

C



Catrinel S.tudio

Catrinel Sabaciag's work straddles between product design, installation, and sculpture. The starting point of her work is often rooted in science and philosophy, whilst the making, often quite experimental, is focused on material exploration.

Catrinel's work is driven by her interests in perception & movement, whilst the themes she tackles most are time perception, entropy, light and the nature.

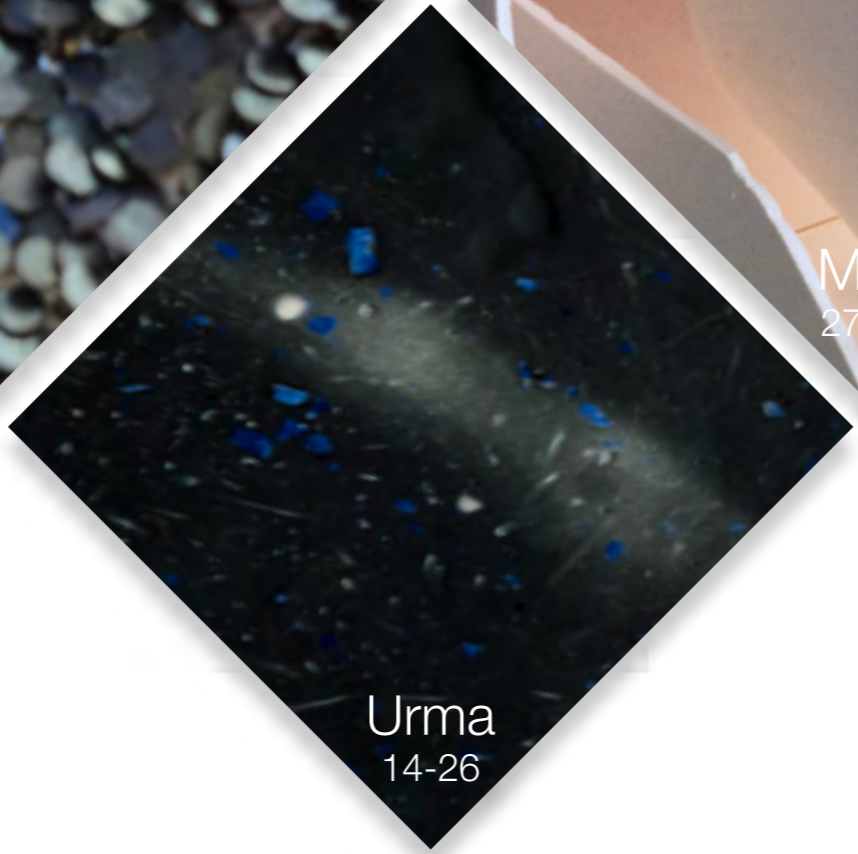
Through her interactive objects she designs experiences which challenge perception and bring to light the invisible forces that surround us in an engaging manner. This brings reality in a new light in which the ordinary becomes extraordinary.

In her process, she uses a mix of advanced manufacturing techniques such as laser cutting and classical hands-on ones such as casting. The objects often embody a scaffolding of technical components, which is used to mimic an organic/natural inspired phenomena.

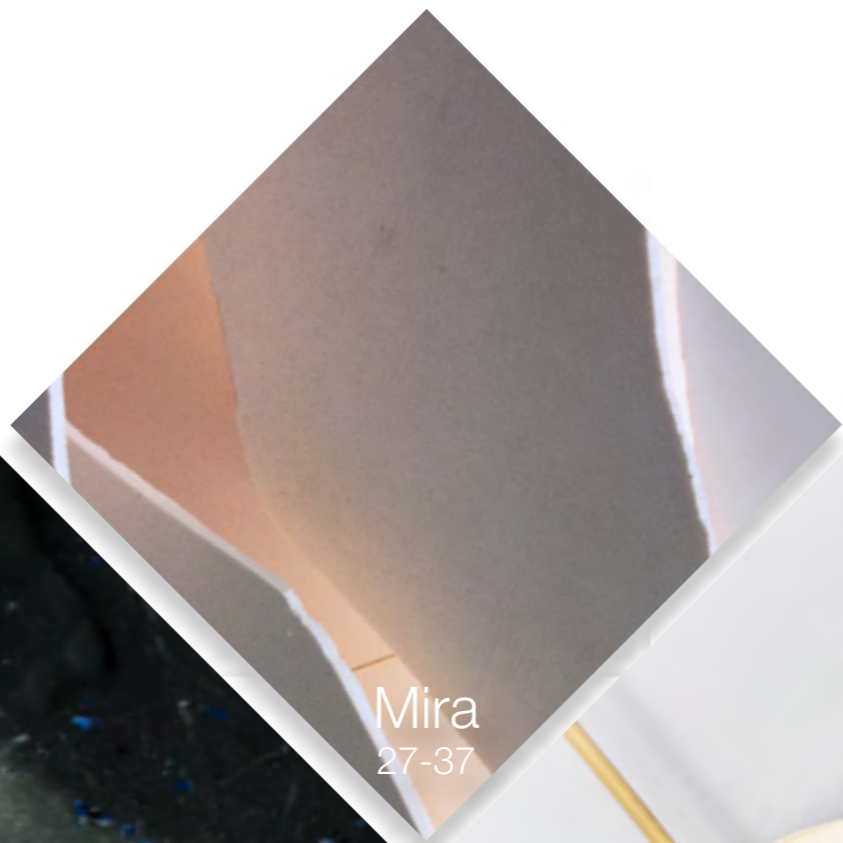
CONTENT



TACTIL
4-14



Urma
14-26



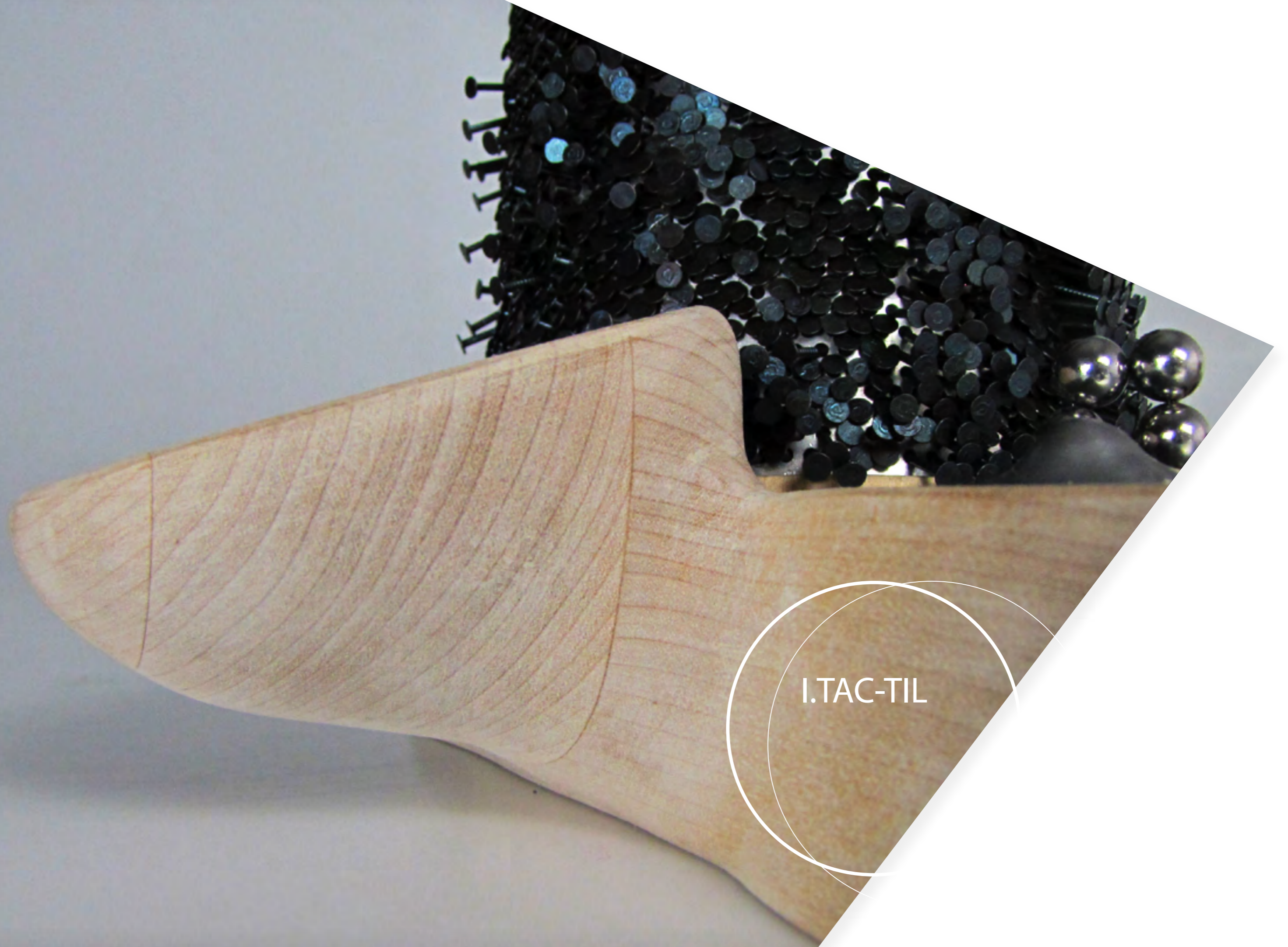
Mira
27-37



Timescapes
38-45



Morfoza
46-63



I.TAC-TIL

reSEARCH

Touch is a primordial sense which plays an essential role in experiencing and understanding the world around us. Haptics is used in a variety of stress relief practices such as sand-play, massage or fidgeting.

However, in today's „civilized“ world the sense of touch is considered to an extant primitive, whilst being suppressed by the more noble sense of vision. Today's hegemony of vision has an impact on how we experience the man-made world around us. Stimulating all the senses makes an experience more alive and more inspiring, that's one of the reasons why a walk in nature, for instance, is so fulfilling.

Philosophers such as Jacques Derrida, Martin Heidegger and Michel Foucault have pondered on the negative effects our vision-driven modern world.

As part of my research into haptics, I came across a wide range of artist, scientists, psychologists and designers who have explored the links between haptics self-regulation and creativity.

„All the senses including vision are extensions of the tactile sense, all sensory ex-

periences are modes of touching and thus relating to tactility.....The view of Ashley Montagu, the anthropologist, based on medical evidence, confirms the primacy of the haptic realm:

The skin is the oldest and the most sensitive of our organs, our first medium of communication, and our most efficient protector. Touch is the parent of our eyes, mouth and ears. Touch is the sensory mode that integrates the experience of the world with that of ourselves.“ J. Pallasmaa

Fidgeting, the act fiddling with objects, or one's own body, is one of numerous tactile stress-relief

behaviours. Although fidgeting is sometimes stigmatized and considered to be an urge supposed to be put to rest, new research proves that it is actually beneficial for our mental and physical health.

Research has proven that fidgeting is actually

embedded and integral act of computer interaction. Furthermore, this mindless activity is a strong aid in problem solving and increases creativity.

