Lichtkonzept

DEJAN IVKOVIC
DIPLOMA SS2020
INDUSTRIAL DESIGN 1
SUPERVISED BY PROF. DIEZ, SEN. ART. MAG. ART. BRUCKMANN

Photography

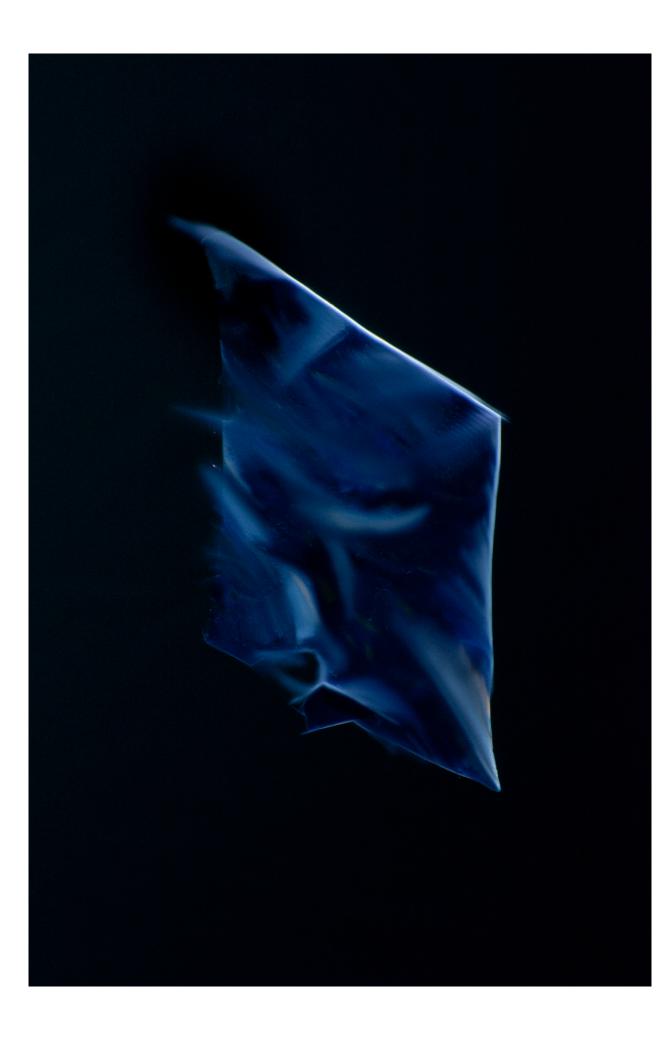


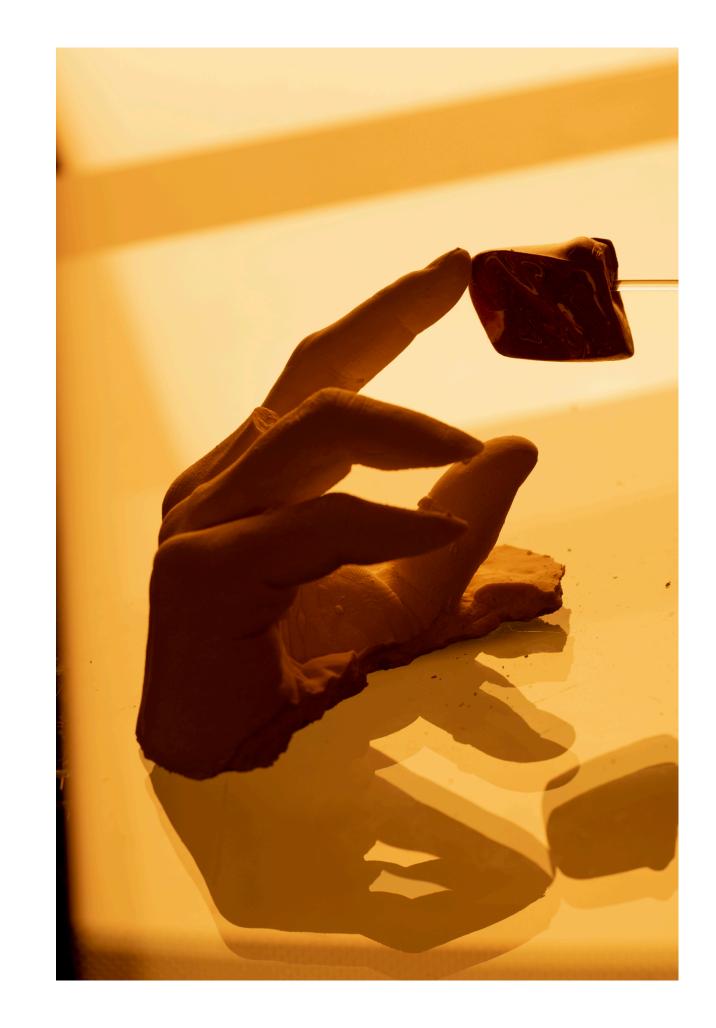


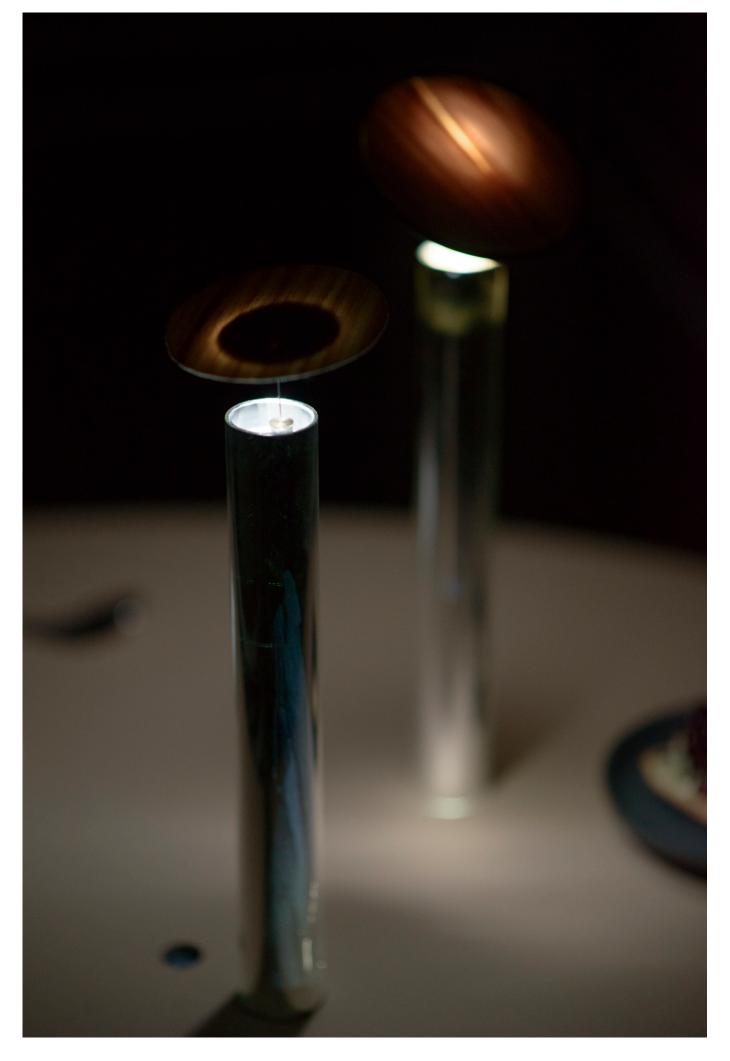


Photography













Video: Jonathan Mauloubier

not an isolated object in a closed space

create a device that registers observers

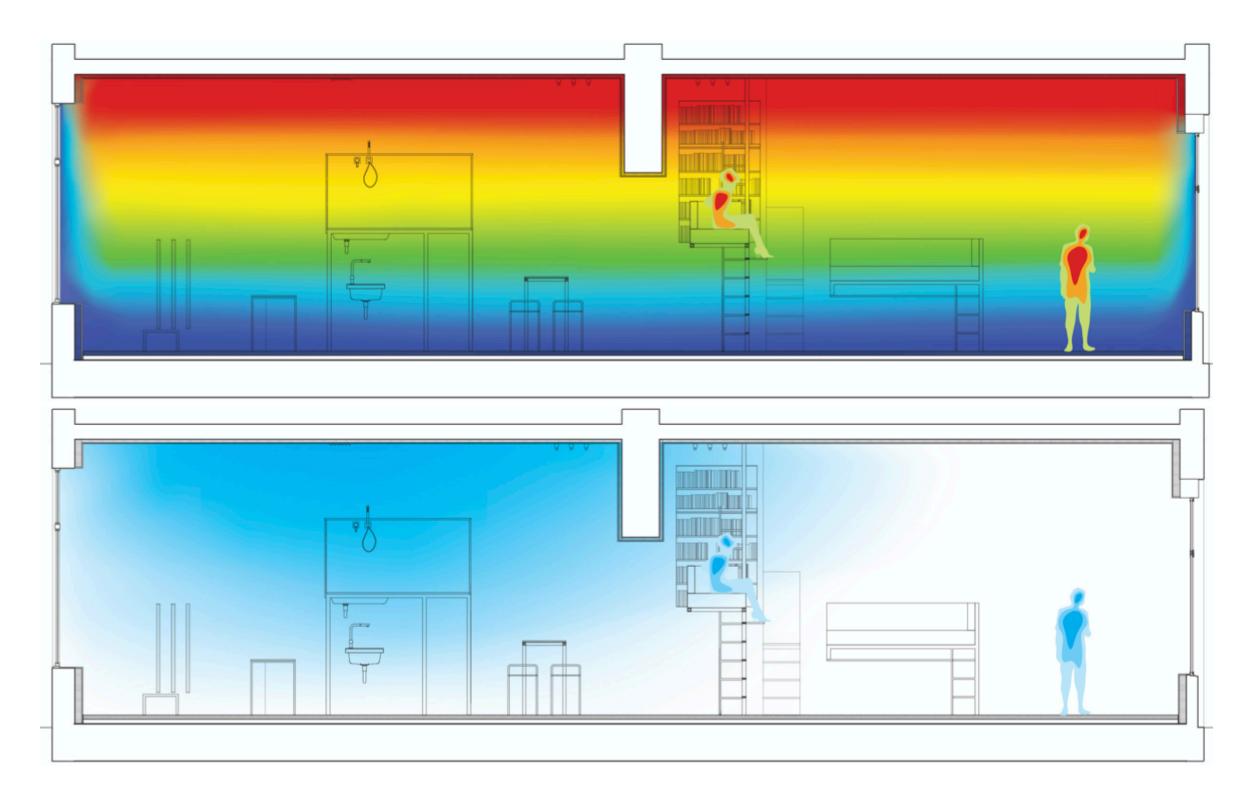
interacts with the bodies and things that surround it

