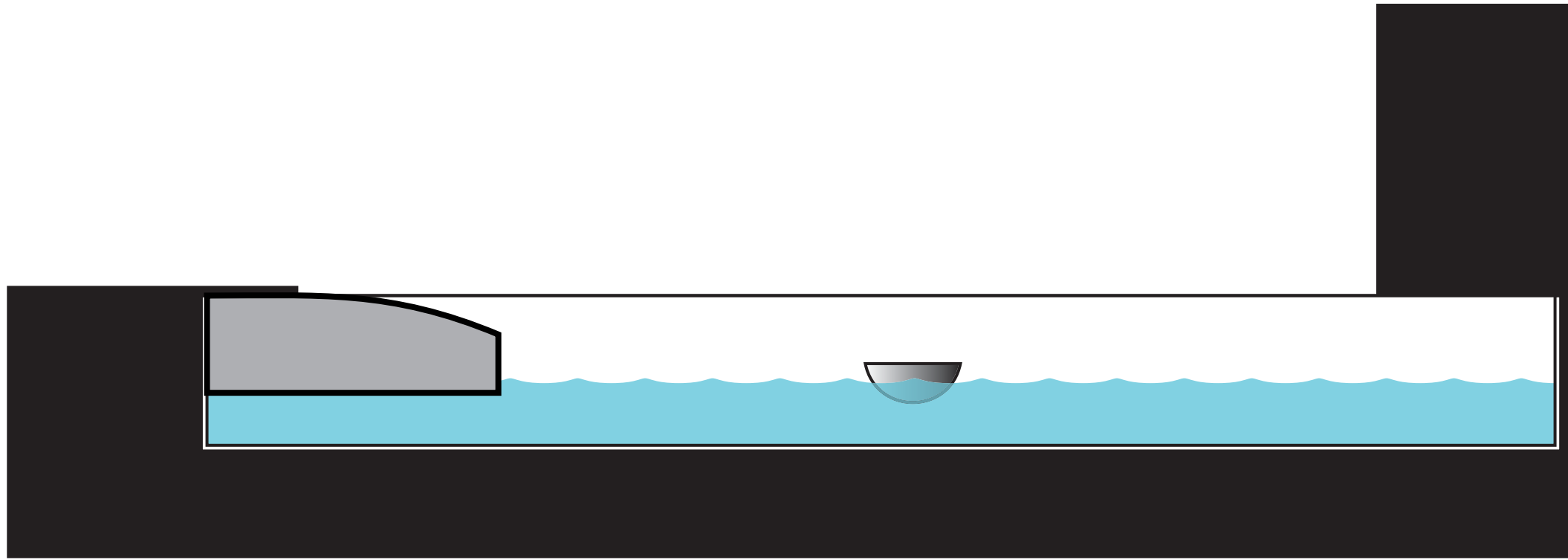


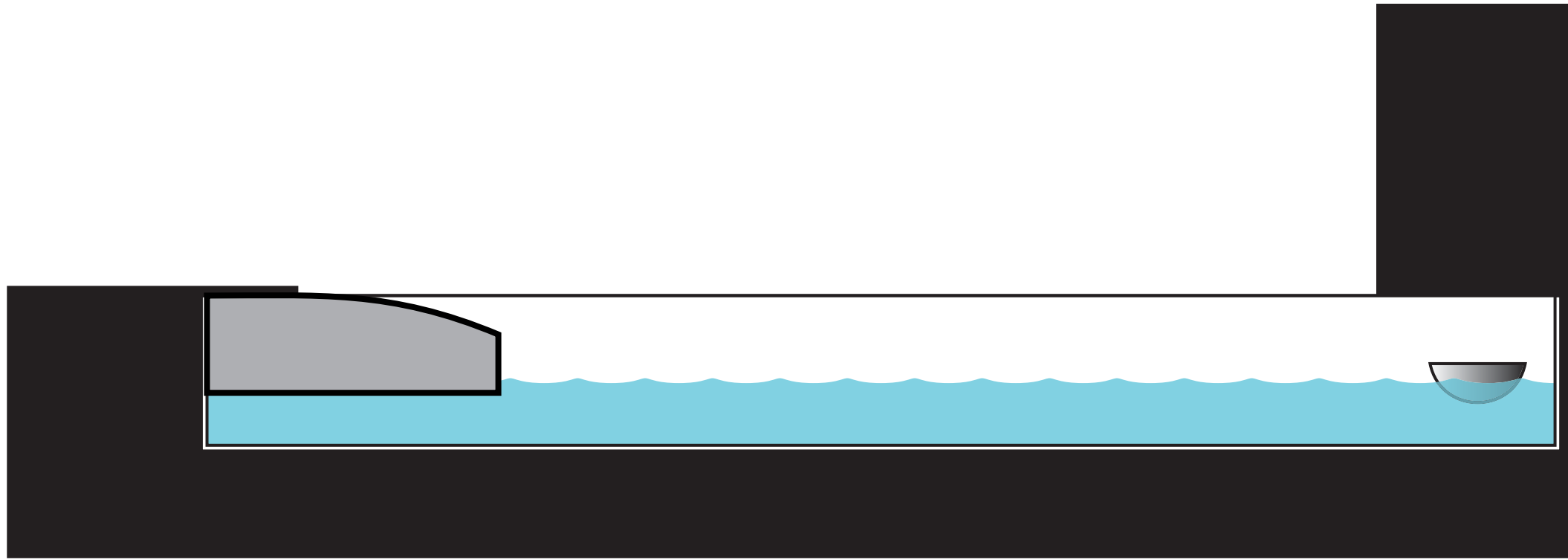
When a reply has come, the magnetic bar trespasses the floater and starts pushing it back