Starting •

Touch is the sense of closeness and intimacy, however, in today's world it is to an extent,

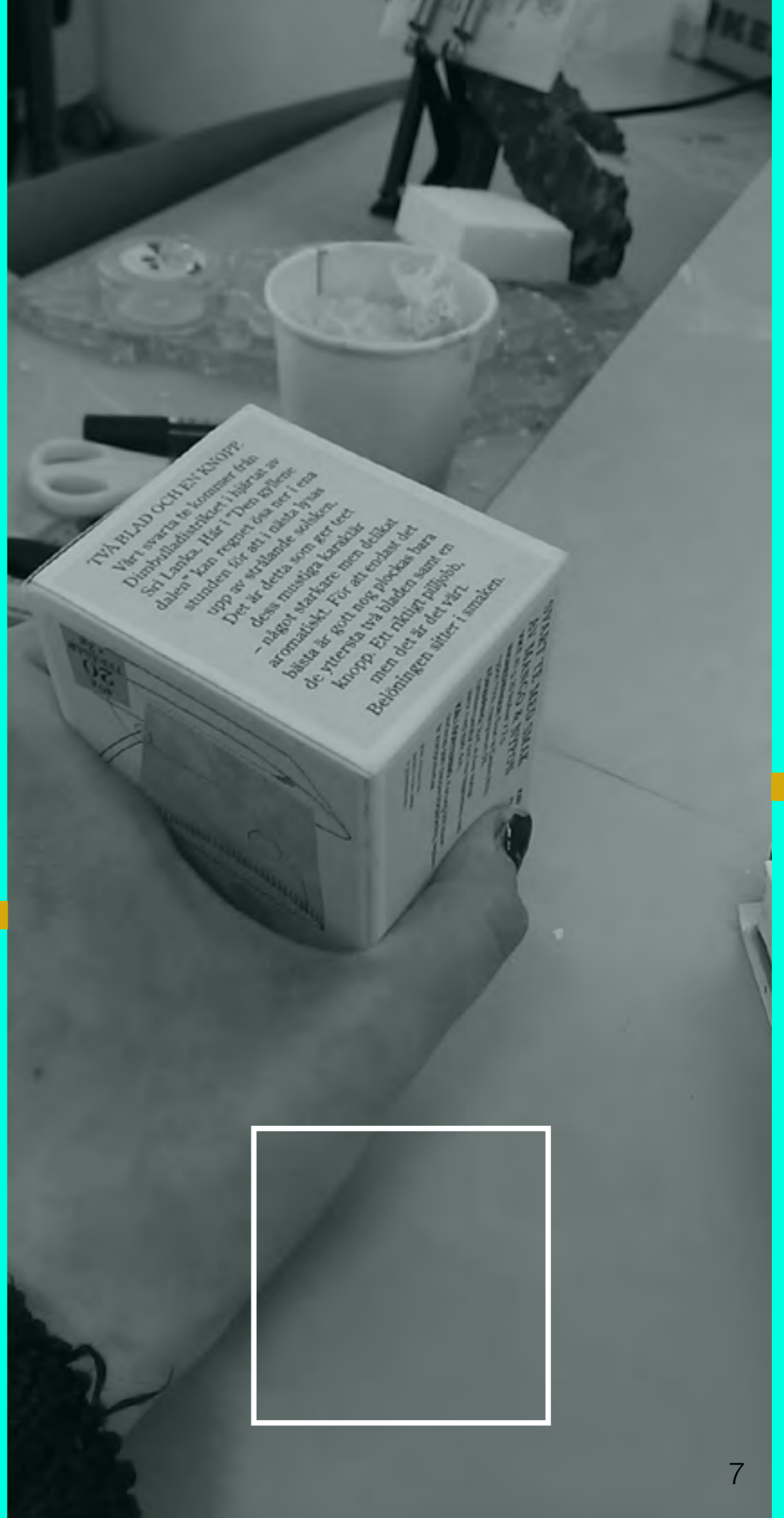
considered an almost socially unacceptable socially unacceptable primitive sense.

I decided to question throughout my project the hegemony of vision in our modern world and investigate how can designers engage the sense of touch via daily objects. Through playfully-tactile interactions, the product aims to delight the sense of touch, whilst relieving stress and increasing creativity.

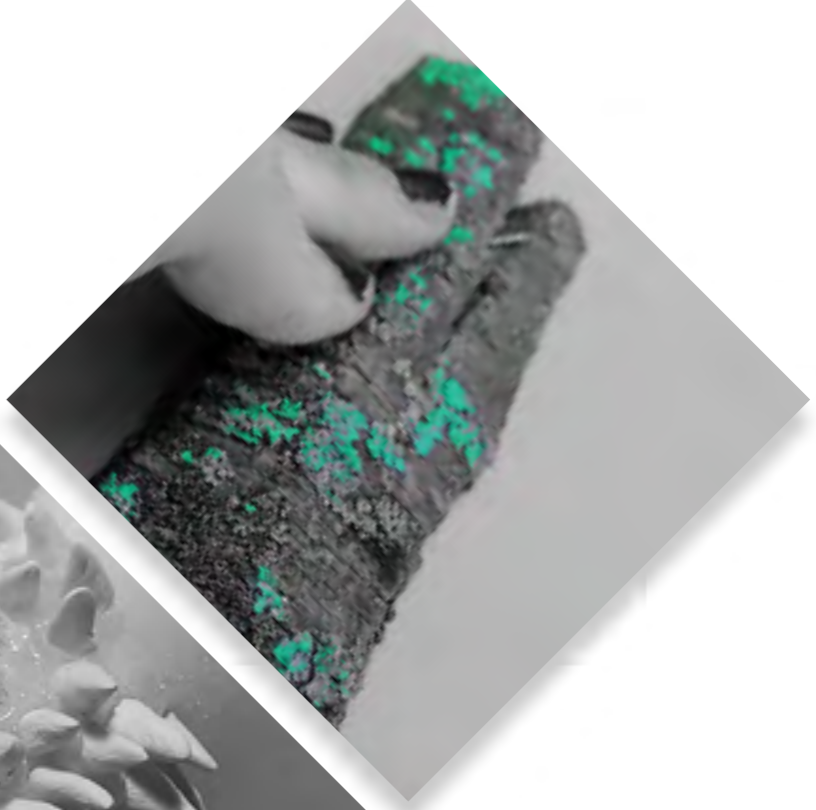
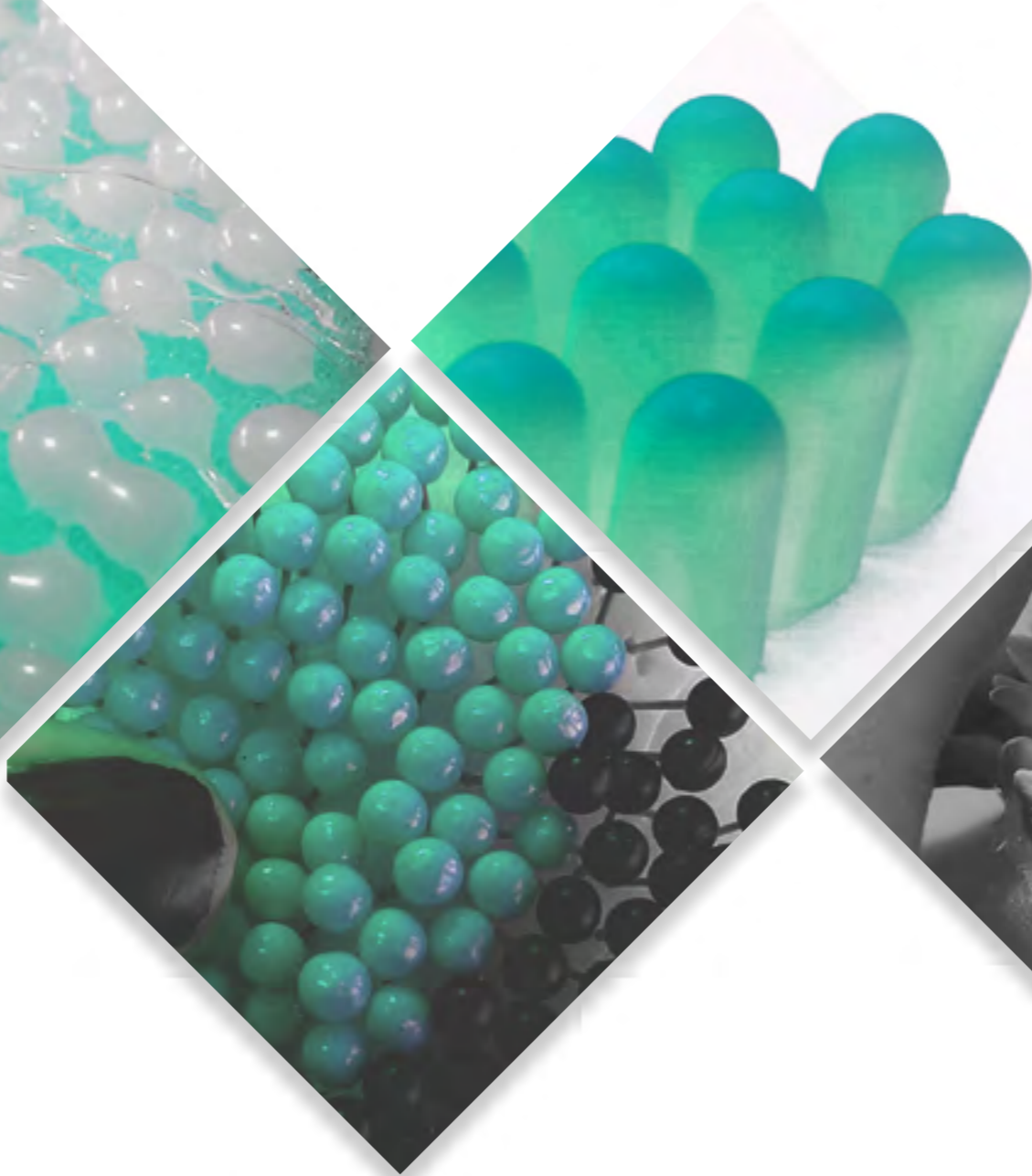


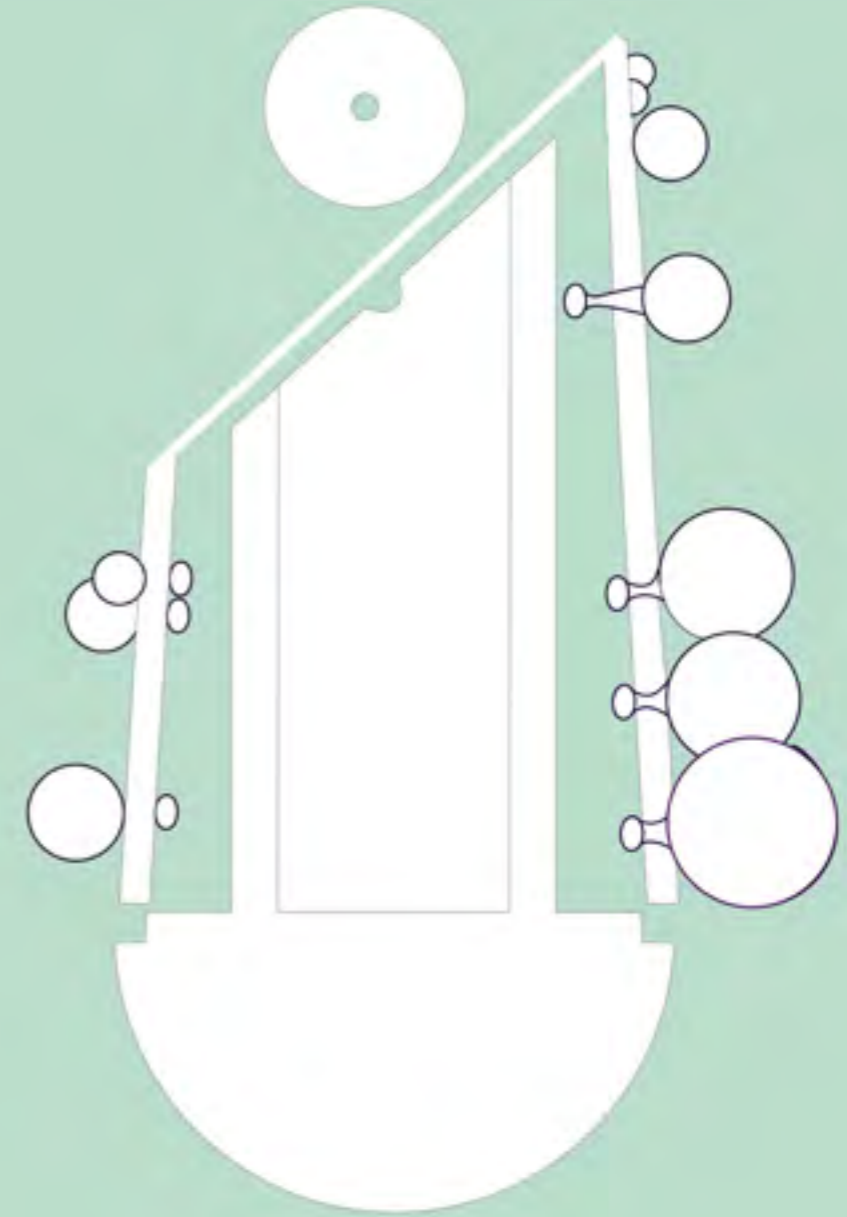
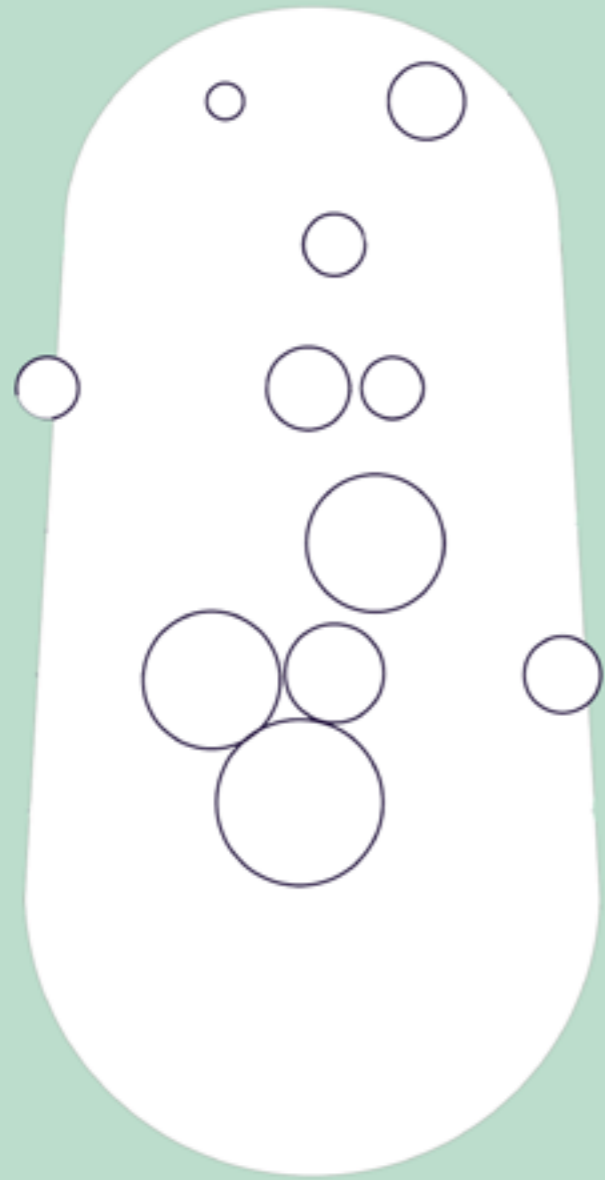
Brief