stops exhibiting the phenomena which it creates

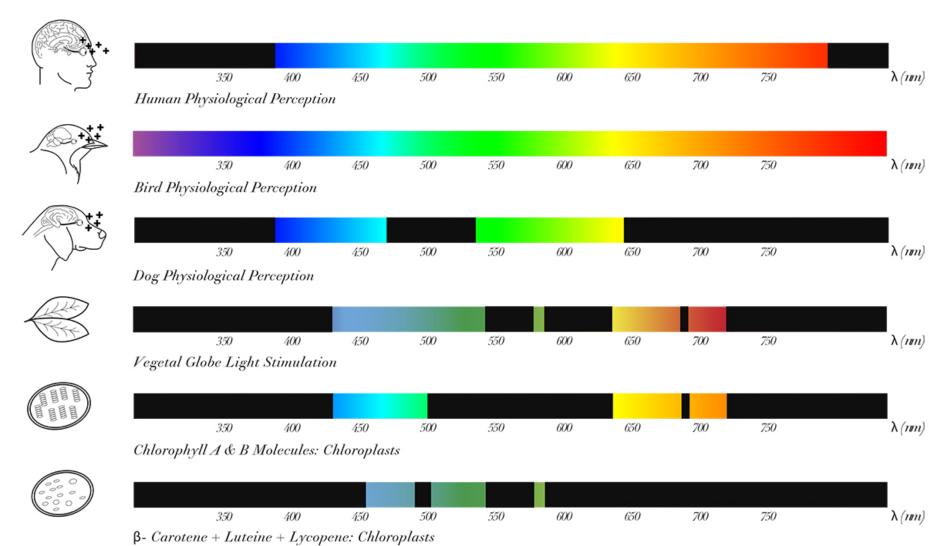
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influences

Philippe Rahm Evaporated Rooms



Human, Bird, and Dog Physiological Perception & Vegetal Solar Stimulation Inwavelength



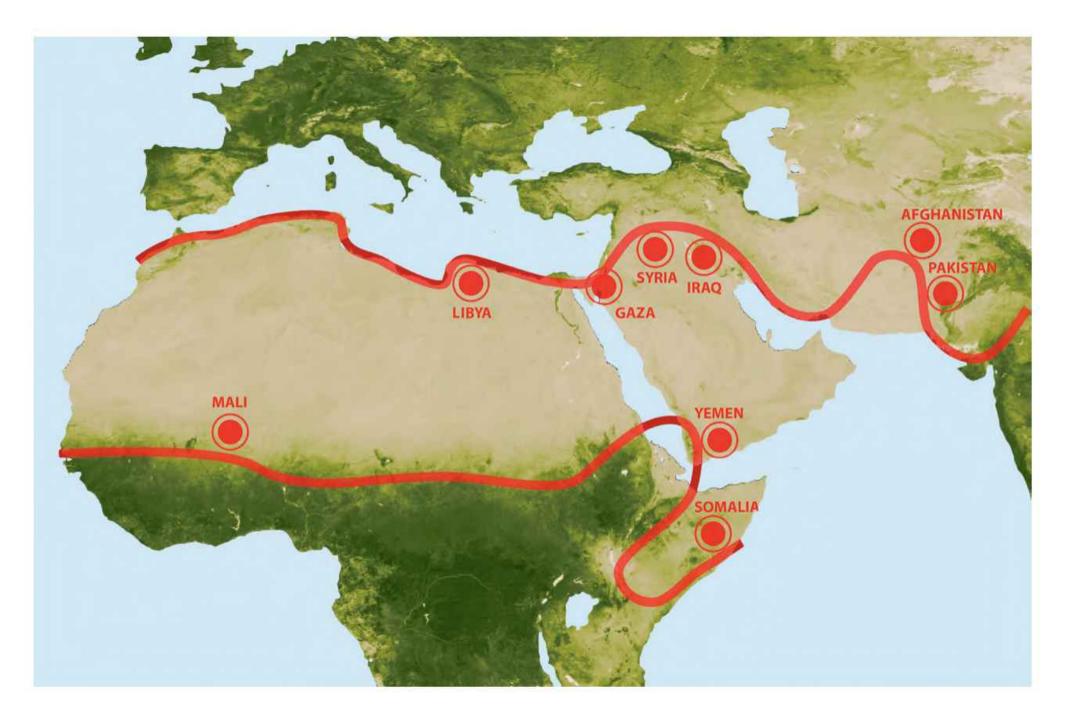
Richard Mosse Incoming





Eyal Weizmann The Conflict Shoreline



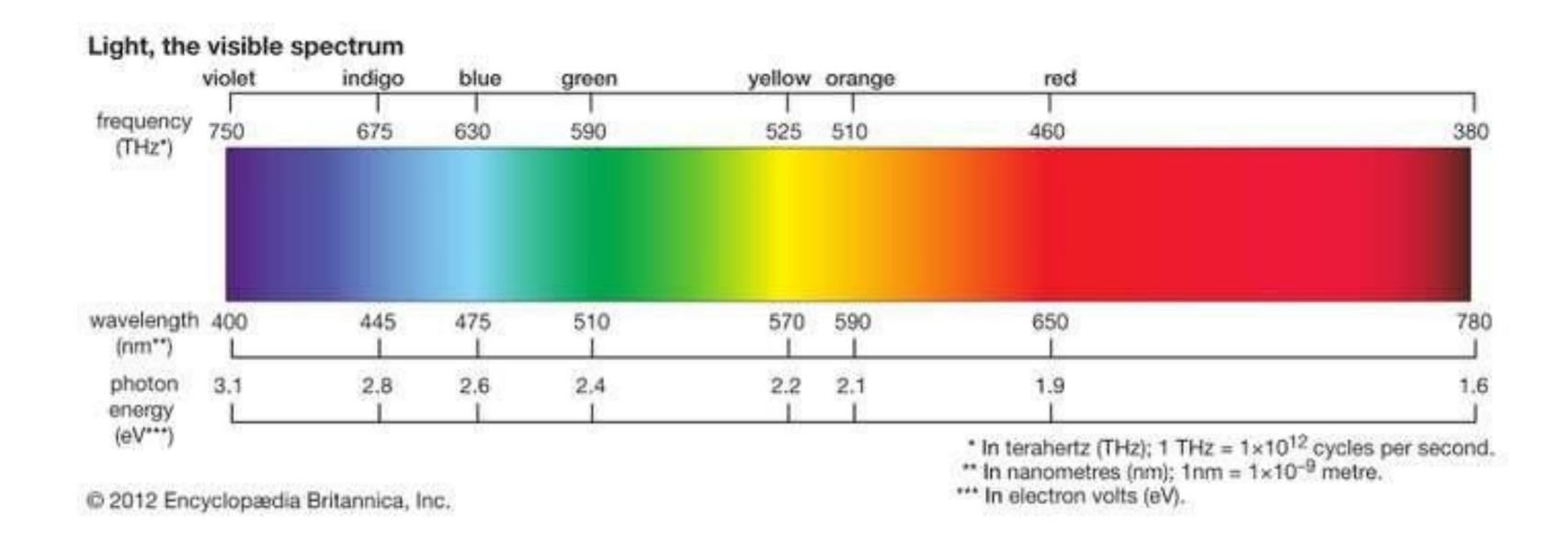


what is light?

visible light

Most commonly, light refers to electromagnetic radiation that can be detected by the human eye

human spectrum: from 700 nanometres (nm; billionths of a metre) for redlight down to about 400 nm for violet light



what is the nature of light?

But there simply is no single answer to the question to "What is light?" that satisfies the many contexts in which light is experienced, explored, and exploited.

Light provides a window on the universe, from cosmological to atomic scales.

Light transmits spatial and temporal information.

Light has a dual nature that is revealed only in quantum mechanics ("Wave-Particle Duality")

Waves and Particles

Waves are propagations of disturbances that travel through a medium, transporting energy from one location to another location without transporting matter.

Particles are, most generally, what makes up matter, the material substance that constitutes the observable universe.

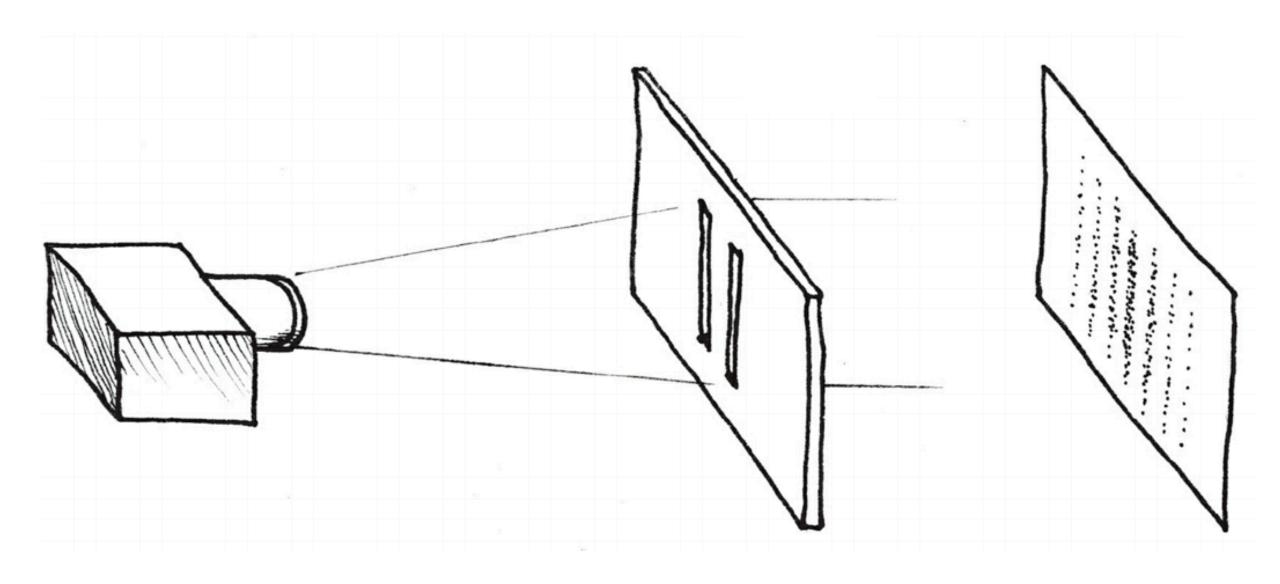
Wave-Particle Duality Paradox

Matter, under certain circumstances manifests wave behavior and produces diffraction patterns (Two-Slit Experiment)