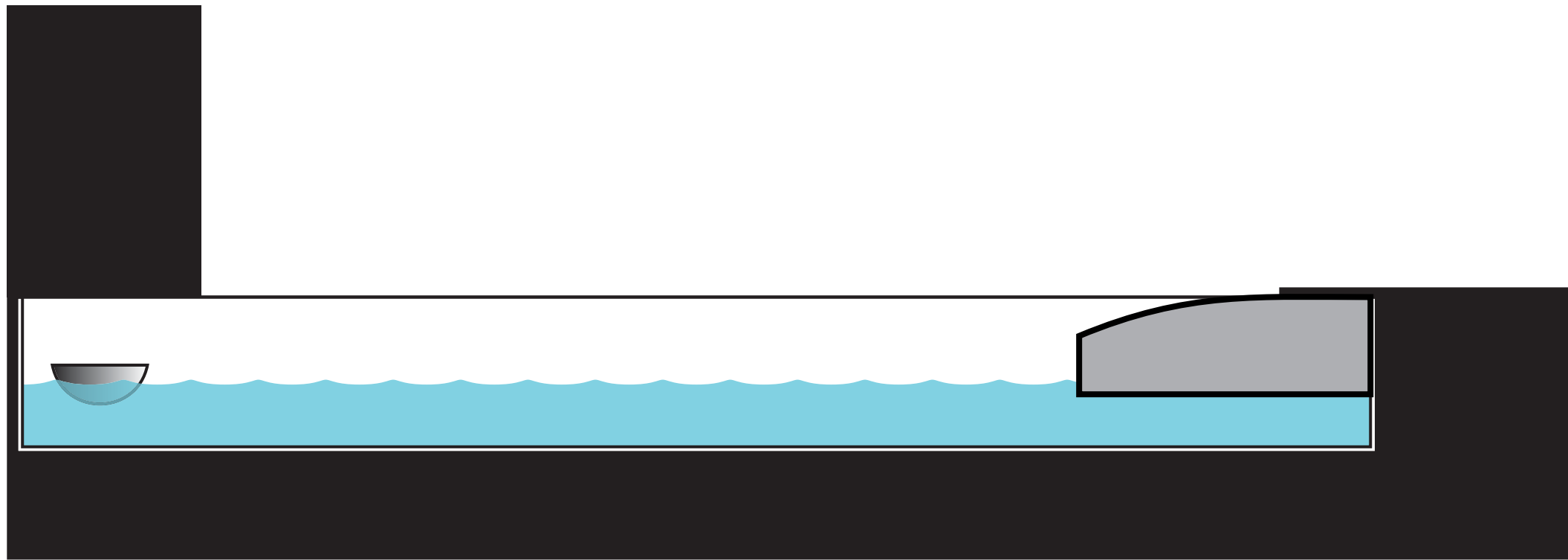


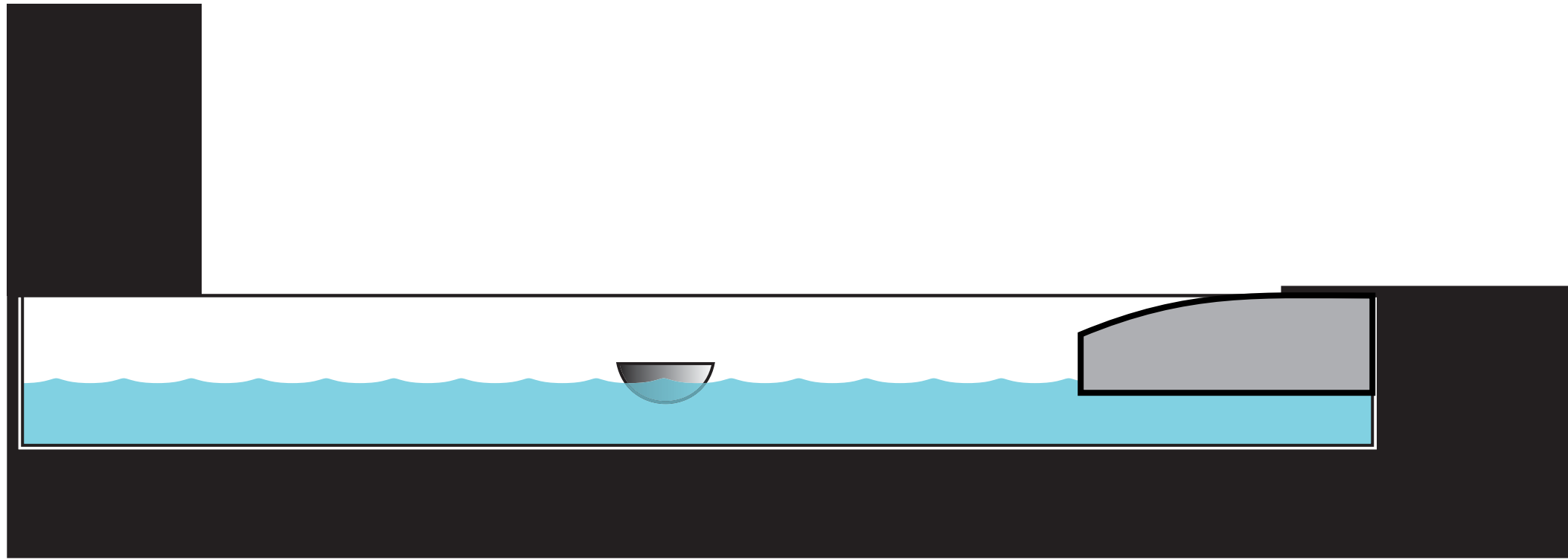


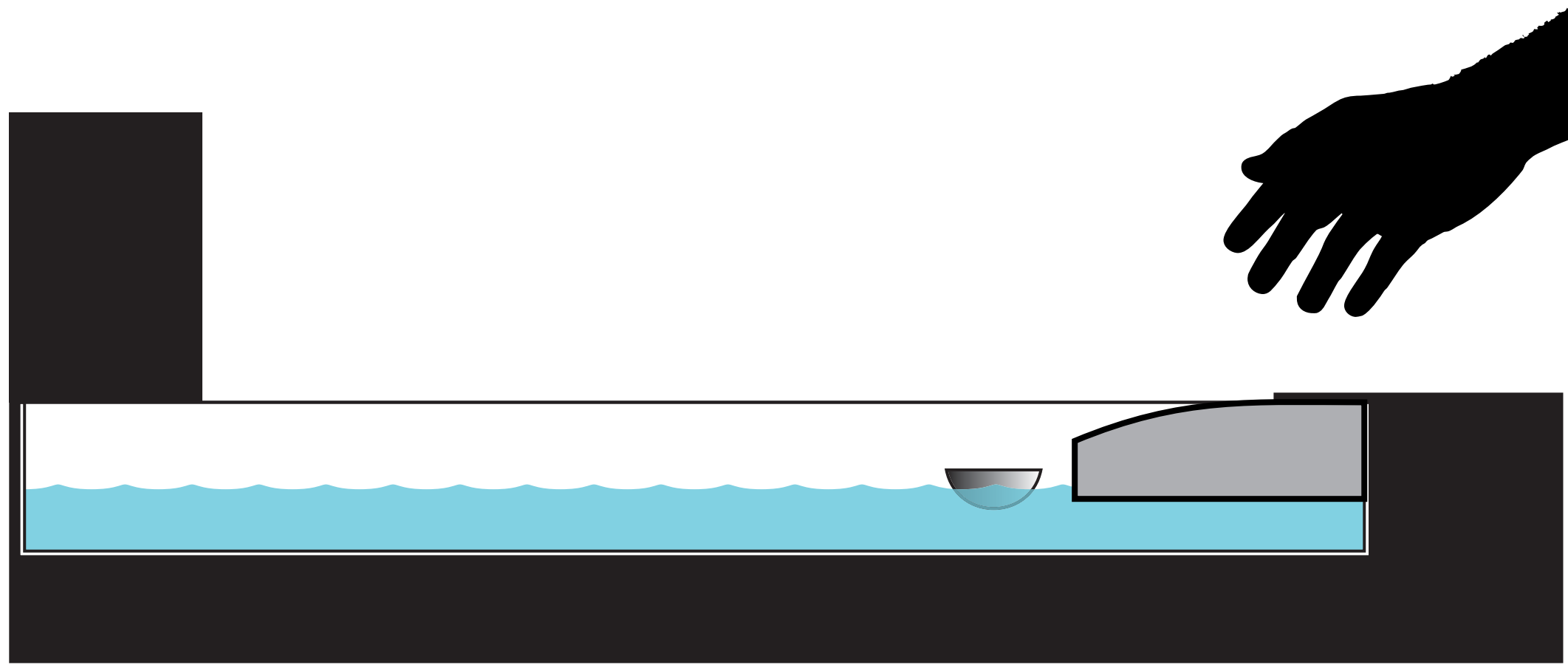


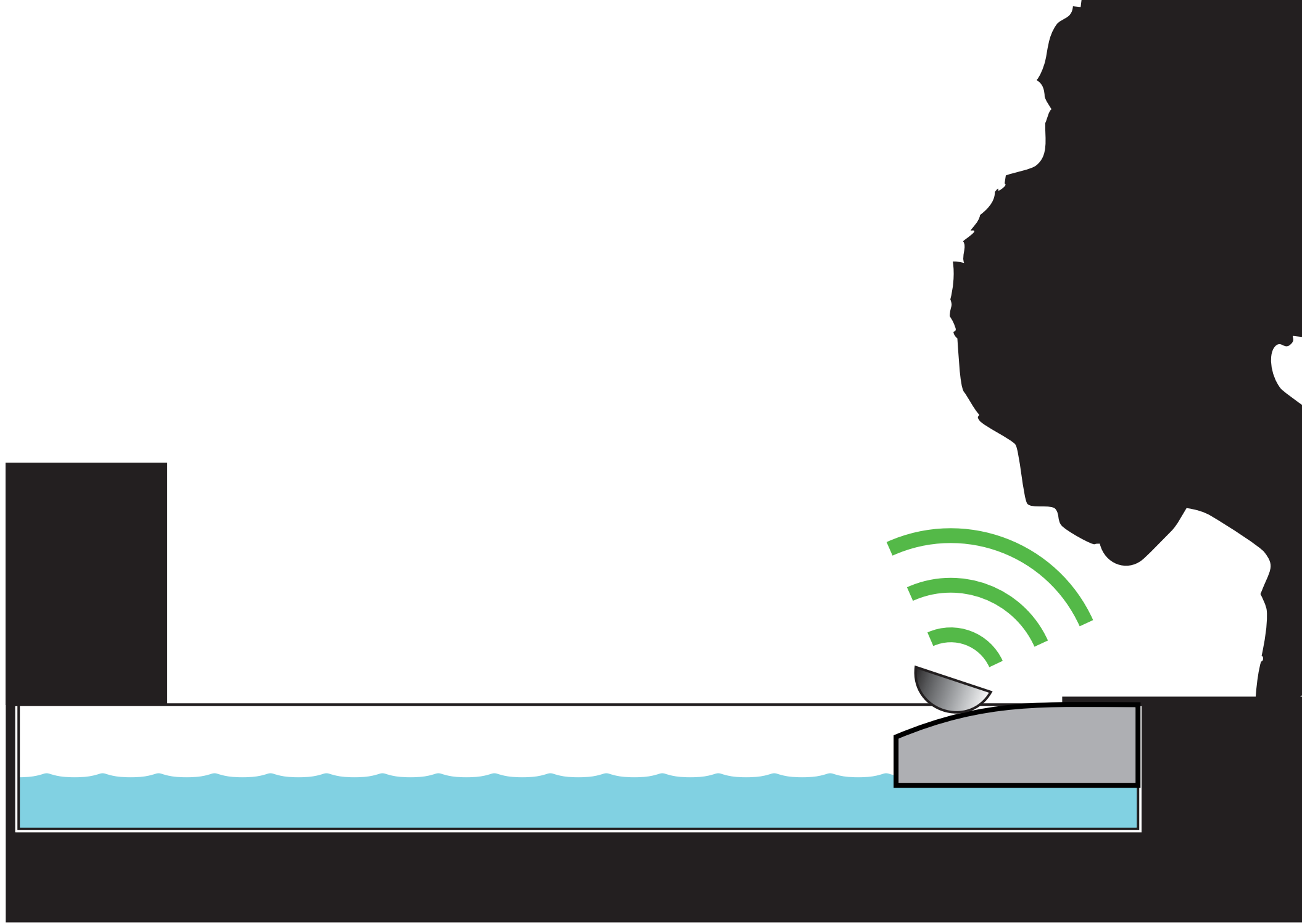


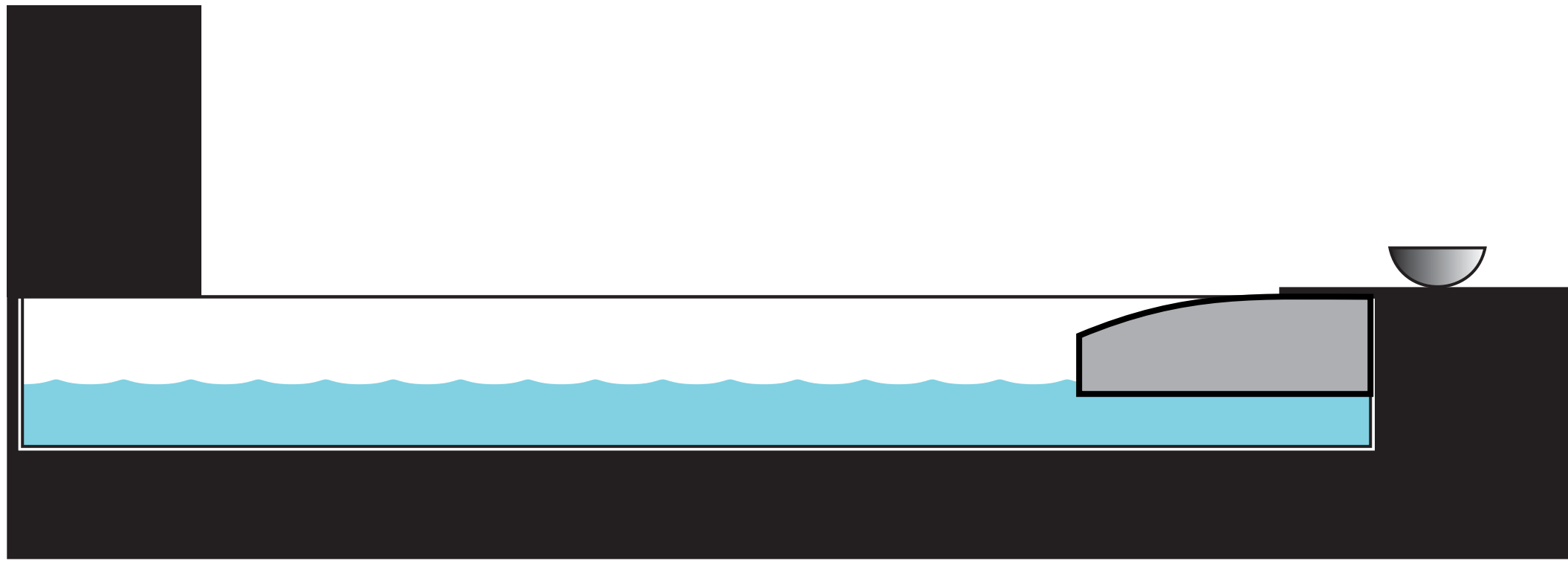