Design a family of desk accesories designed to reduce anxiety&increase creativity throught fidgeting and tactile play



tactile experiments

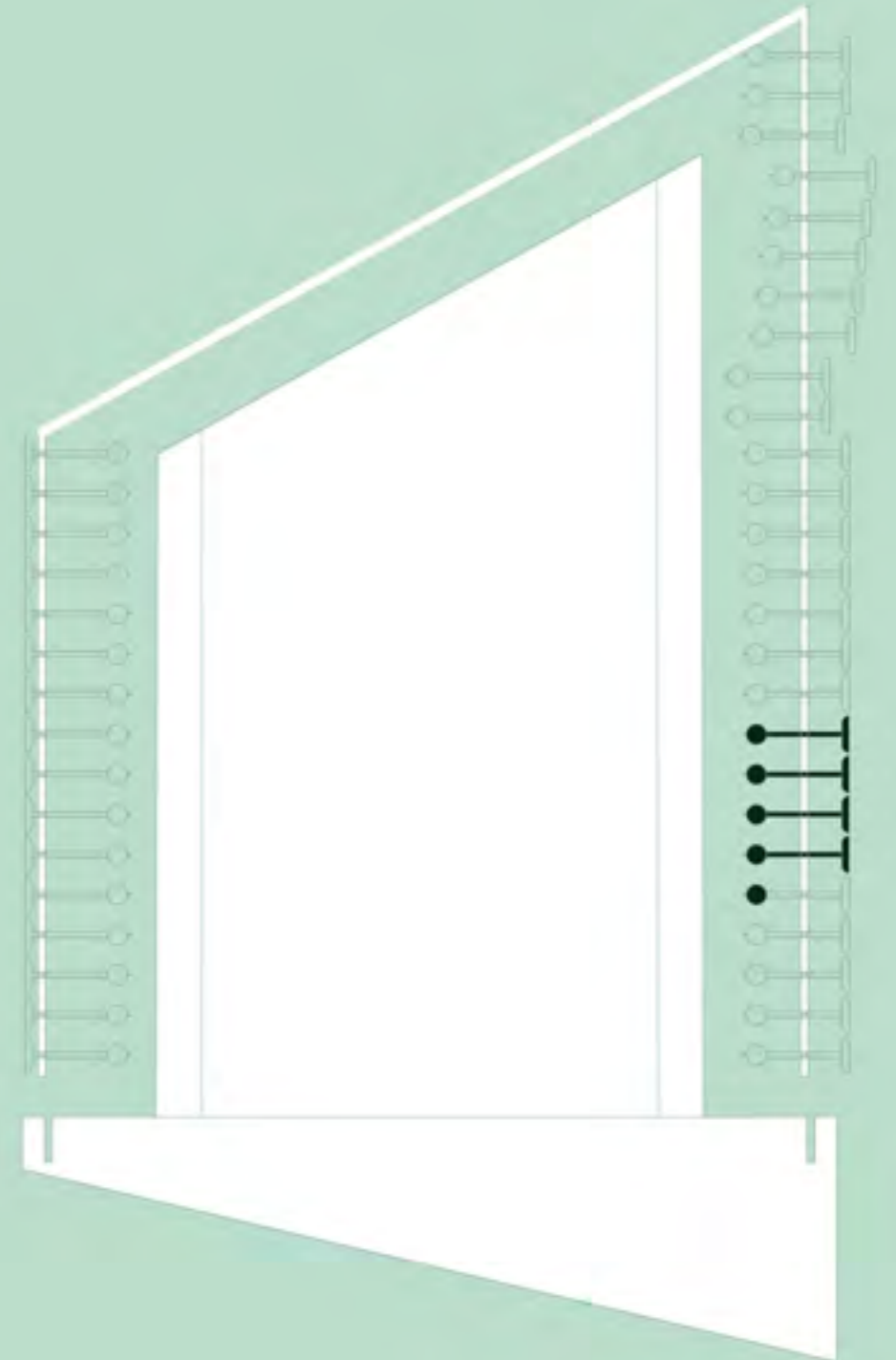




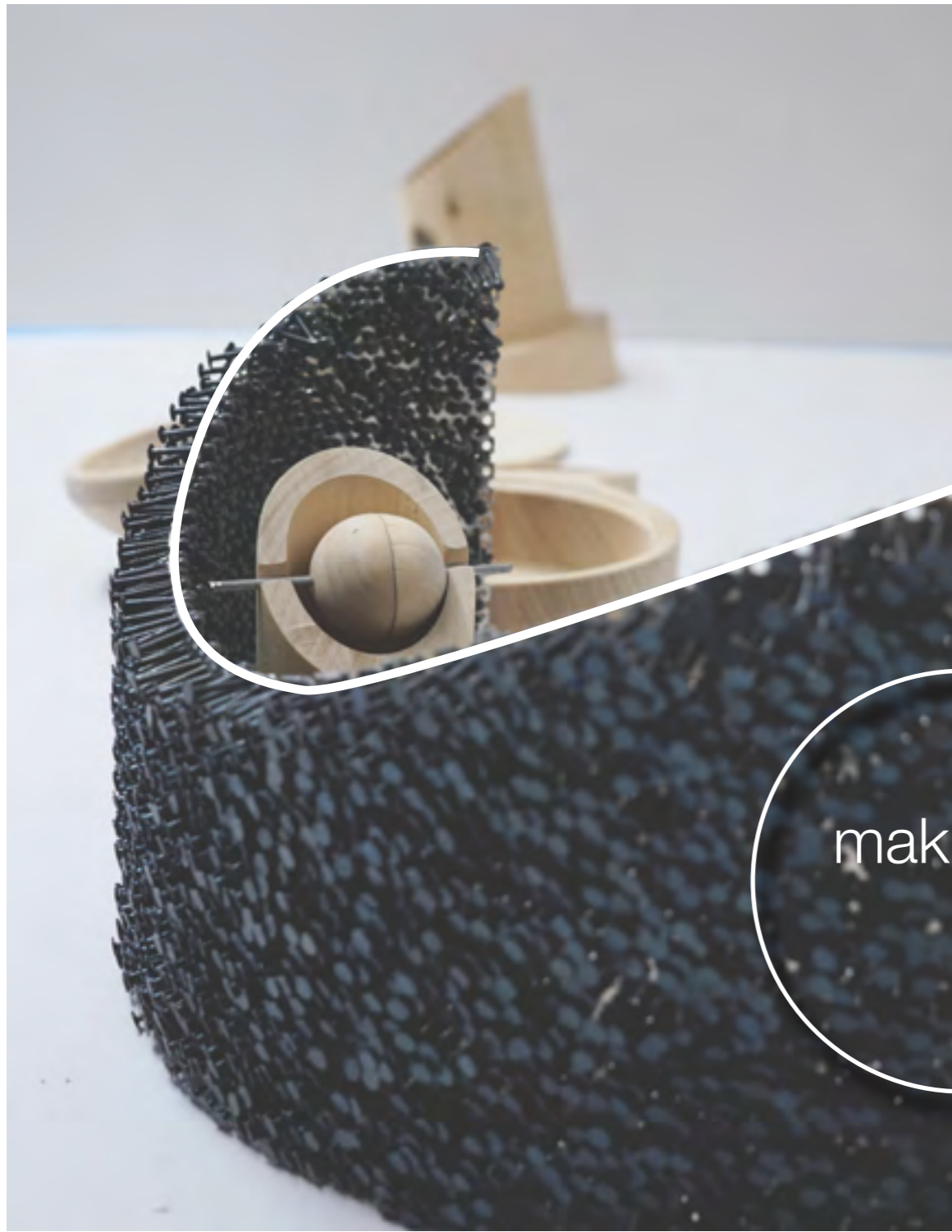
soft texture



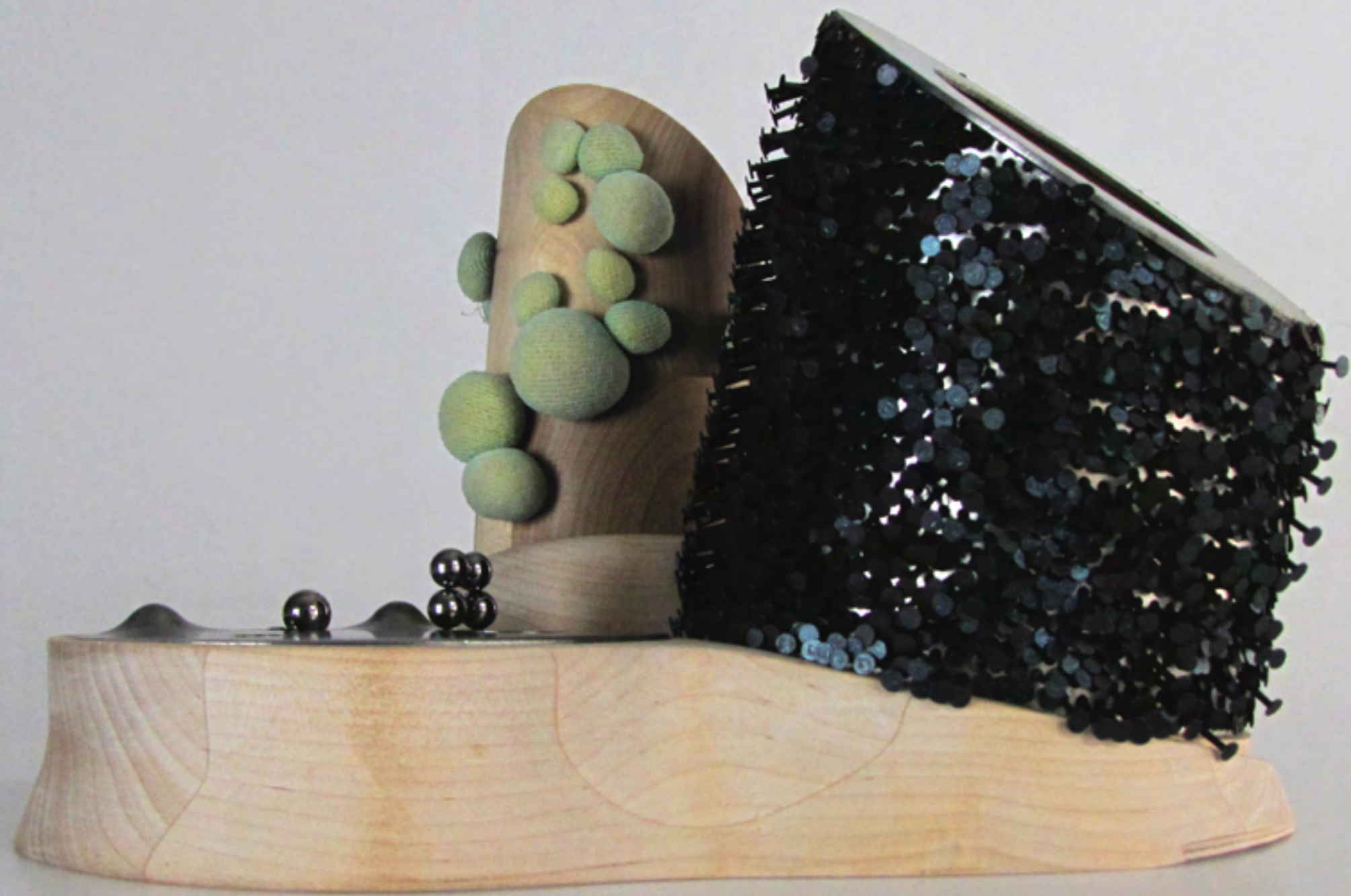
Card holder
magnetic texture



Pen holder
fish scale texture

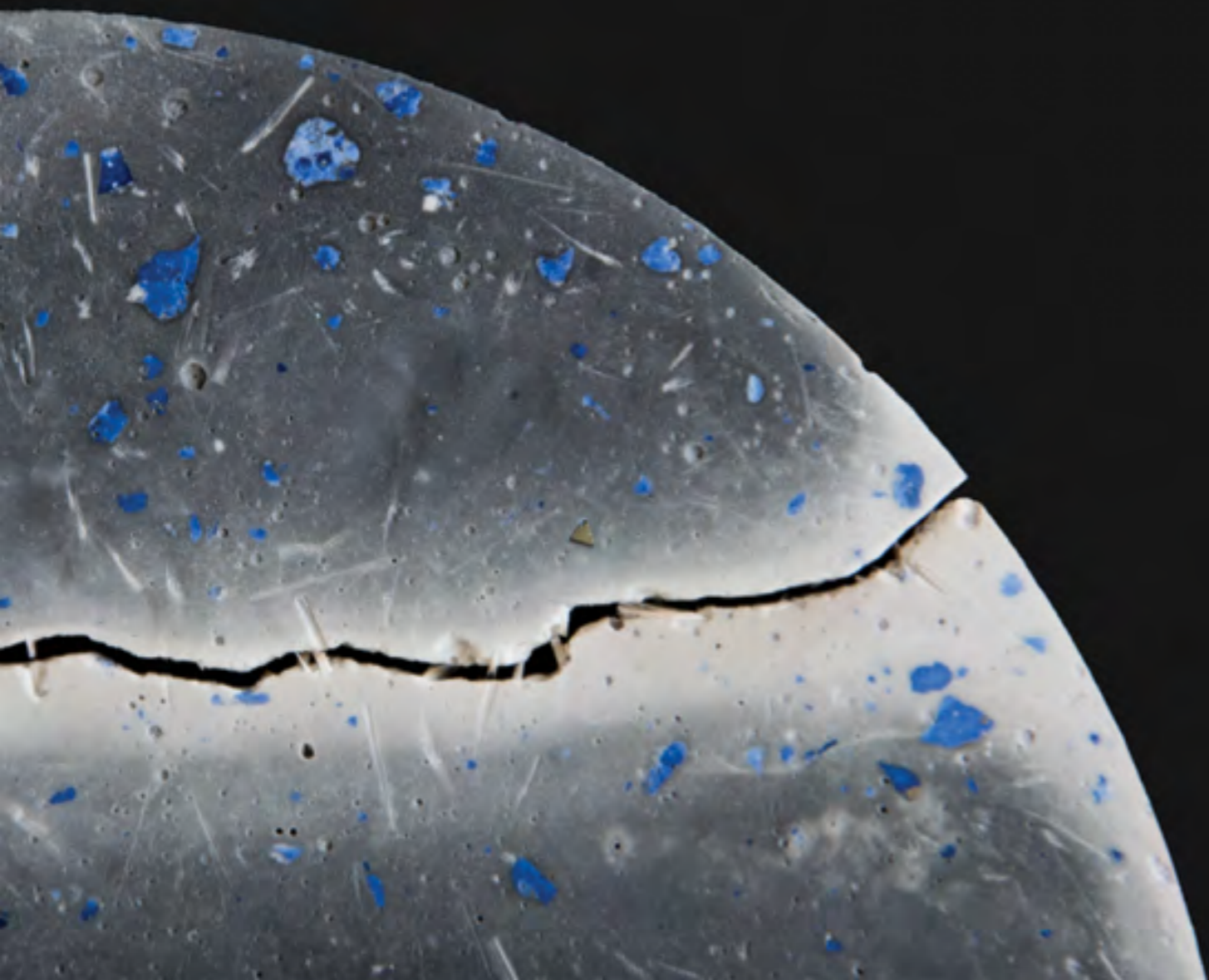


making of









IV.THISorder Collection
URMA CLOCK

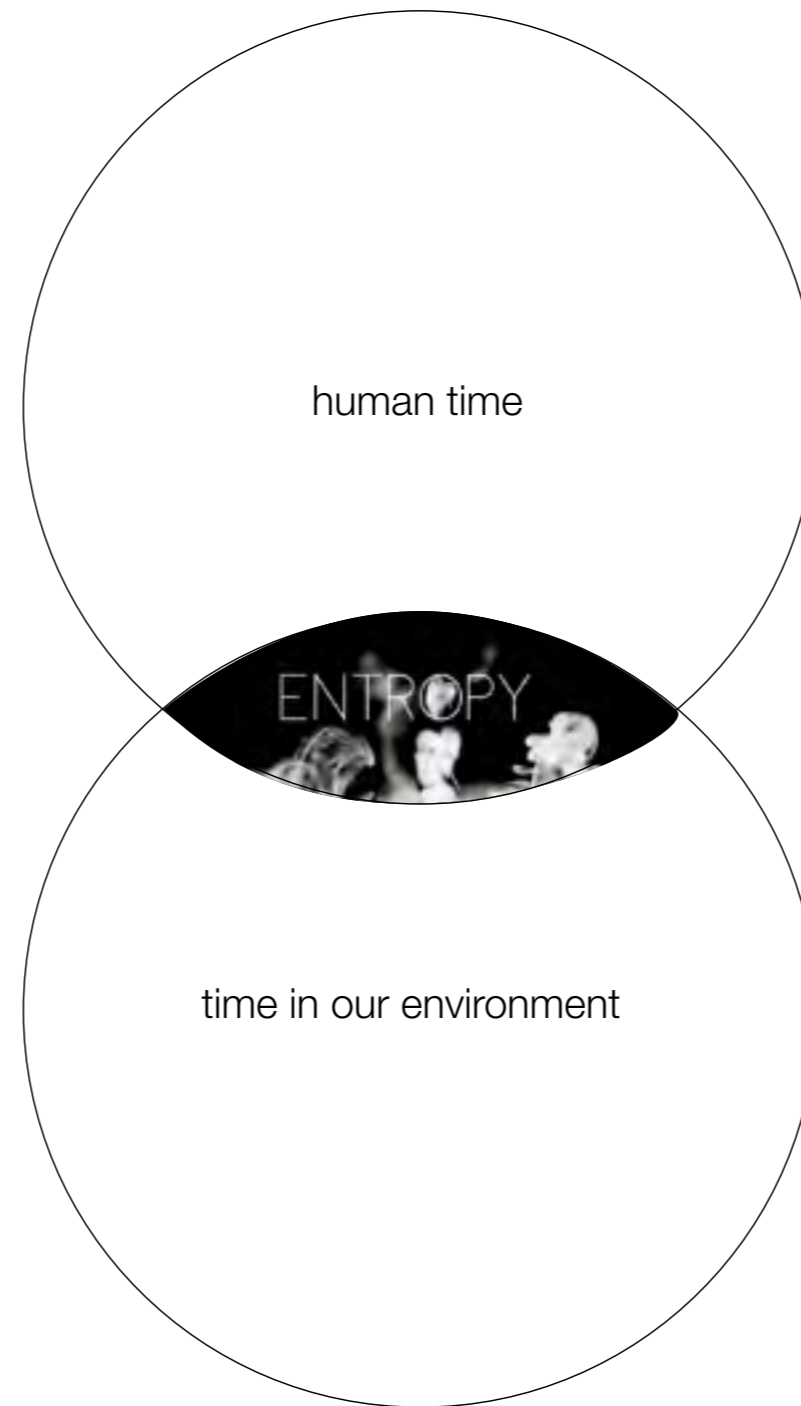


Collection
CONCEPT

In an age in which time is measured more accurately than ever before (eg. using the new German atomic clock) and seems to be often a barometer of productivity and money, it feels like we are overlooking its essentially organic quality. My aim is to question our perception of time by creating objects that reflect a more empathic and natural time.

„It is strangely empowering to think that the very phenomenon depicted as the unforgiving dictator of life is something we might be able to shape and benefit from.“
Claudia Hammond

THISorder is a series of objects
that embodies entropy through
materialised time based
installations



Entropy is the only quantity in the physical sciences (apart from certain rare interactions in particle physics) that requires a particular direction for time. As one goes "forward" in time, the entropy of a system can increase, but not decrease. Hence, from one perspective, entropy measurement is a way of distinguishing the past from the future.

A measure of disorder: the higher the entropy the greater the disorder.

Reversed entropy

In theory, no physical laws are broken in reversed entropy, however, there is no proof that matter can undergo such a process. This reflects the asymmetry of time.

Polyrhythmia

the existence of multiple tempos is an aspect of time. Different organisms and environments live on completely different time scales and pace. However, we are so caught up in our daily rhythm of life that we often forget to consider all the other timescapes in our natural environment. In order to broaden our understanding of time rhythms I started investigating the one element that all systems are subjected to : TIME
ENTROPY



Most clocks display time as a single dot on a grid, however, my aim was to design a timekeeper that depicts time as continuum, thus the traces of the past as well as the boundary between present and future are visible. This alternative, integrated way of telling time is found in several natural phenomena such as moon phases, and timepieces such as sundials.



Urma is designed to resemble a mineral formation. Mimicking Lapis Lazuli and granite were core ideas of the material exploration process. I choose to work monochrome because the transition from black to white has a natural aesthetic and relates best to organic ways of telling time such as light and shadow (sundial) and the overarching theme of entropy.