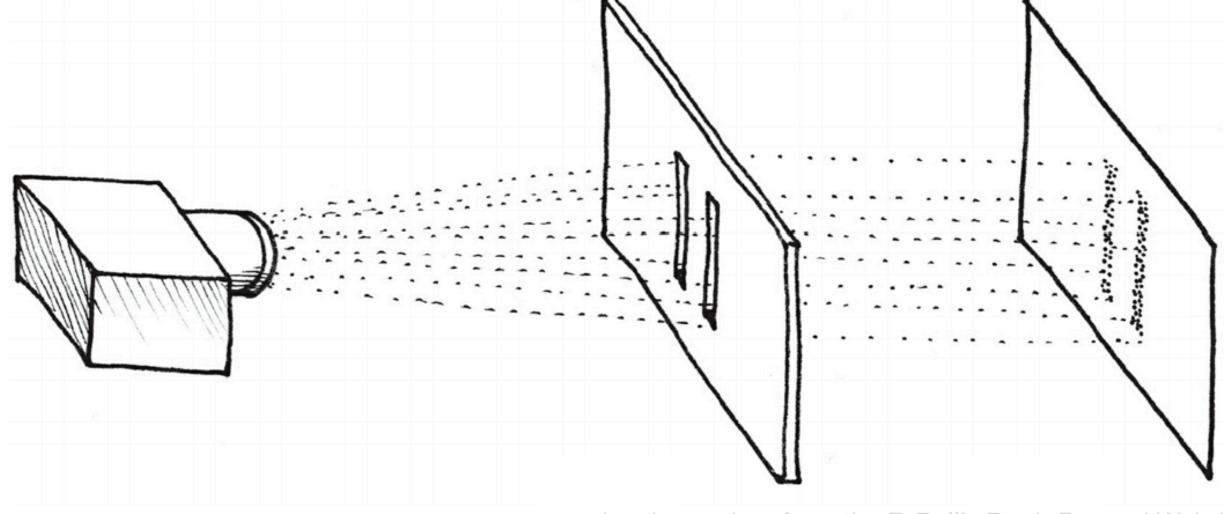
Light, under certain circumstances manifests particle behavior

This wave-particle duality is shared by all of the primary constituents of nature. (photos, quarks, electrons, protons, neutrons, but also compound particles such as atoms and molecules)

Double Slit Experiment

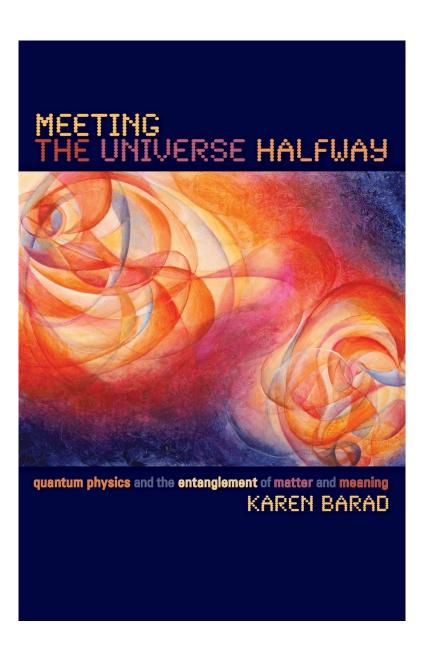


drawings taken from the P. Ball's Book Beyond Weird



What the experiment importantly showed: What we understand as a particle (for example, an electron) can exhibit particle **and** wave behavior! The act of observing determines the system (what something is!)



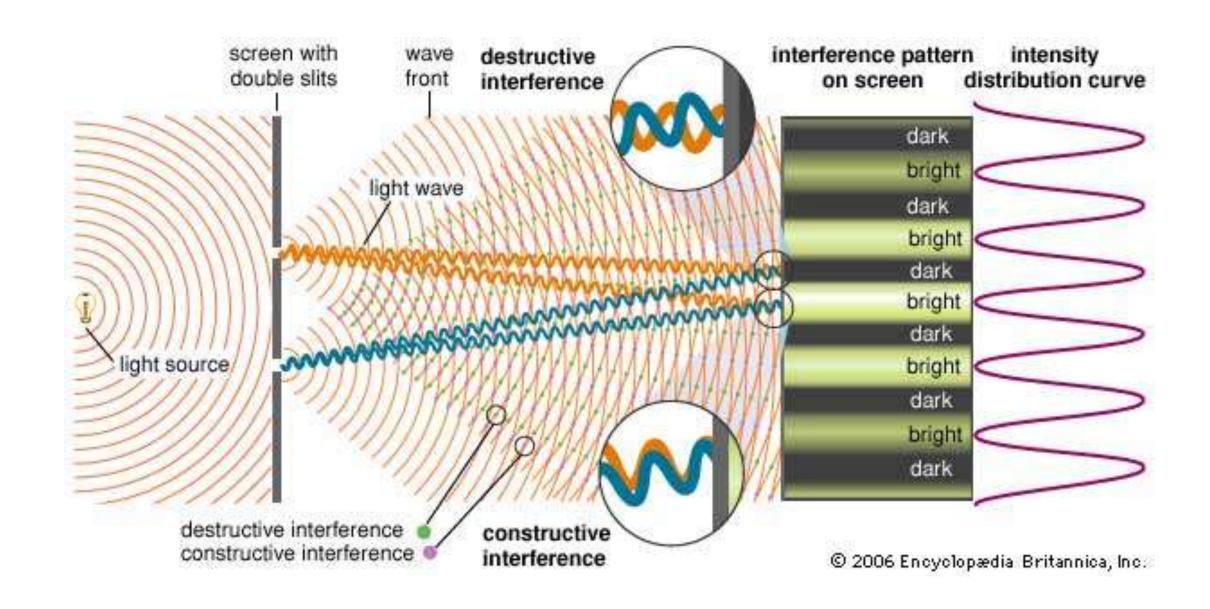


Karen Barad is Professor of Feminist Studies, Philosophy, and History of Consciousness at the University of California at Santa Cruz.

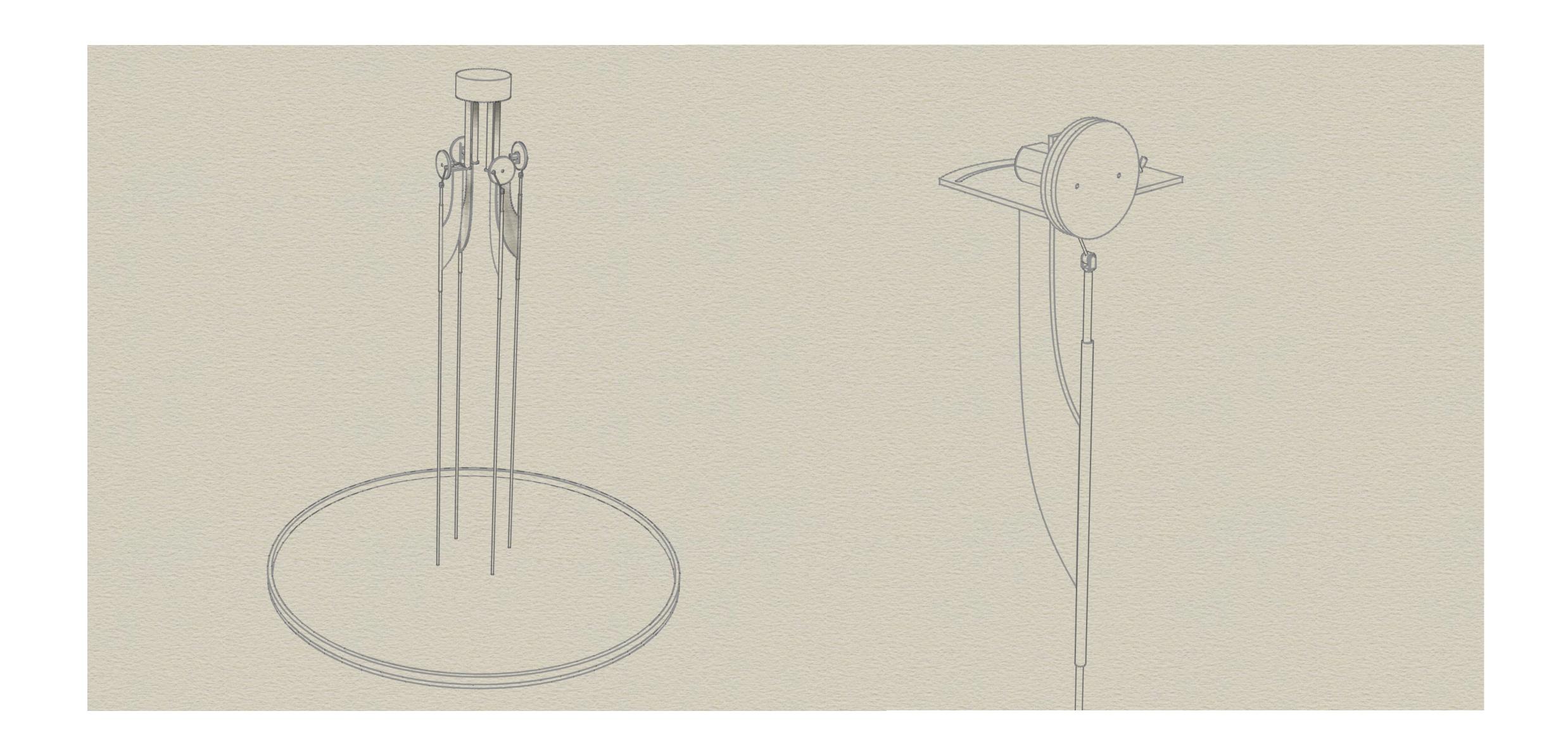
The key points are:

- there are no isolated entities (things, bodies, objects, etc) in space
- everything is entangled and intra-acts (including observer and object)
- our world is made up not of stuff that interacts, but of relations and intra-actions