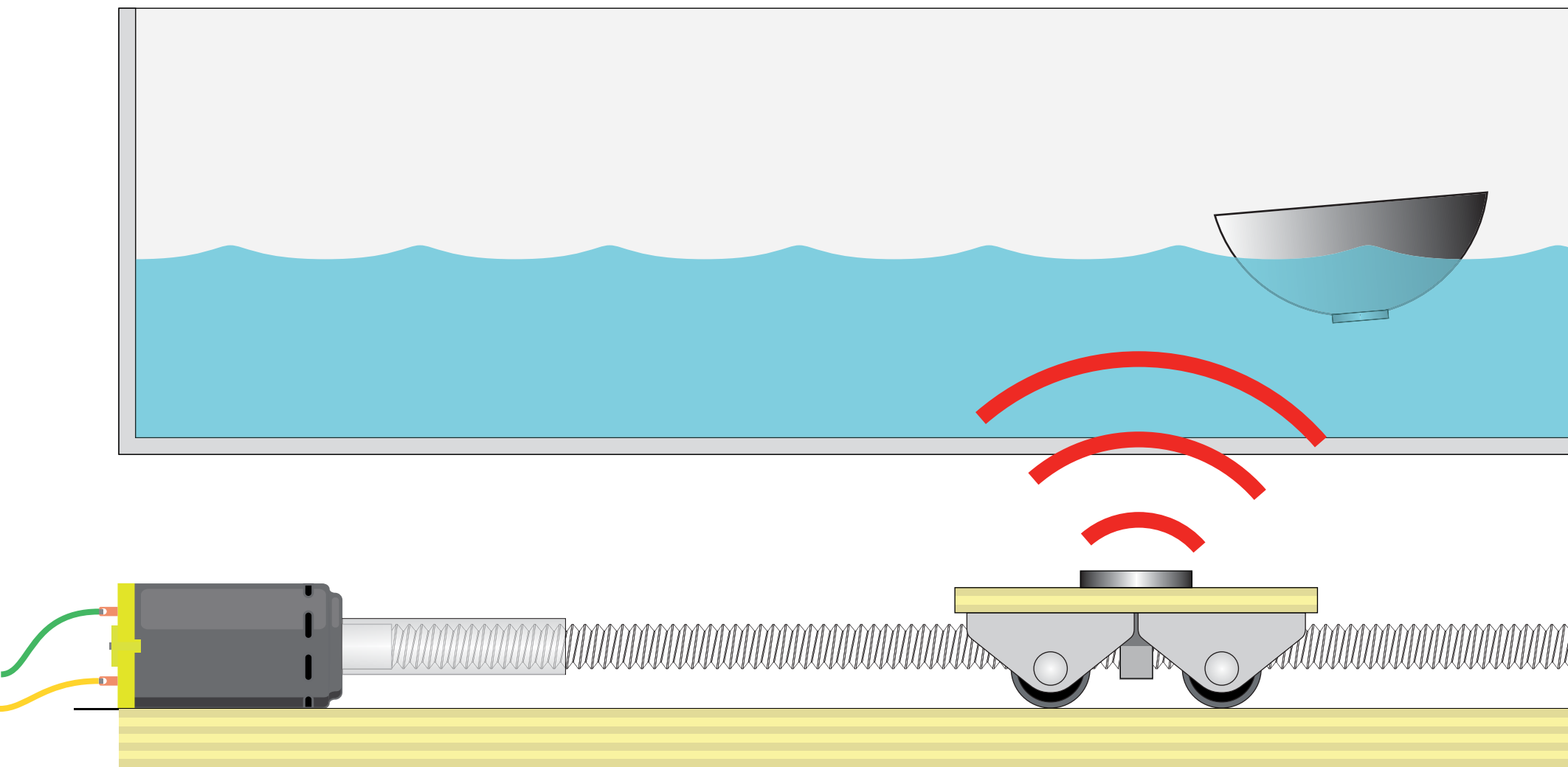




IMPLEMENTATION

The simplest and safest way to make the message sailing straight but in a smooth way is to drag it magnetically.

Five permanent magnets are aligned on a cursor running along a worm gear, underneath the pool, for the whole basin's length. The cursor moves along a worm-gear thanks to an Arduino-controlled DC Motor. The inversion of the motion, once the cursor has reached the end of the pool, is granted by a H-Bridge.



AREAS OF IGNORANCE

By the user side



Further studies and tests have to be carried out to find out the right mix of ingredients (size, proportions, material coating, shape and material of the floater, extra environmental effects (i.e. lights, smoke, waves)).

Plants and fishes may be added to amplify the psychological calming effects in aquarium-alike versions.