Aesthetics & Behaviour

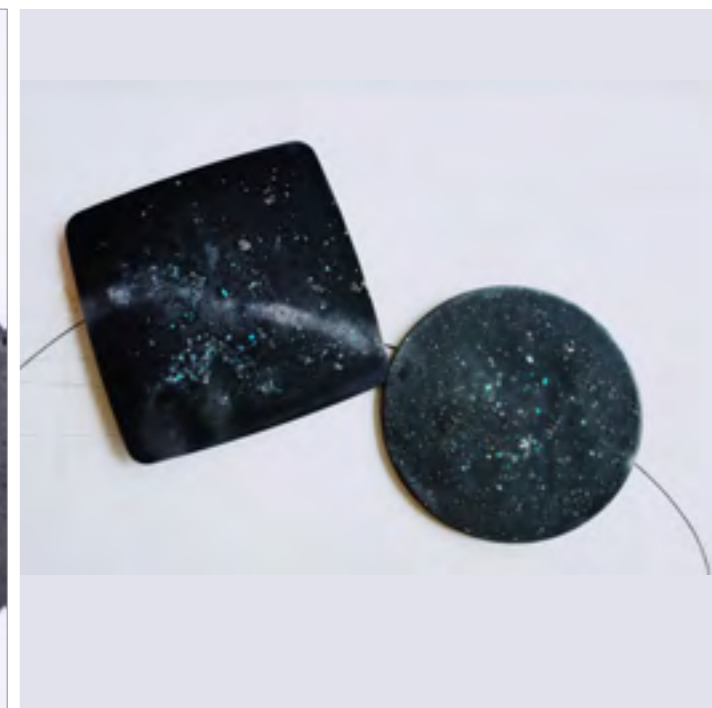
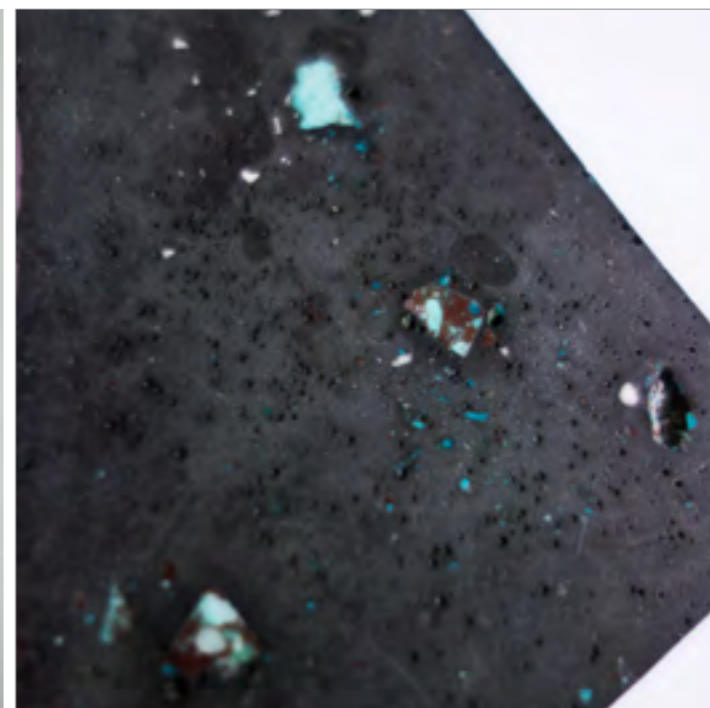
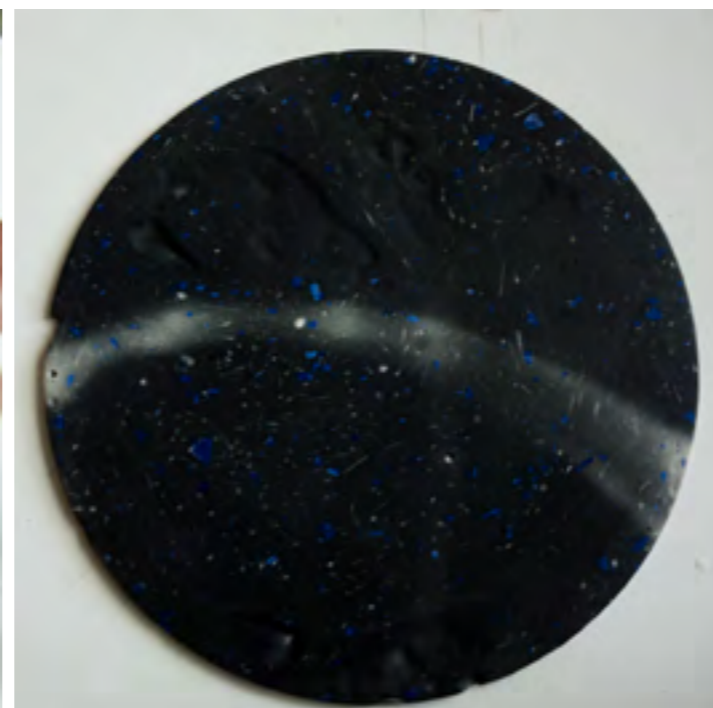
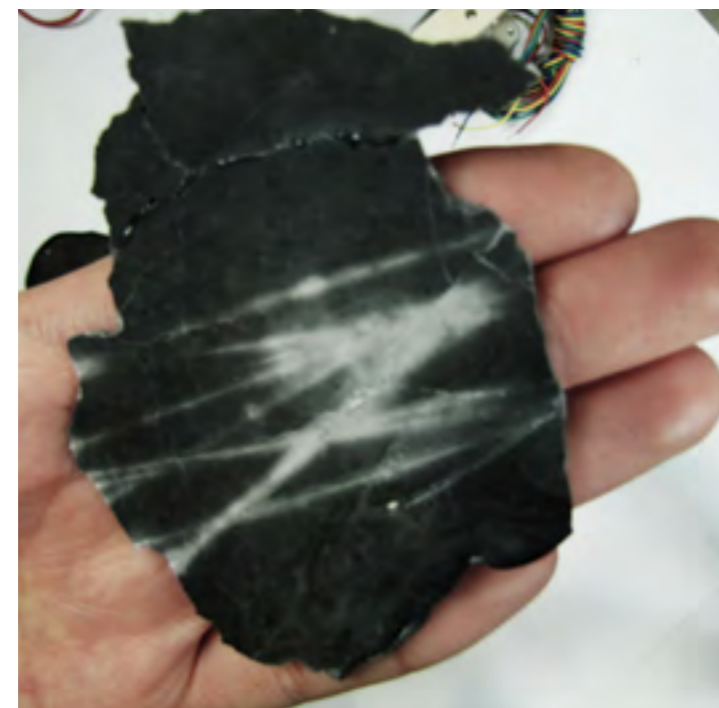
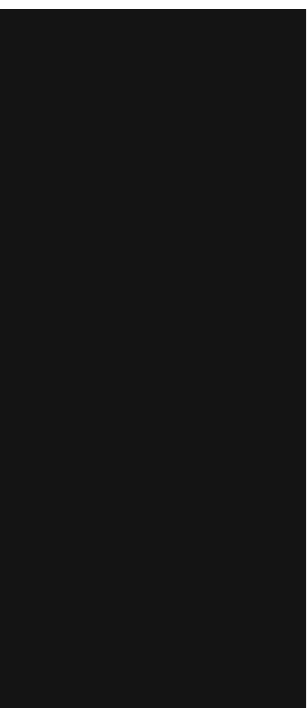
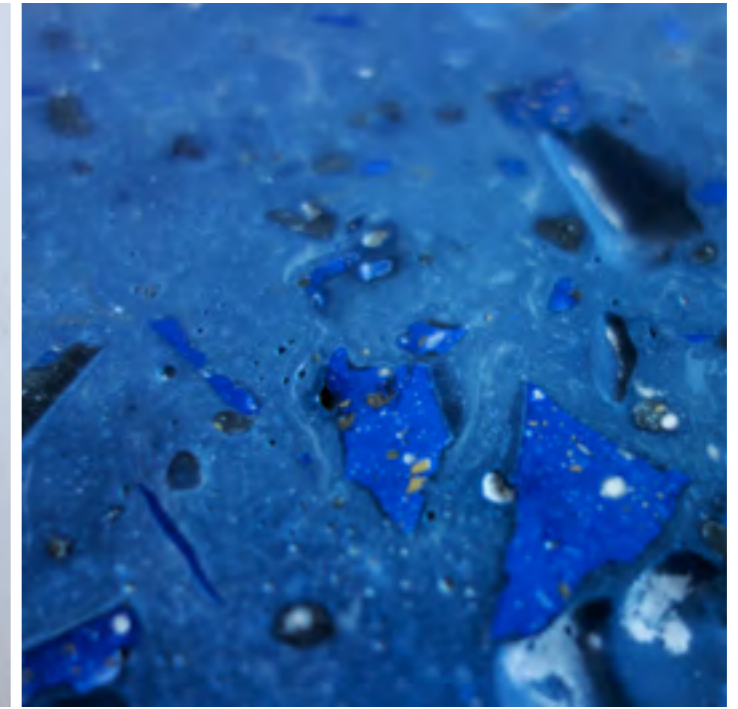
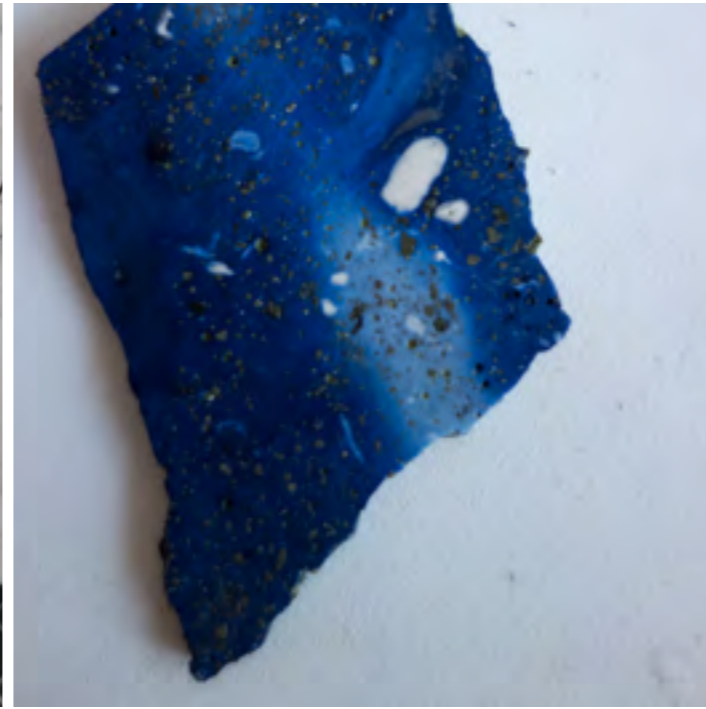


Since entropy, the overarching theme of the collection, is influenced by heat, I decided to start my material exploration using heat changing effects. I developed a thermochroic composite, which mimics rock such as granite and Lapis Lazuli.



Material exploration







1:4 prototypes
...casting experiments...





As time passes by, URMA displays the traces of the past, almost like a ghost, thus the fragile boundaries and relationship between the present, future and past are brought into focus.





Technology is used as a hidden scaffold-ing for an analogue and organic process to unfold. In contrast with the clock's internal mechanism, driven by an Arduino, the exterior resembles a mineral. The design methodology used to create these objects reflects the dichotomy between order and chaos, central to my project. A symbiosis of great accuracy (in terms of prototyping, especially gears and coding) and improvisation, dictated by material limitations and behaviour has been vital.



V.THISorder Collection

MIRA

Concept

Mira is an object inspired by our continuous fight against entropy and impermanence. Drawing on the theme of decay and regeneration, the object reacts to human presence by decomposing itself in an entropic motion when no one is around, and dimming its lights; whilst the reverse happens when the object is approached.

For this project the source of inspiration was the double slit experiment and trauma, a component of entropy, in order to understand the differences and similarities in the way humans and their environment react to entropy.

Trauma in the material world will always follow an entropic pattern, decomposing, going from order to disorder, whilst in the mind, a process of reversed entropy seems to happen, in time our traumas heal and events that happened seem to make

sense in perspective, as they say time smoothens things out.

The double slit experiment is a demonstration that small particles of light and matter can behave both as particles and waves and suggests that the very act of observing a particle has a dramatic effect on its behaviour.

This rose the question : Do things have a life of their own when no one is there to observe them?

This experiment led me to investigate and rethink the enigmatic interdependence between objects and people. The designed object would thus change its behaviour according to human presence. Having already developed the theory of emotional reversed entropy, it was clear from here that the viewer would trigger a reversed entropy behaviour in the object.

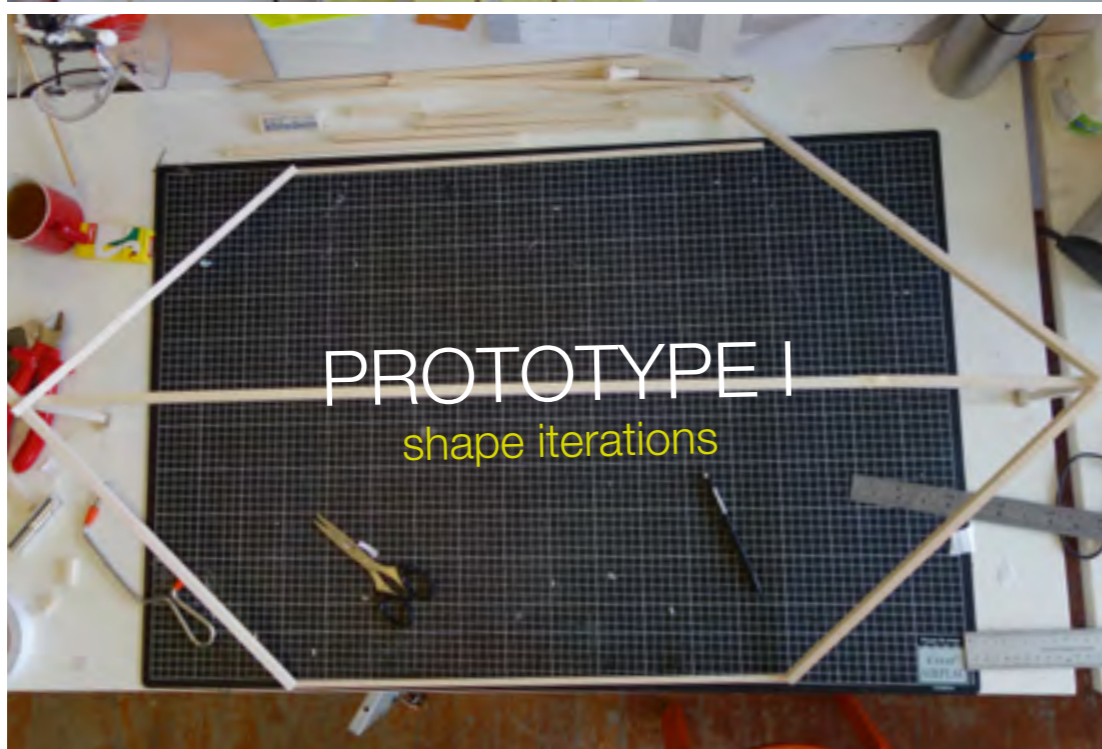
Double slit •

The double slit experiment is a demonstration that small particles of light and matter can behave both as particles and waves and suggests that the very act of observing a particle has a dramatic effect on its behaviour. If one neglects to observe which slit a photon passes through, it appears to interfere with itself, suggesting that it behaves as a wave by travelling through both slits at once. But, if one chooses to observe the slits, the interference pattern disappears, and each photon travels through only one of the slits.