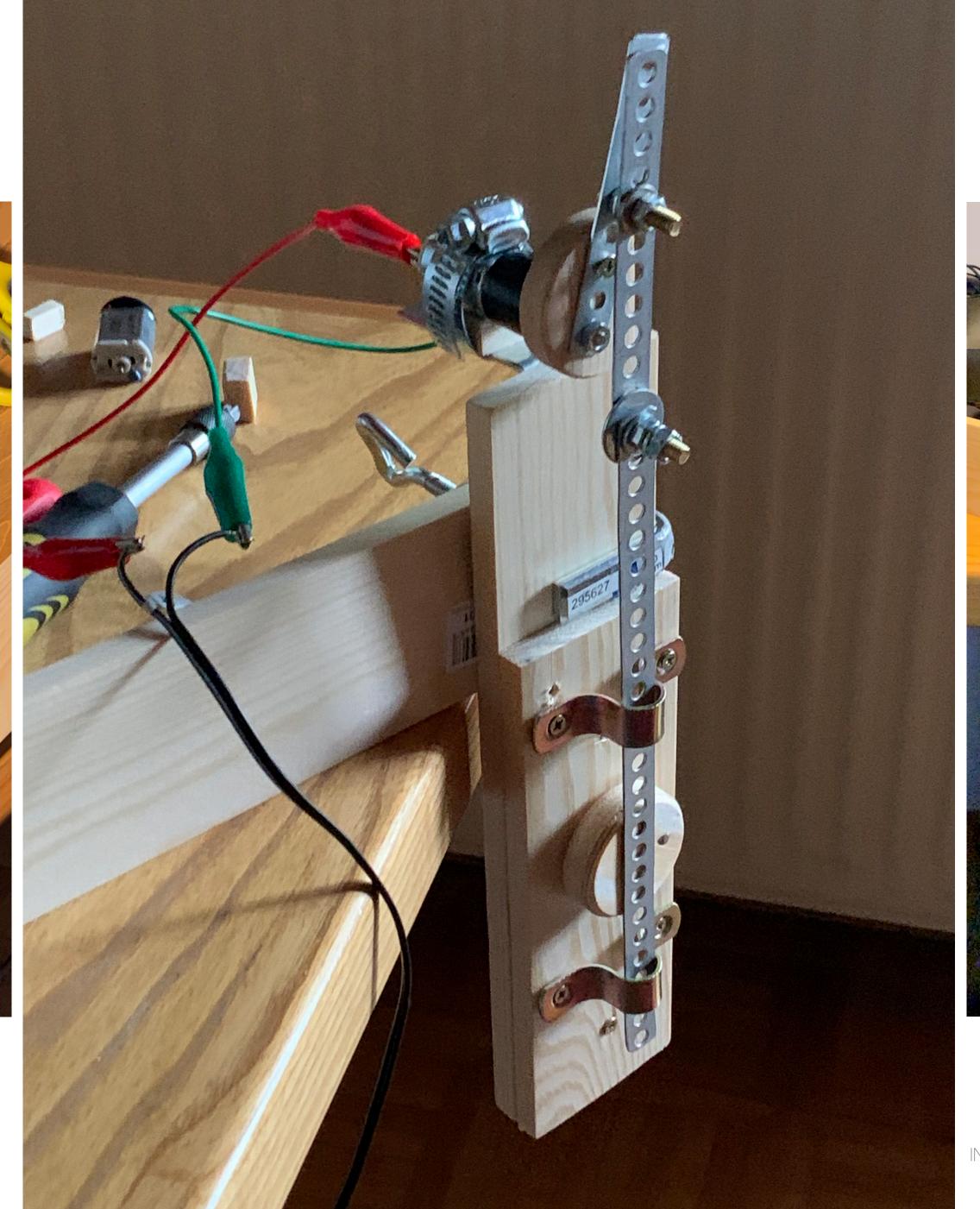
Diffraction is a phenomenon that is unique to wave behavior. Water waves, sound waves, light waves exhibit diffraction patterns.