AREAS OF IGNORANCE

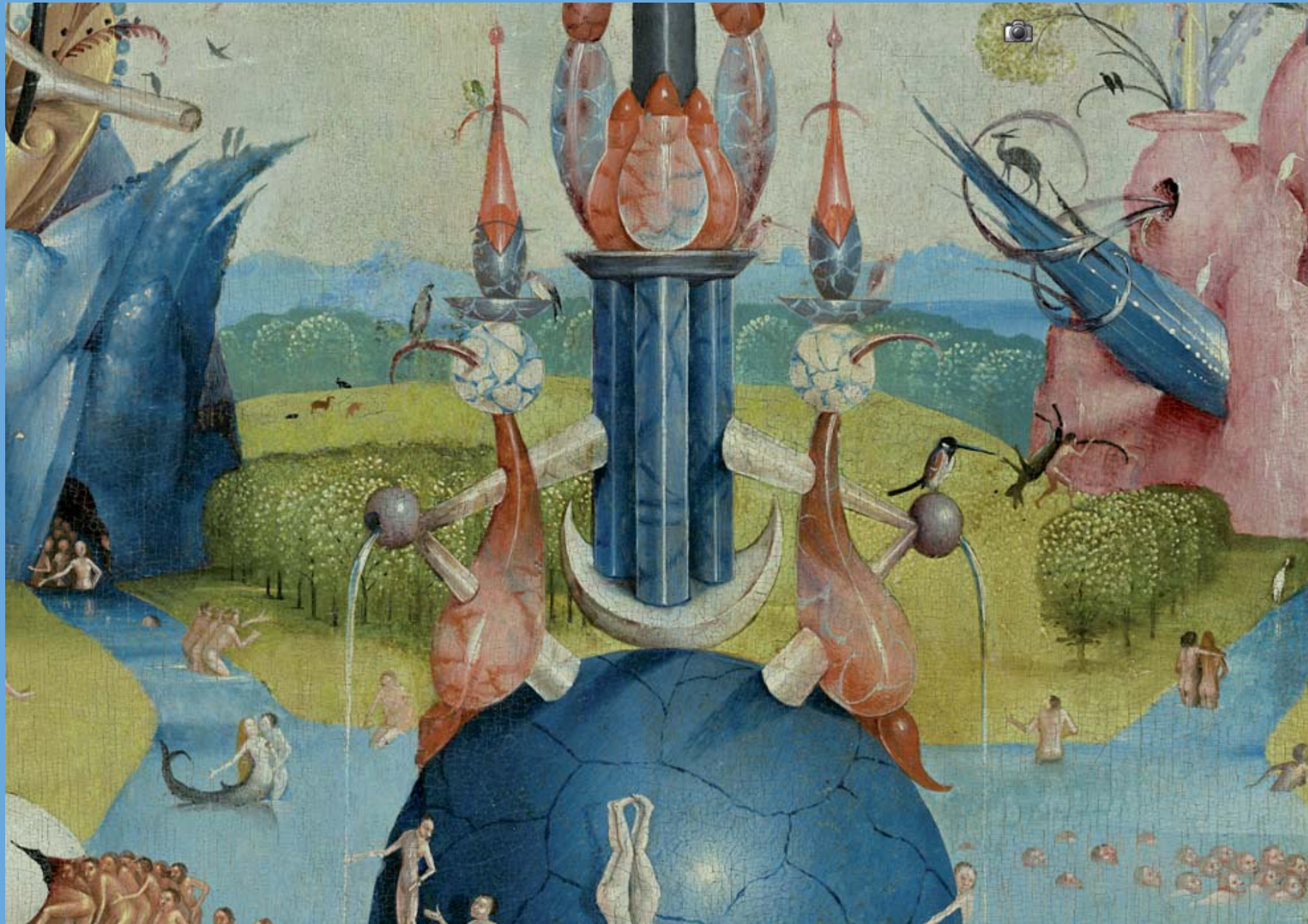
By the machine side



We have tested an ultrasonic mist maker and two RGB LEDs, performing light diffusion tests across translucent materials.

The solution we've adopted to drive the cursor (a one meter long worm-gear), although quickly implemented, revealed to be noisy and unstable. We've promptly identified other possible alternatives to fix the problem. The most promising adopts a pulley.

CRITERIA FOR SUCCESS



The way how the device is materially crafted and the location's choice both do play a key role in granting the best user experience.

Extensive psychological research about the emotional implications in using a mix of different materials and effects (accompanying the incoming and outgoing floater) have to be carried out.

THANK YOU !