The double slit sets aside causality, determinism, and the notion that reality is “out there” as it blurs the line between the observer and the system being observed. Richard P

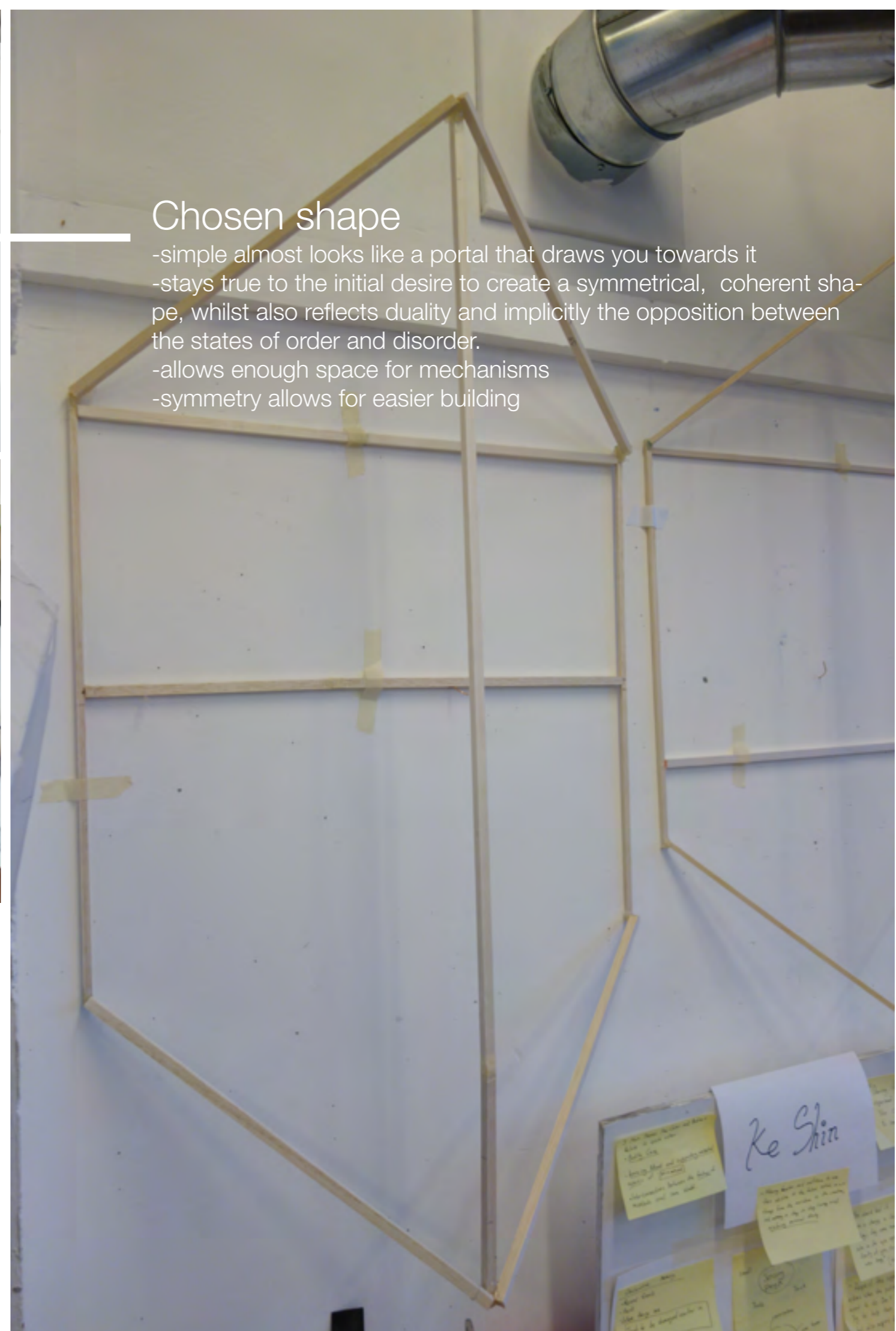


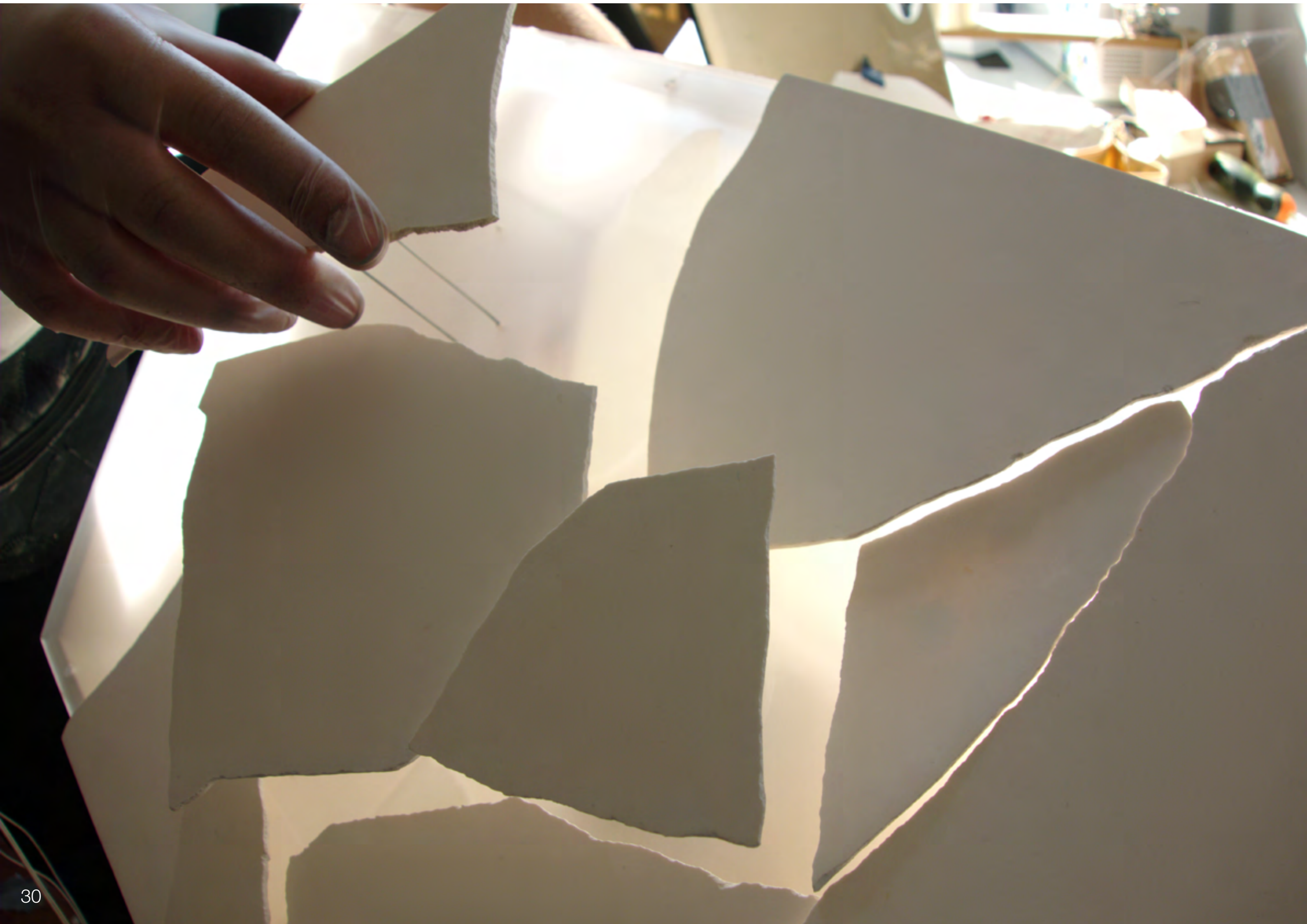
BRIEF: Create an object inspired by our continuous fight against entropy and impermanence. Drawing on the theme of decay and regeneration, the object reacts to human presence by decomposing itself in an entropic motion when no one is around, and dimming its lights; whilst the reverse happens when the object is approached.



Chosen shape

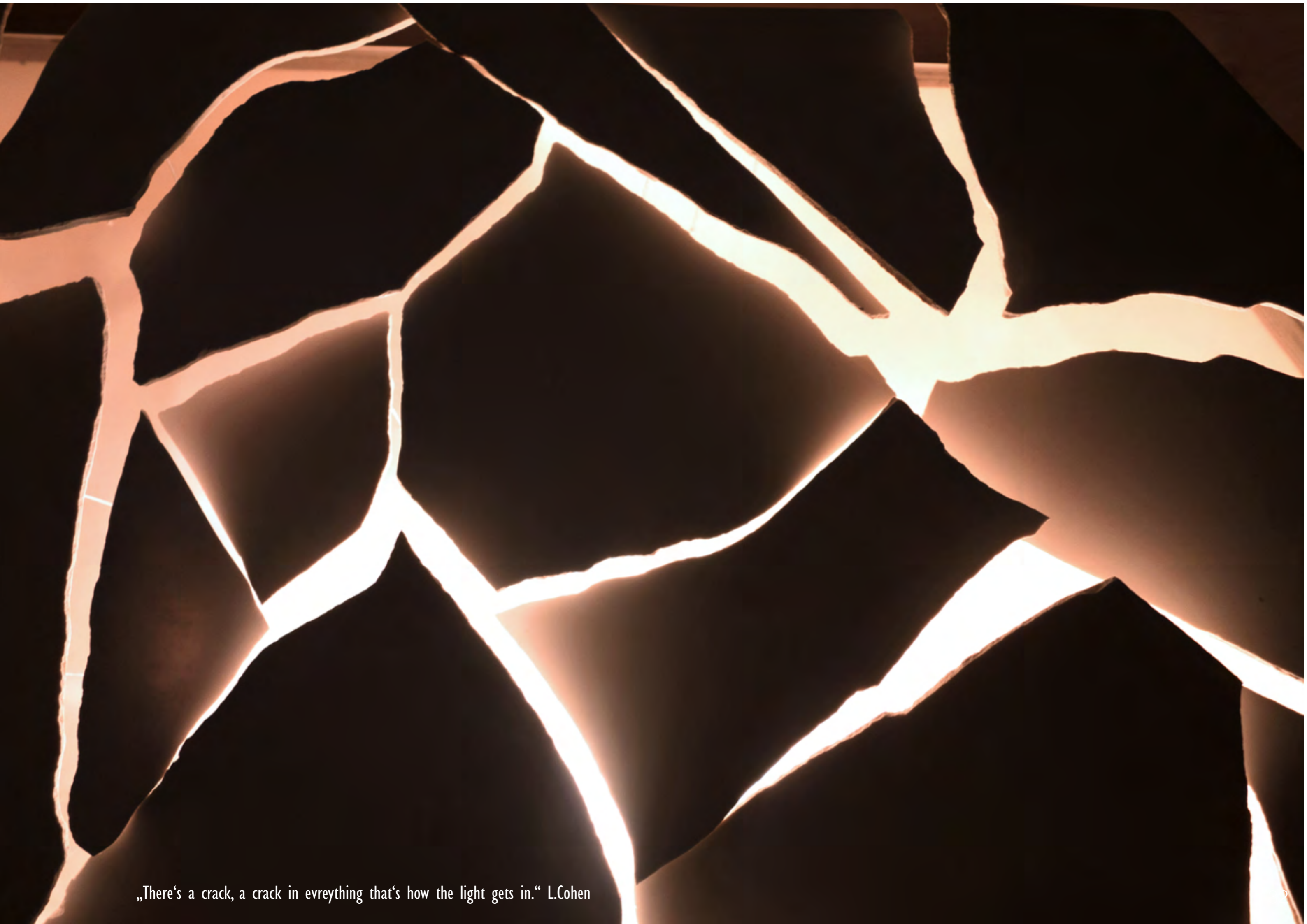
- simple almost looks like a portal that draws you towards it
- stays true to the initial desire to create a symmetrical, coherent shape, whilst also reflects duality and implicitly the opposition between the states of order and disorder.
- allows enough space for mechanisms
- symmetry allows for easier building