my design





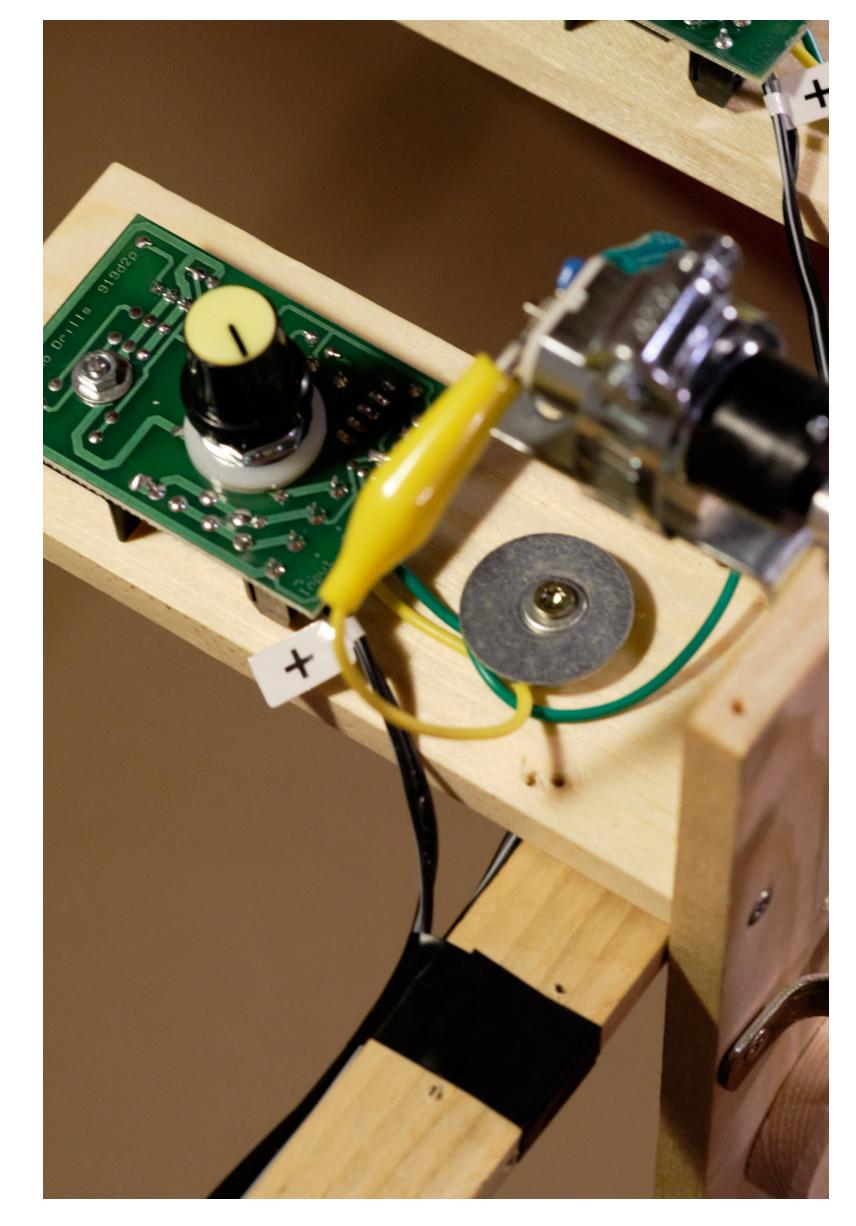


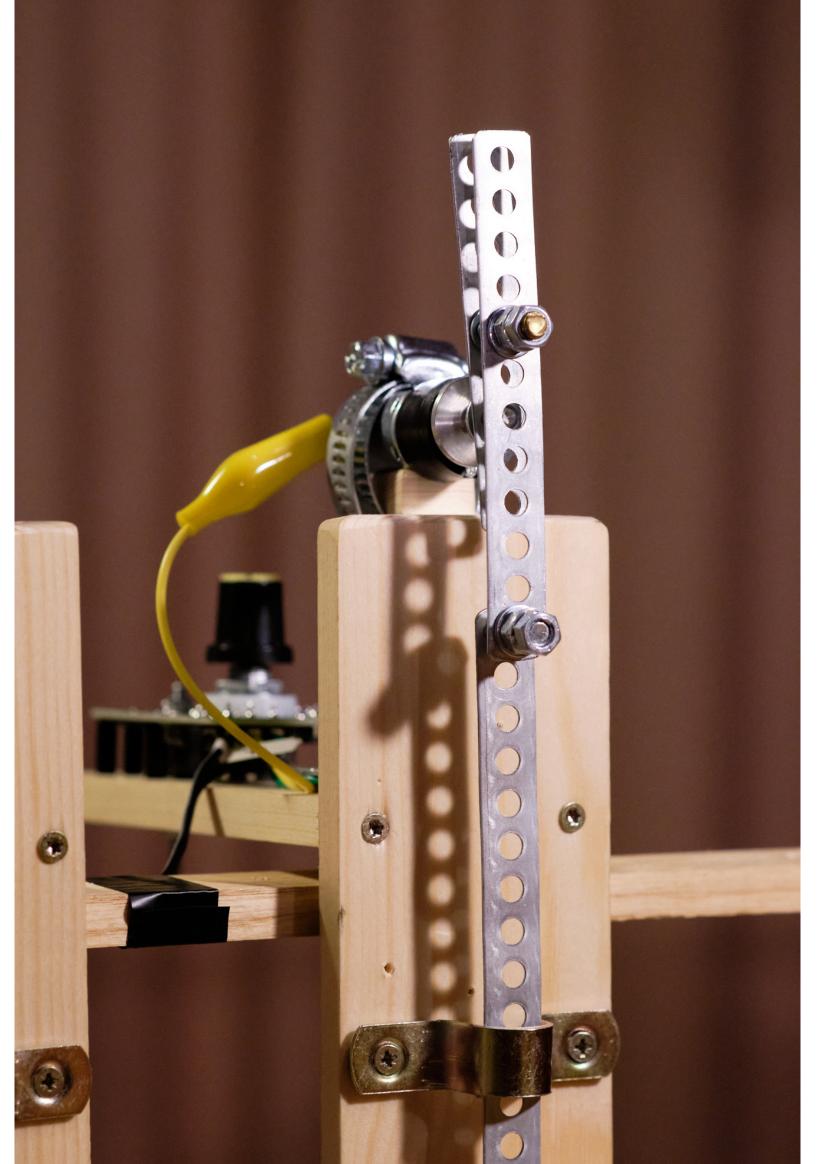


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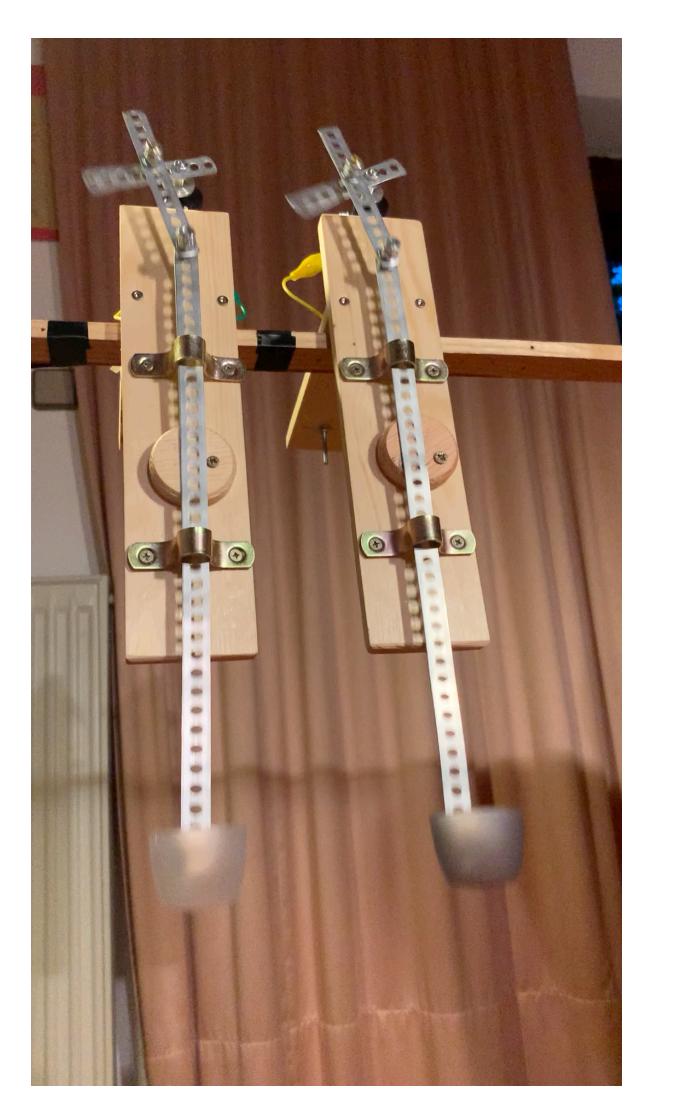
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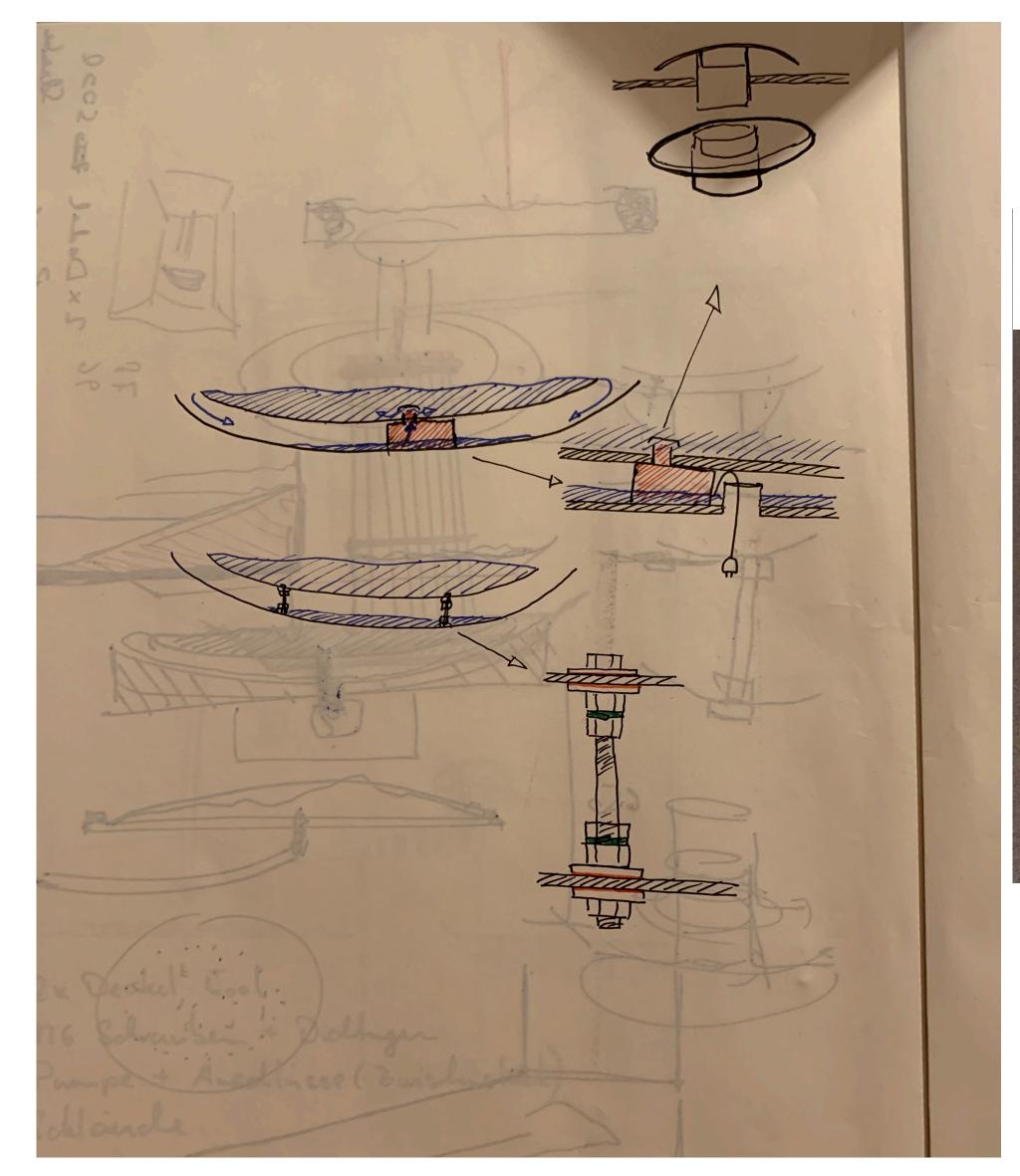




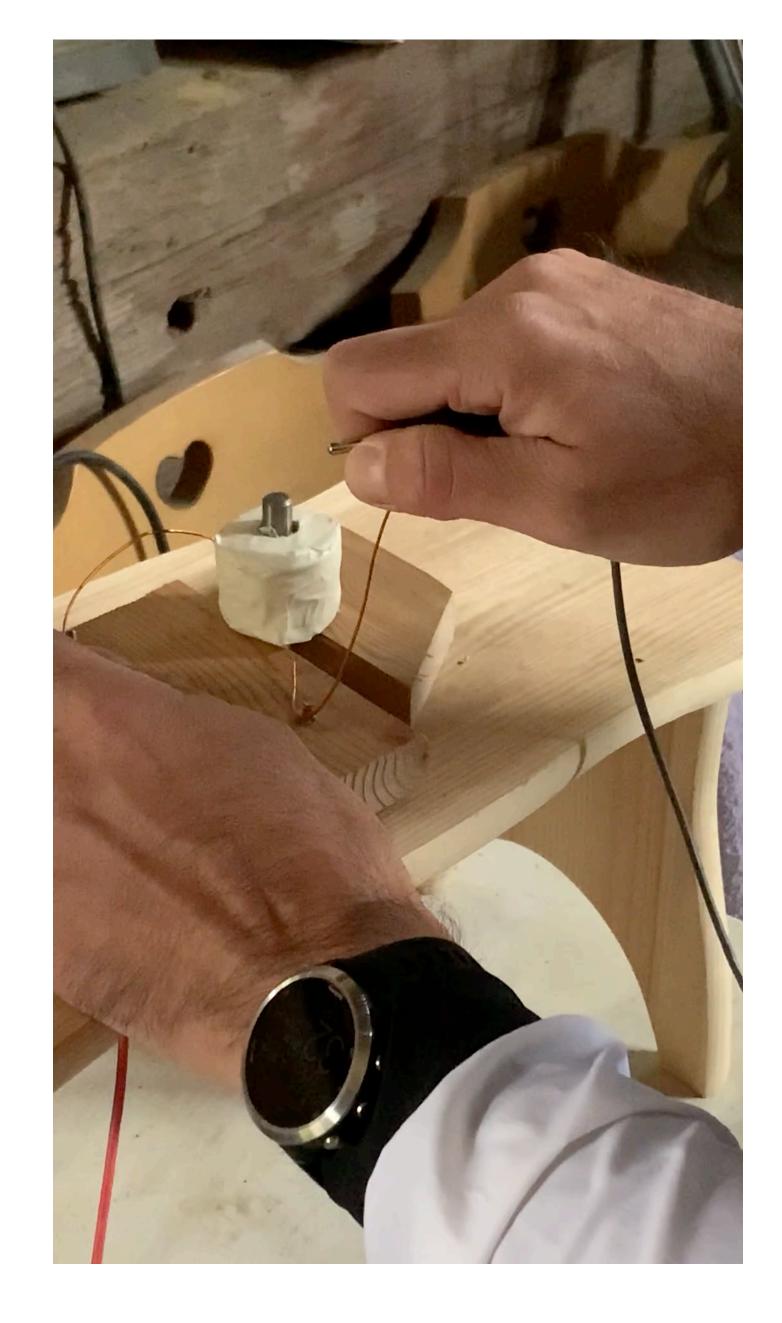




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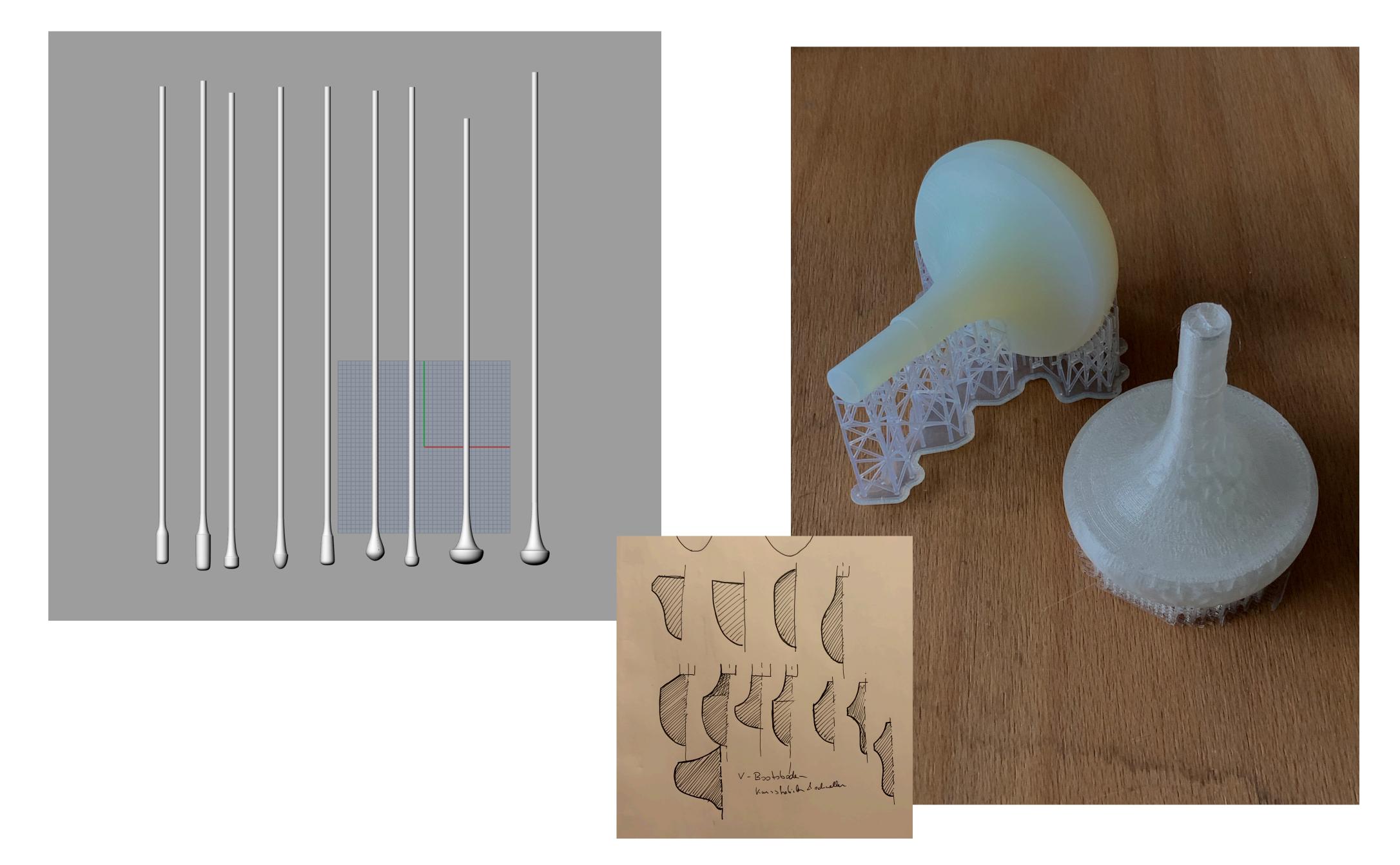