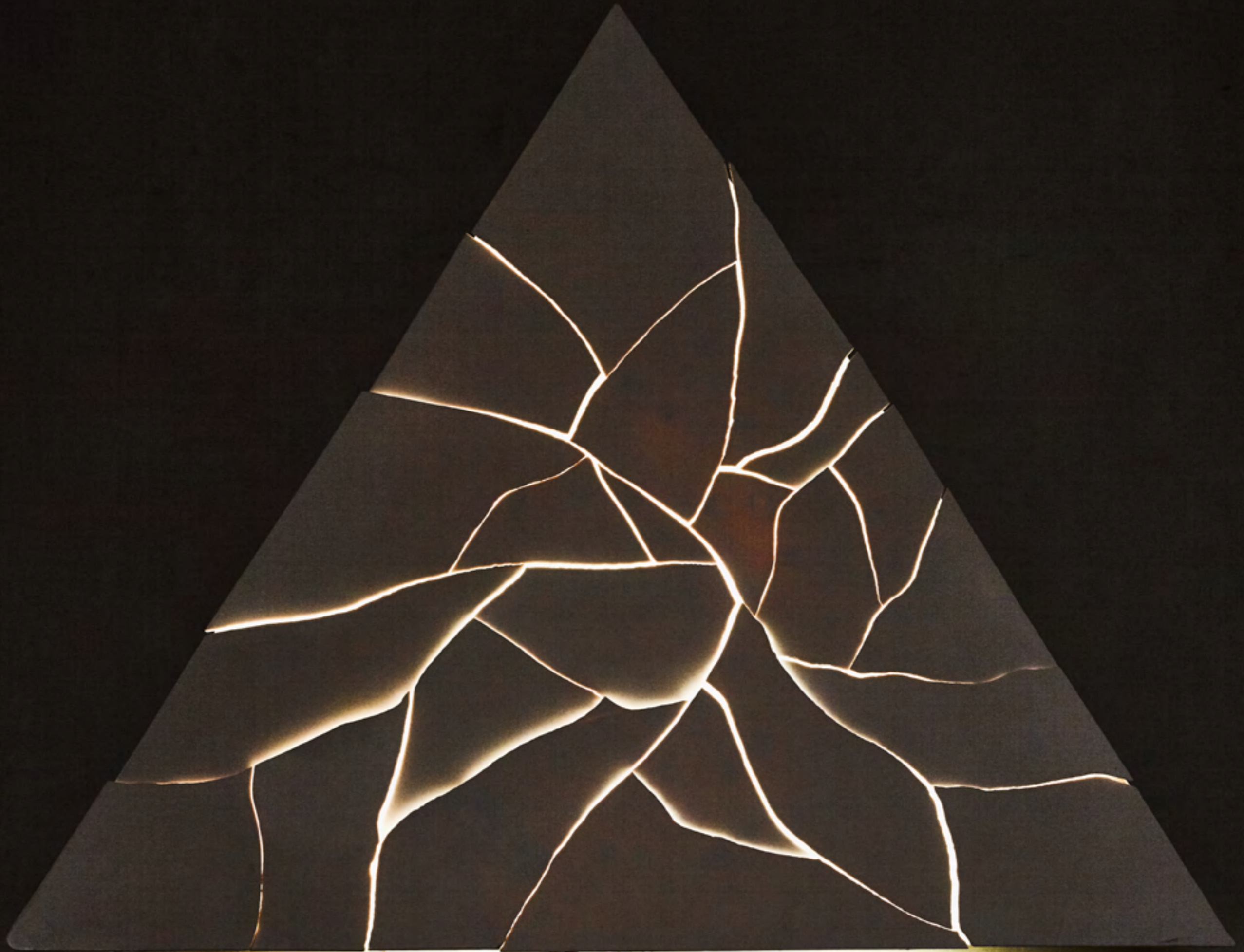
Playing on our need for control and coherence, the lamp forms a symmetrical and unified object. However, this moment of inertia and balance is not meant to last, since the object falls into entropy as soon as the viewer leaves



„There’s a crack, a crack in evreything that’s how the light gets in.“ L.Cohen

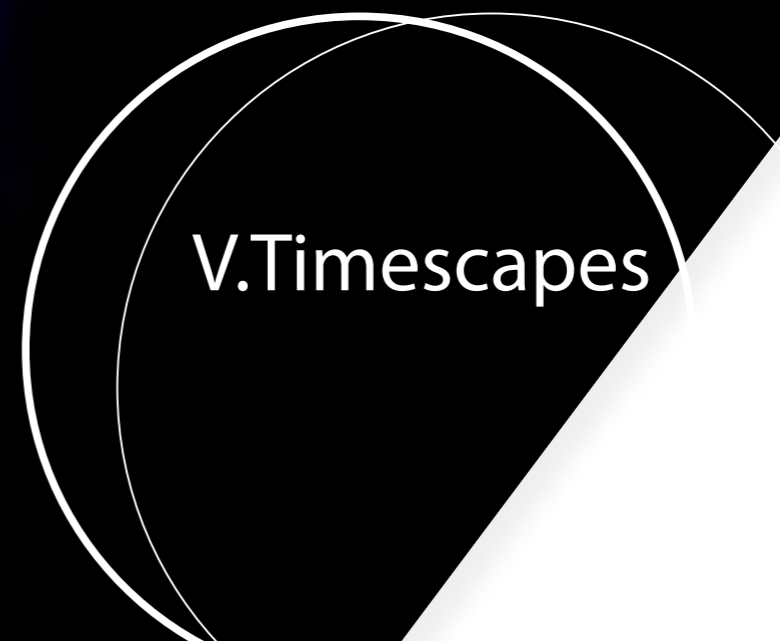
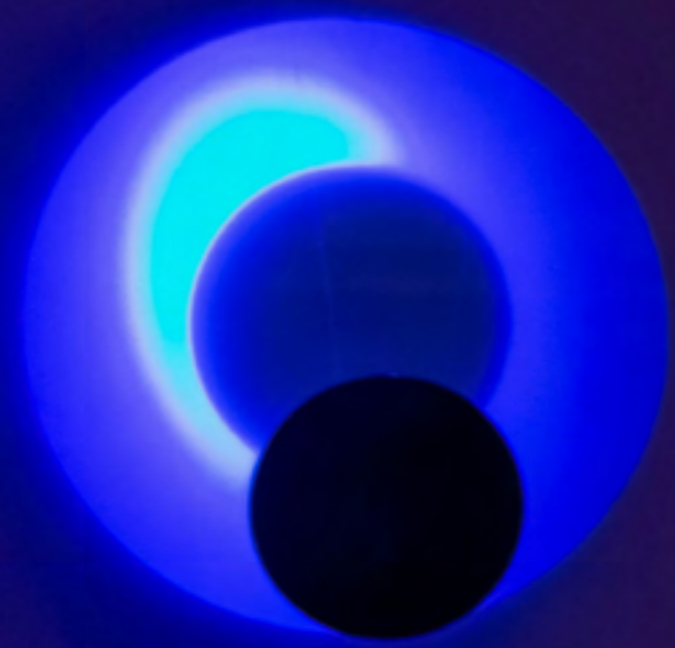






The cracks are a mark of the process of cyclical pattern of growth and decay , characteristic to life.





V.Timescapes

Concept

The starting point of this work was the pendulum, an object used in science and in everyday life to measure phenomenon which embody very different time scales.

The installation is composed of three types of pendulums: human, geological and astral. Their movement pattern describes the temporal landscape of the space it refers to.

The first, a clock pendulum, represents human time. Its movement are regular, fast and mechanical. The object is made out of a golden mirror, thus the viewer can watch himself watching time pass by.

The middle pendulum, made out of

rock refers to geological time. The pendulum's movement are chaotic and unpredictable, in alignment with how geological events seem to occur, especially earthquakes. This pendulum was inspired by the seismic pendulum in Grotta Gigante, Trieste.

The third pendulum, made out of a concave mirror, representing cosmic time, is almost still, thus referring to our perception of outer space as a calm and vast landscape. As the viewer moves around, the reflections in the mirror appear distorted. The pendulum mirrors used in the LIGO Observatory to detect gravitational waves have been the inspiration of this piece.

Residence •

Timescapes : From Clocks to outer-space is the result of the Scientifica Art & Science Residence.

The selected artists, beneficiaries of the residency program, have collaborated with researchers from advanced research institutes to learn knowledge in astrophysics, biotechnology, spectromicroscopy, geophysics, genetics and marine sciences, information that will be reflected in the works.

Organised in partnership with Fondazione Internazionale Trieste, "Our Nature" residence provides a framework for artists to investigate the relationship between contemporary art and advanced scientific research.





Human time pendulum

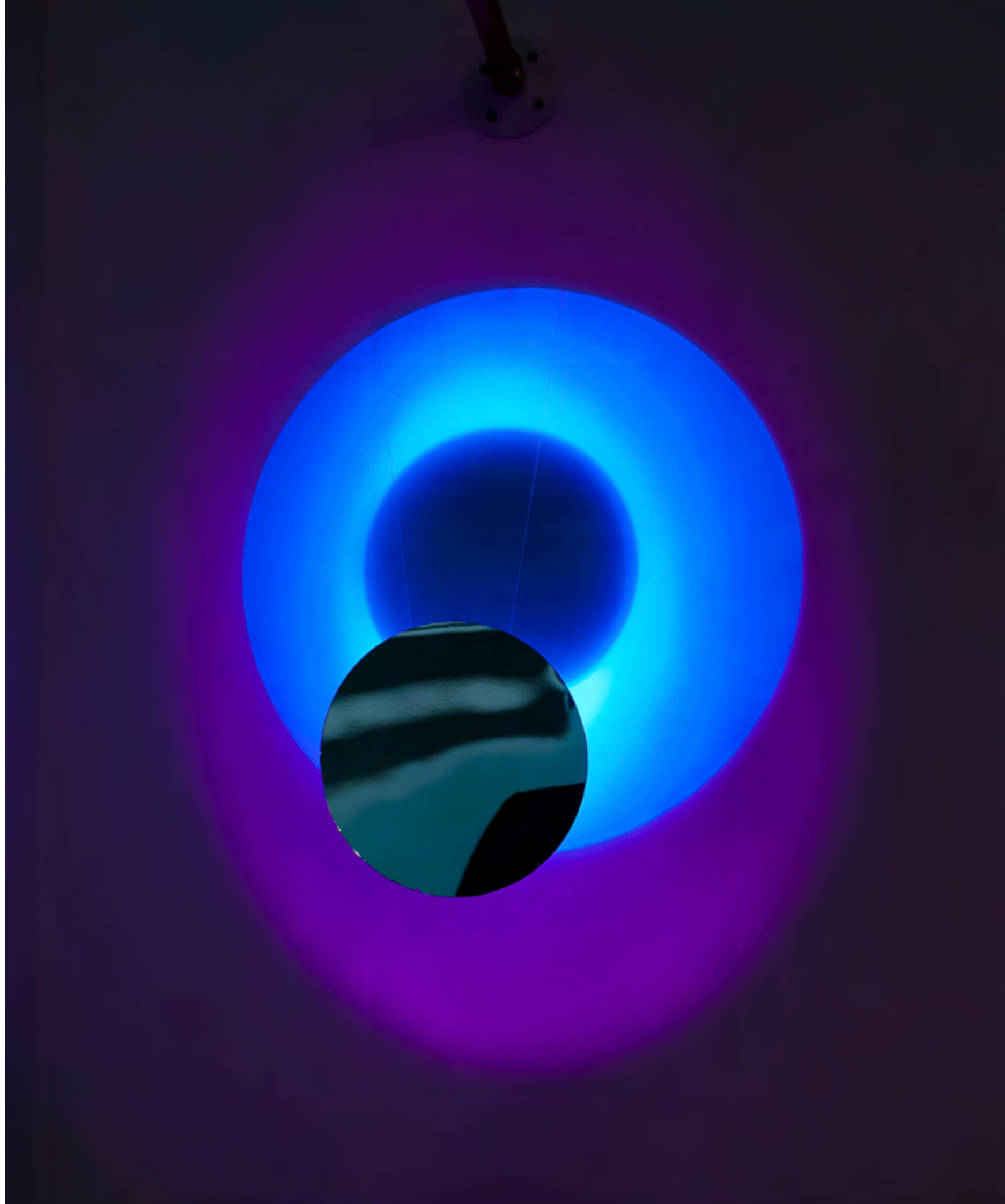




This pendulum was inspired by the pendulum that measures the earthquakes in Grotta Gigante, Trieste. The mechanism used is exemplified by The Chaos Theory (behavior of dynamic systems very sensitive to initial conditions)