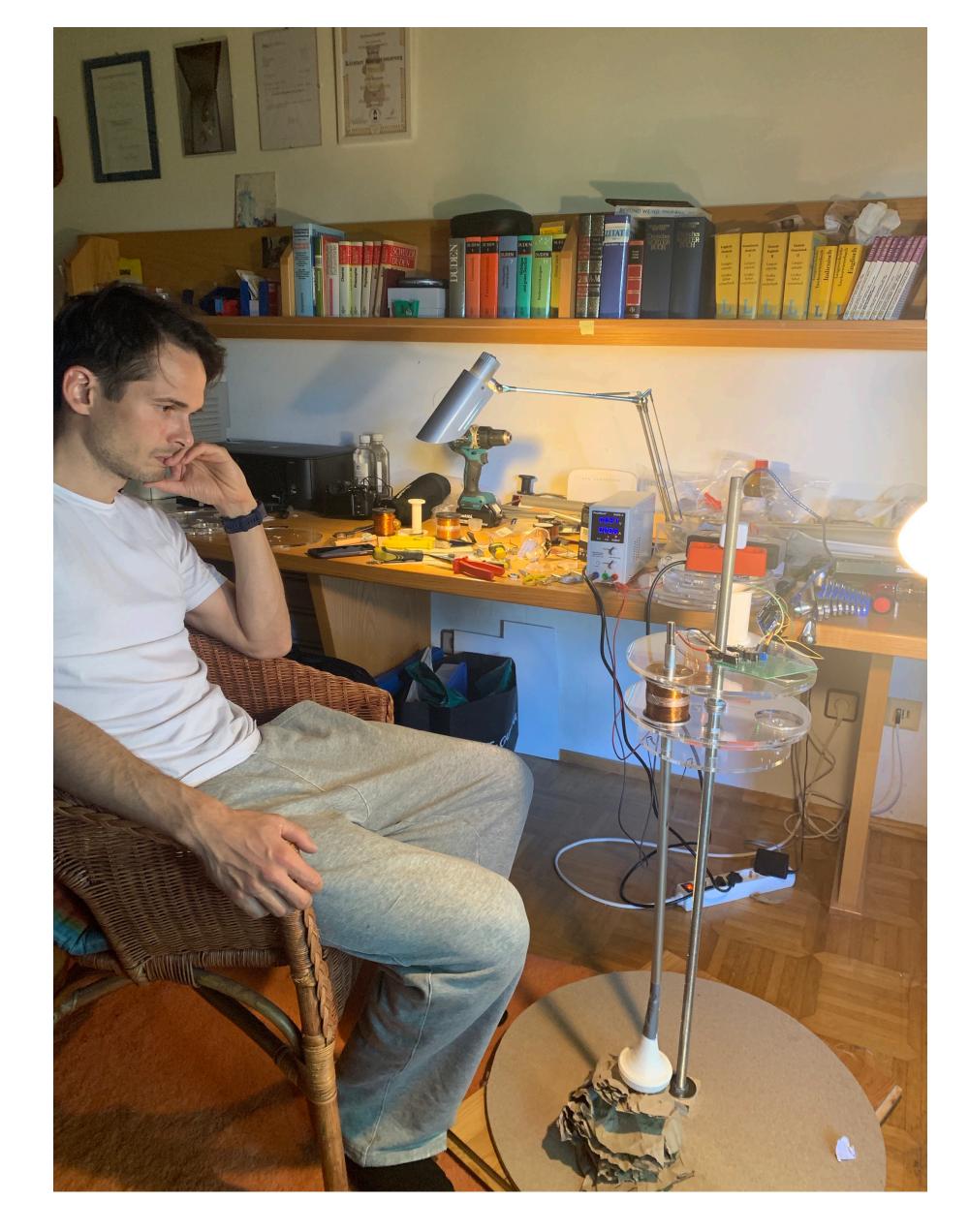




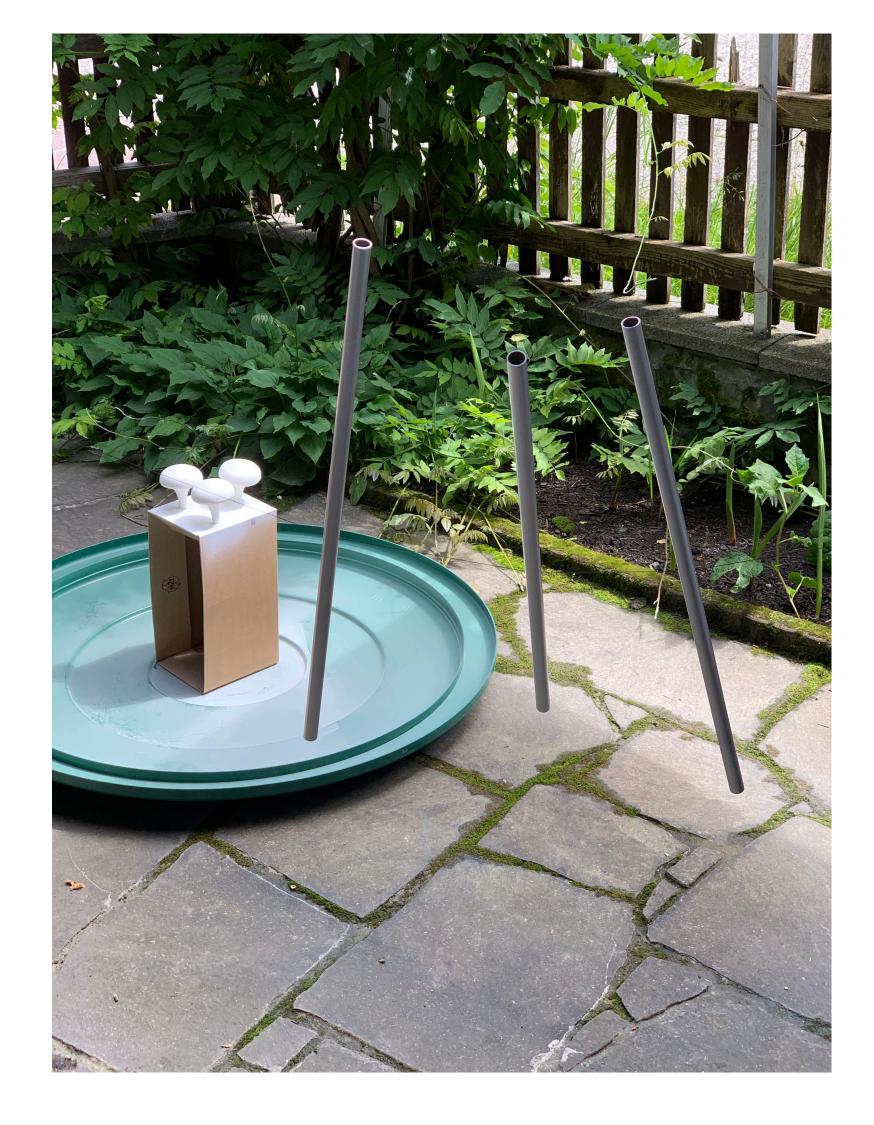




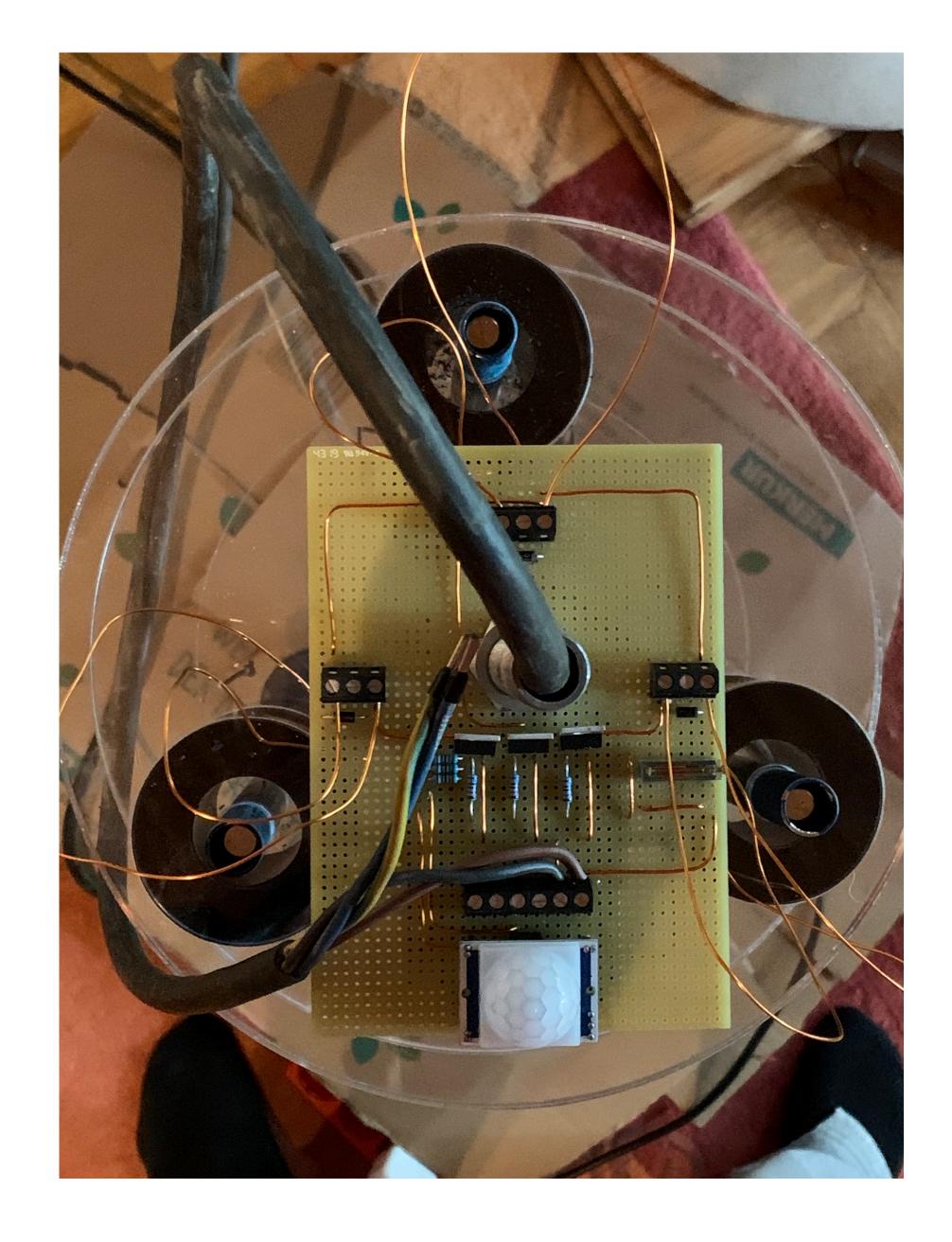








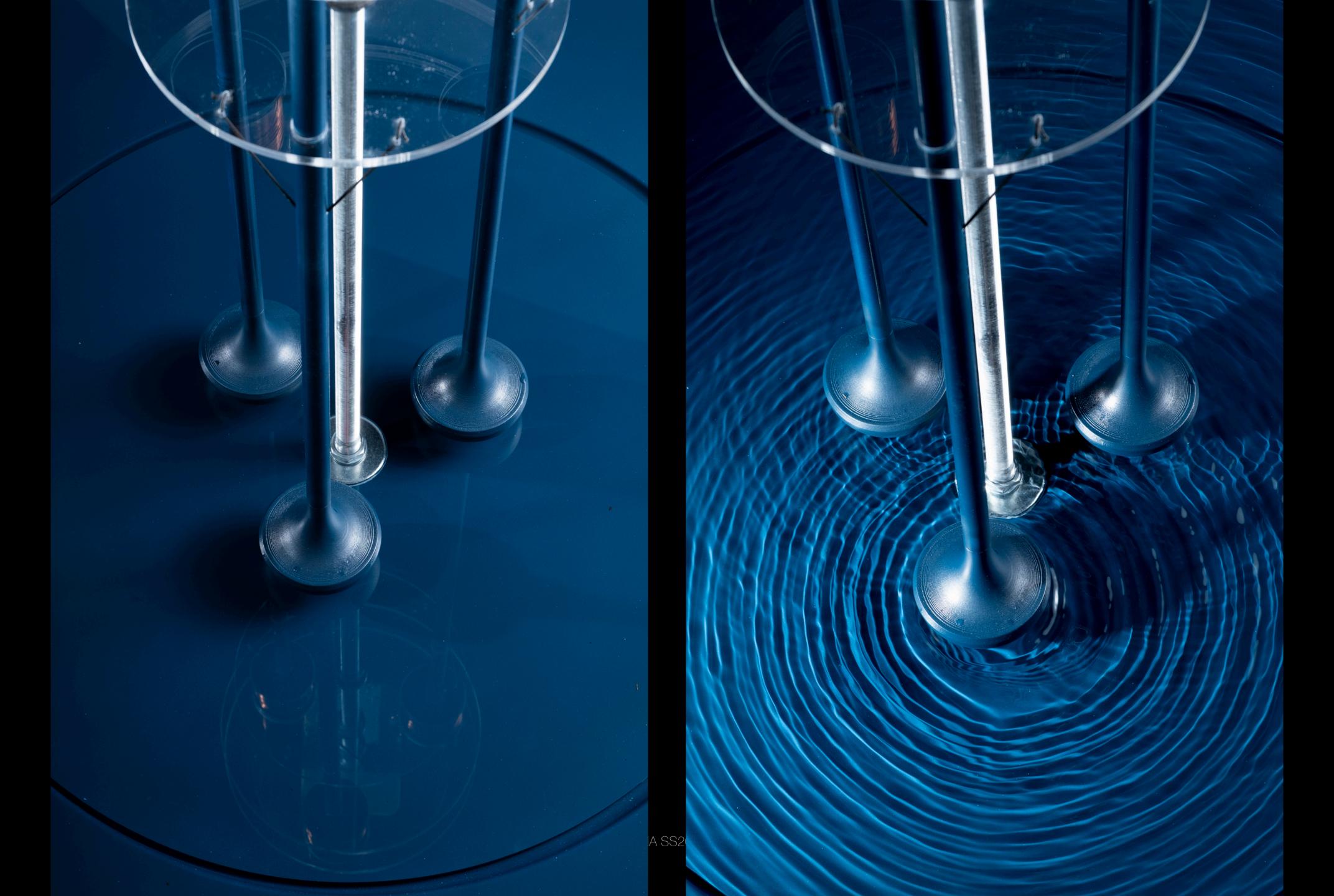


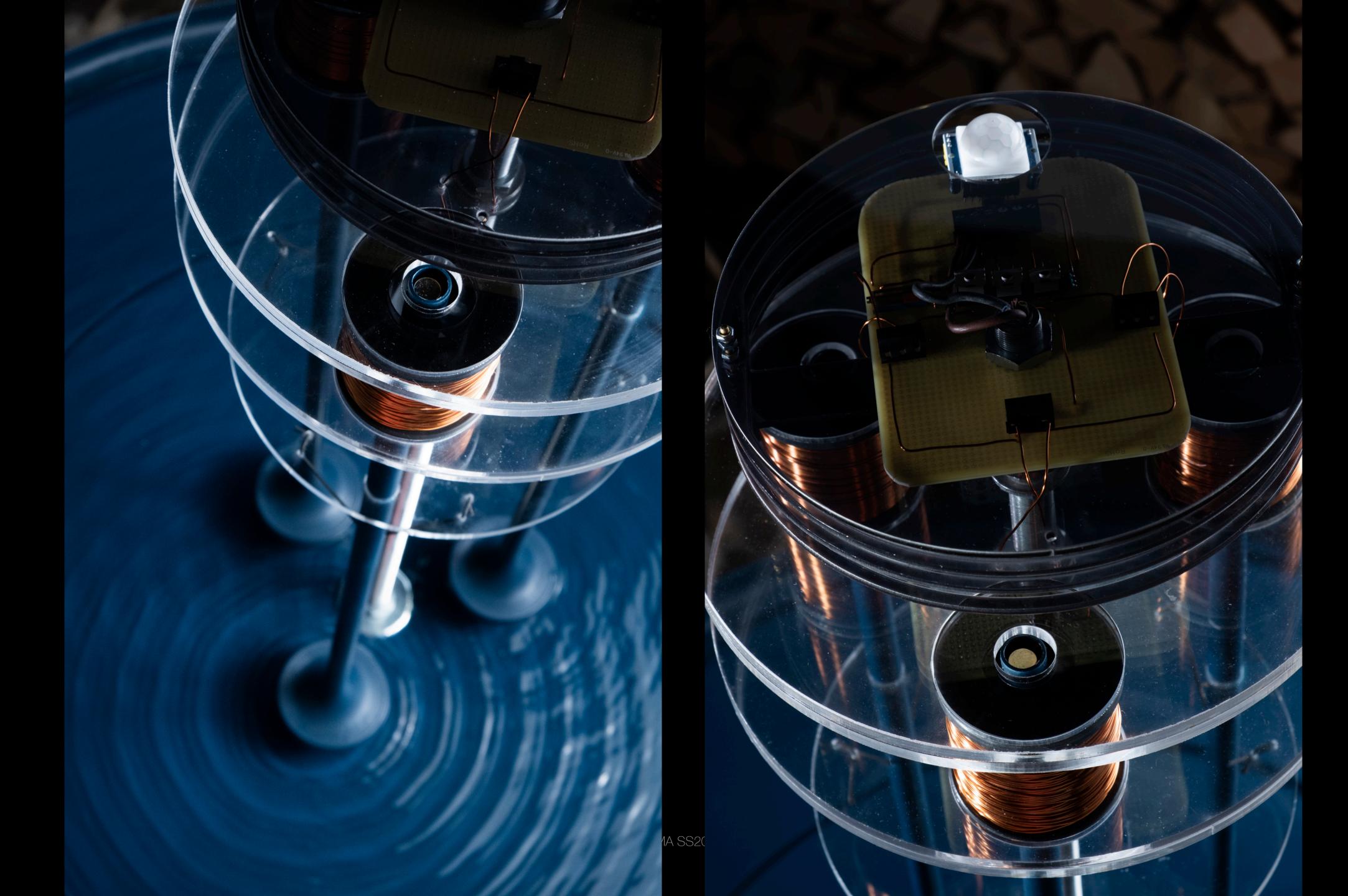




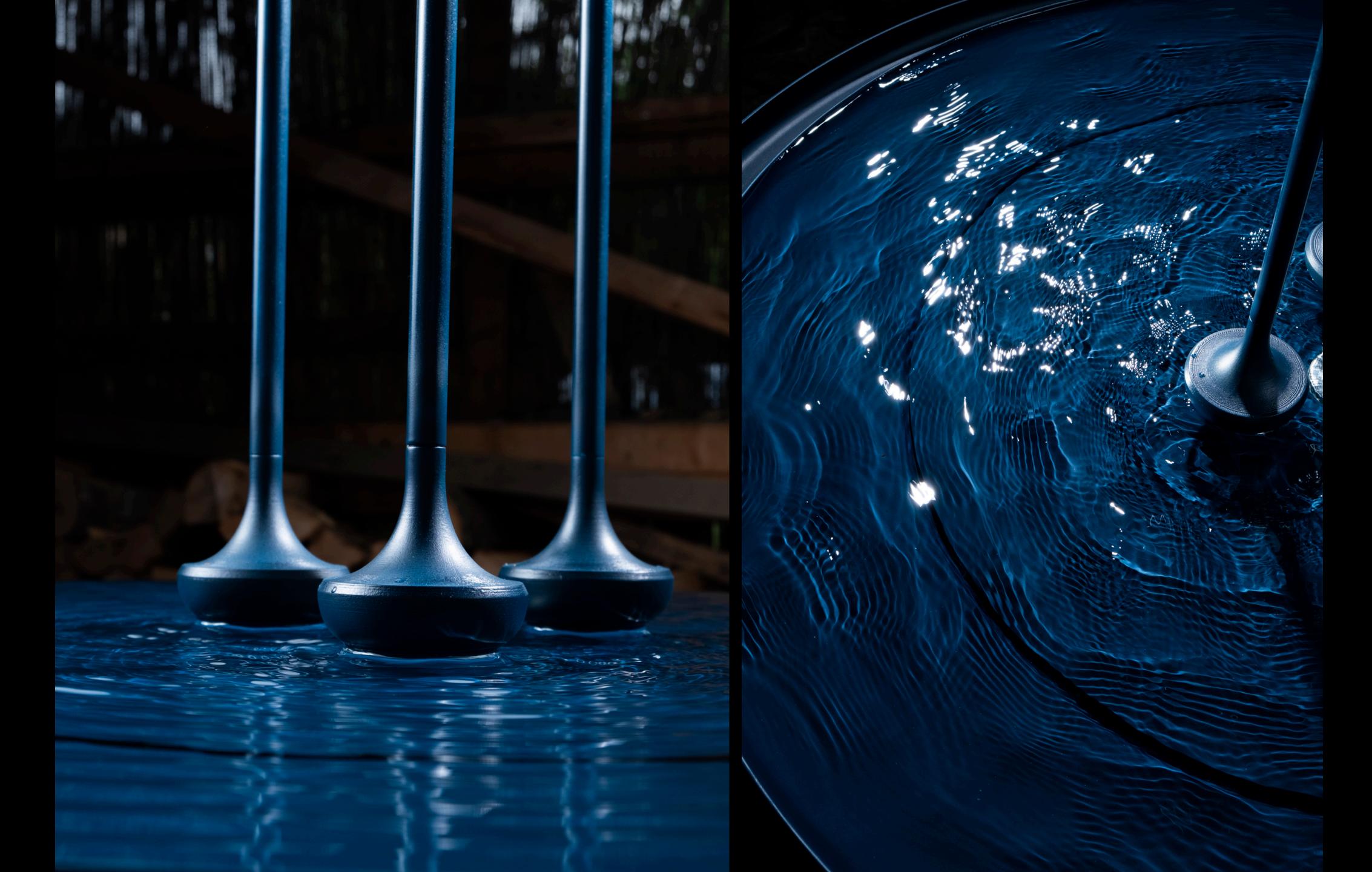








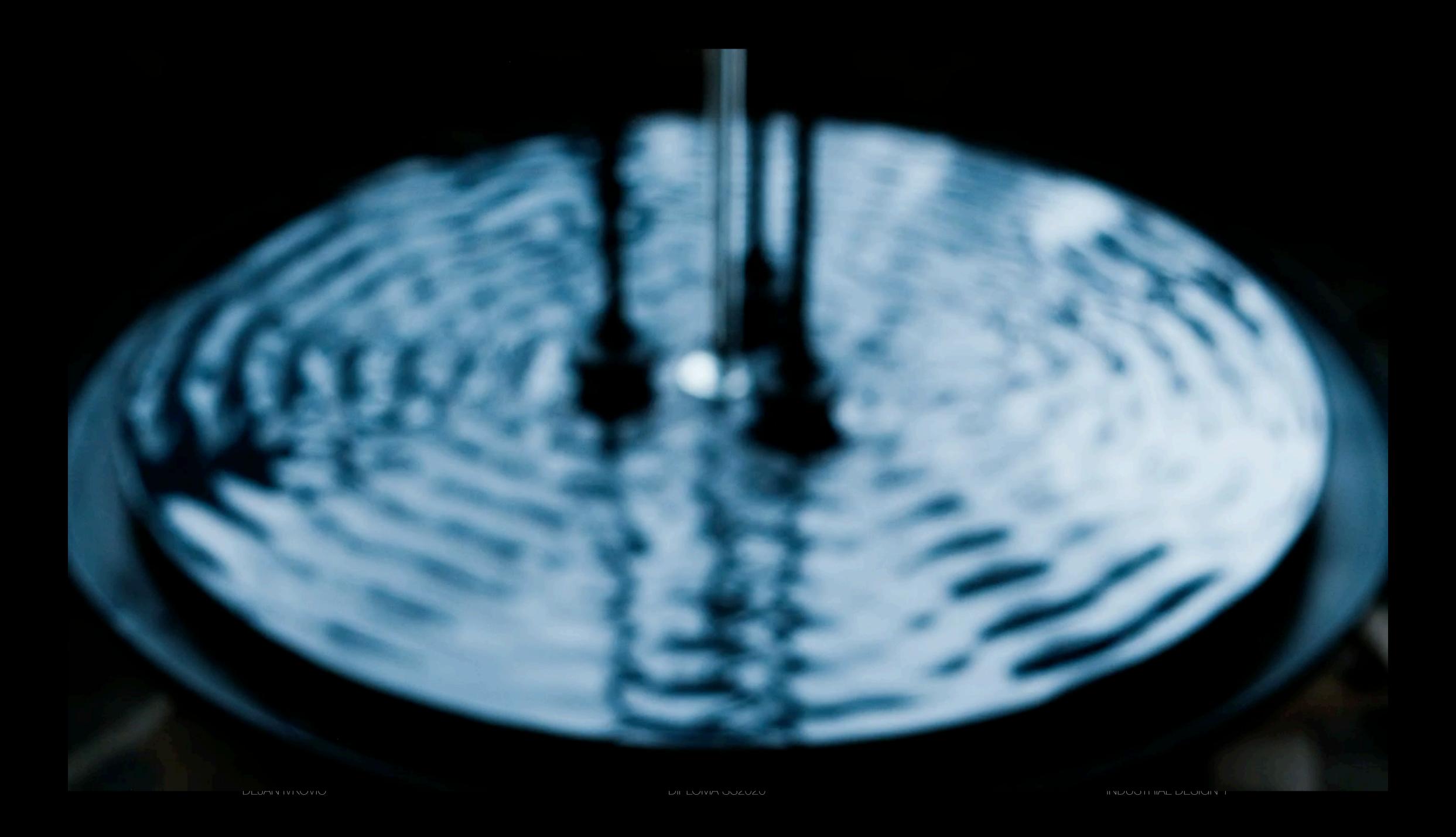








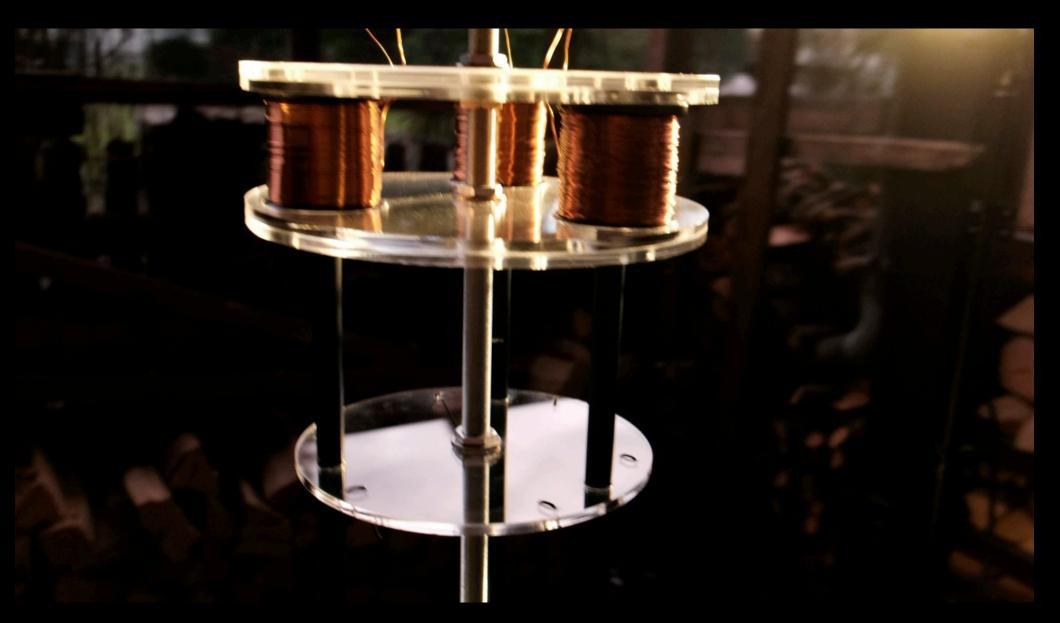


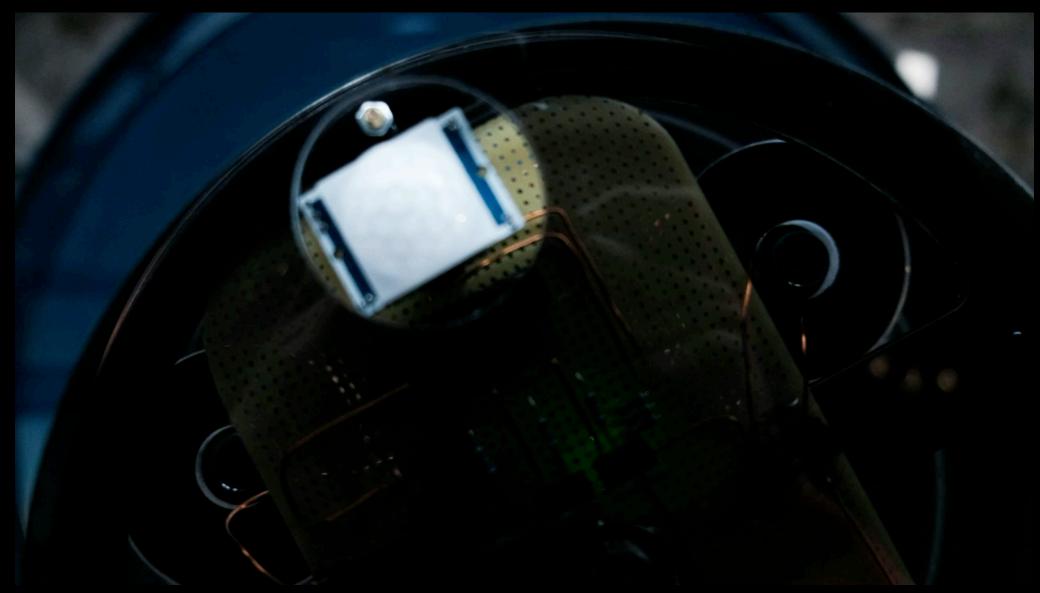












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