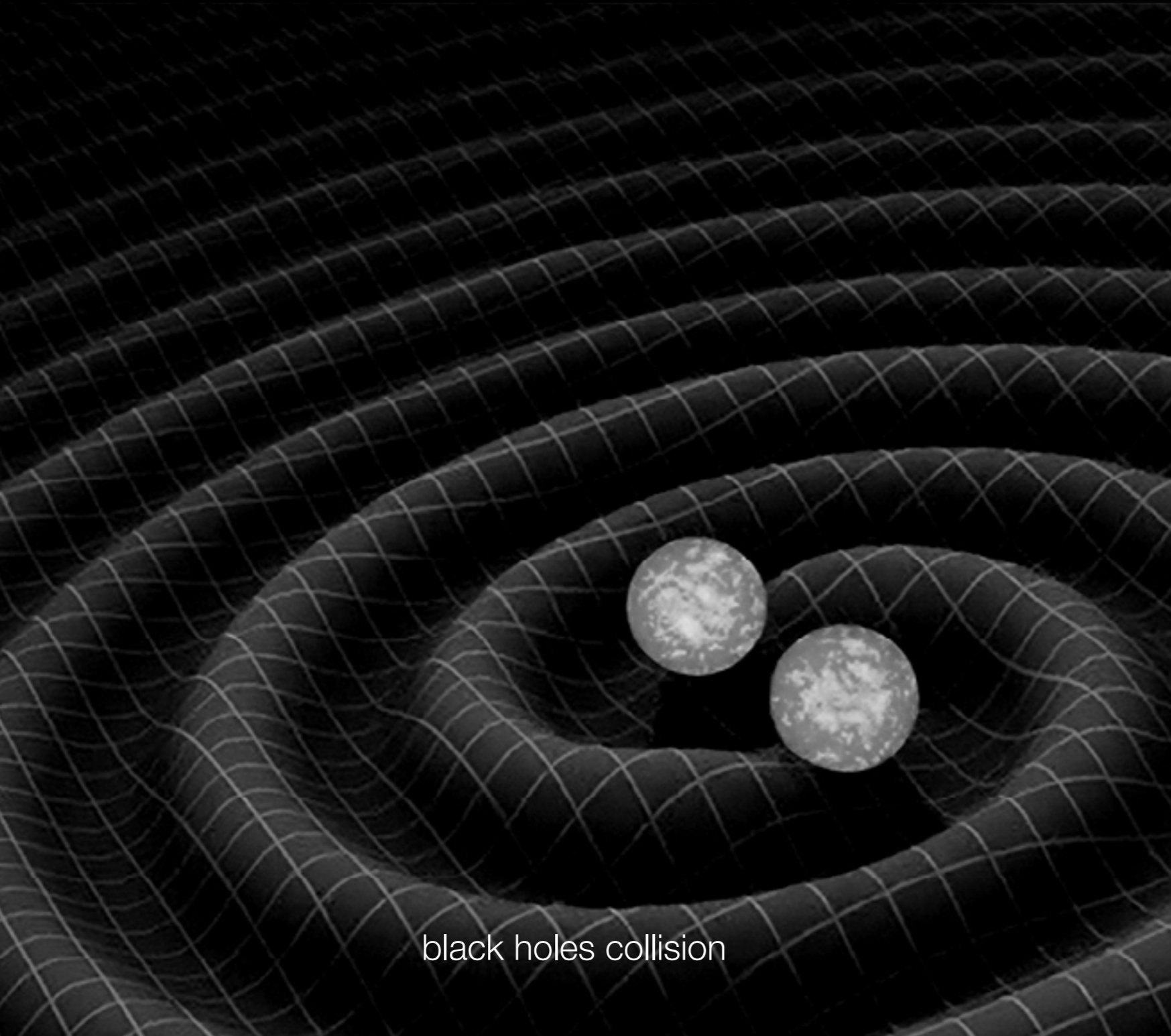


Astral pendulum

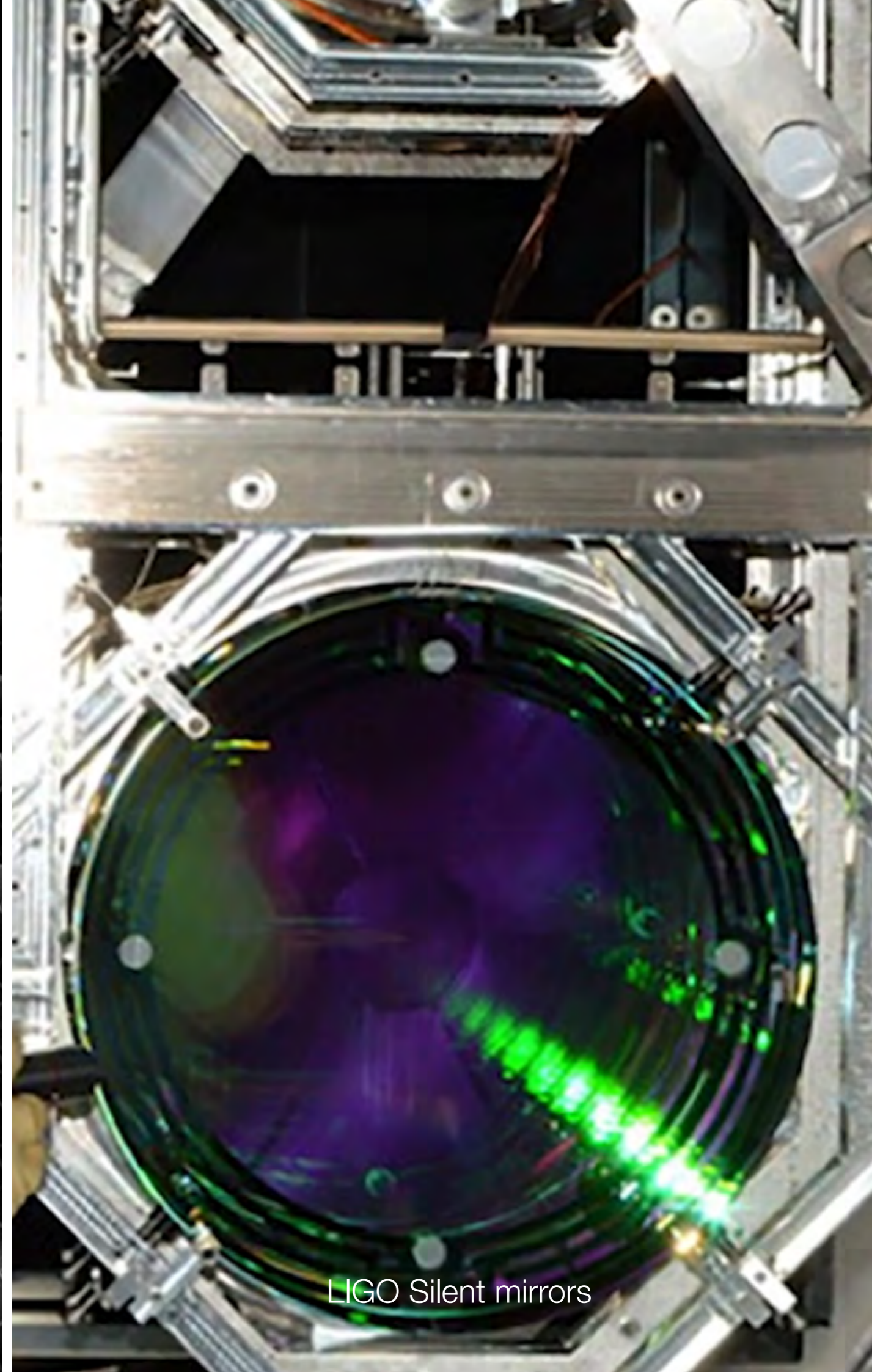


Astral Pendulum , depicts a vast, calm and silent temporal landscape. It is inspired by pendulum mirrors used in the LIGO Observatory to measure gravitational waves. These mirrors, also called silent mirrors, are static pendulums designed to reflect a laser wave detecting gravitational wave (a fluctuation in the space-time curve that propagates like a wave and is generated by a cosmic object with a very large mass)

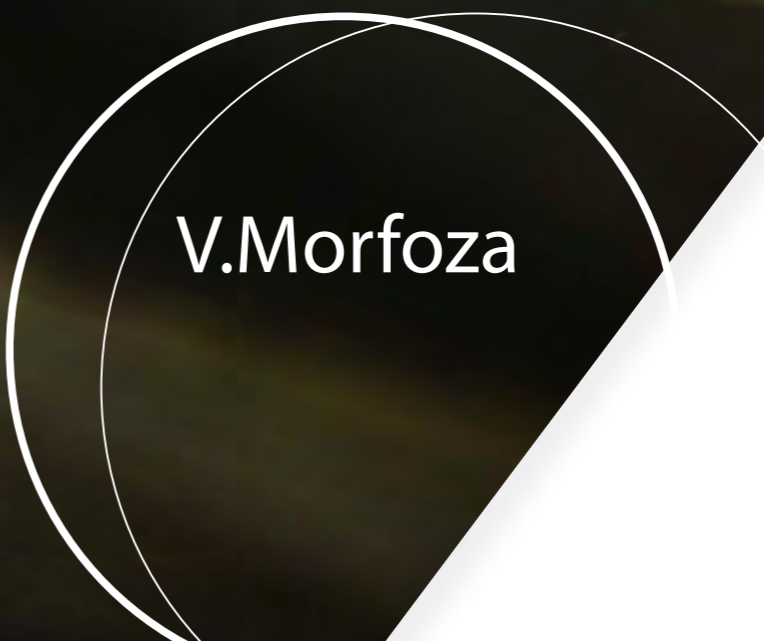
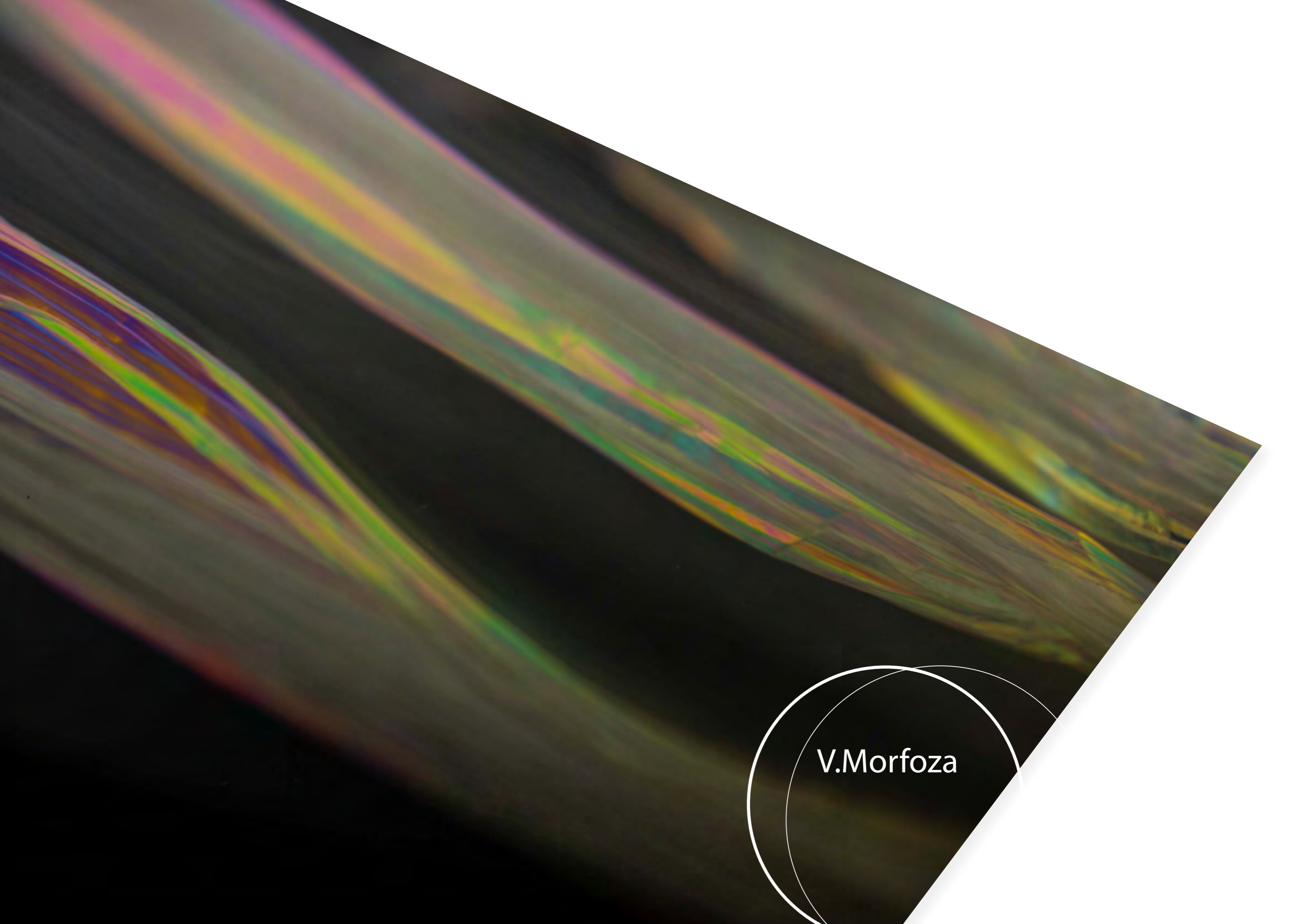
In 2016, LIGO and Virgo Collaboration Scientific announced that they had made the first direct observation of the gravitational waves generated by the merging of two black holes at ca. 1 billion light years from Earth, an extremely important moment in science, which was rewarded with the Nobel Prize in 2017.



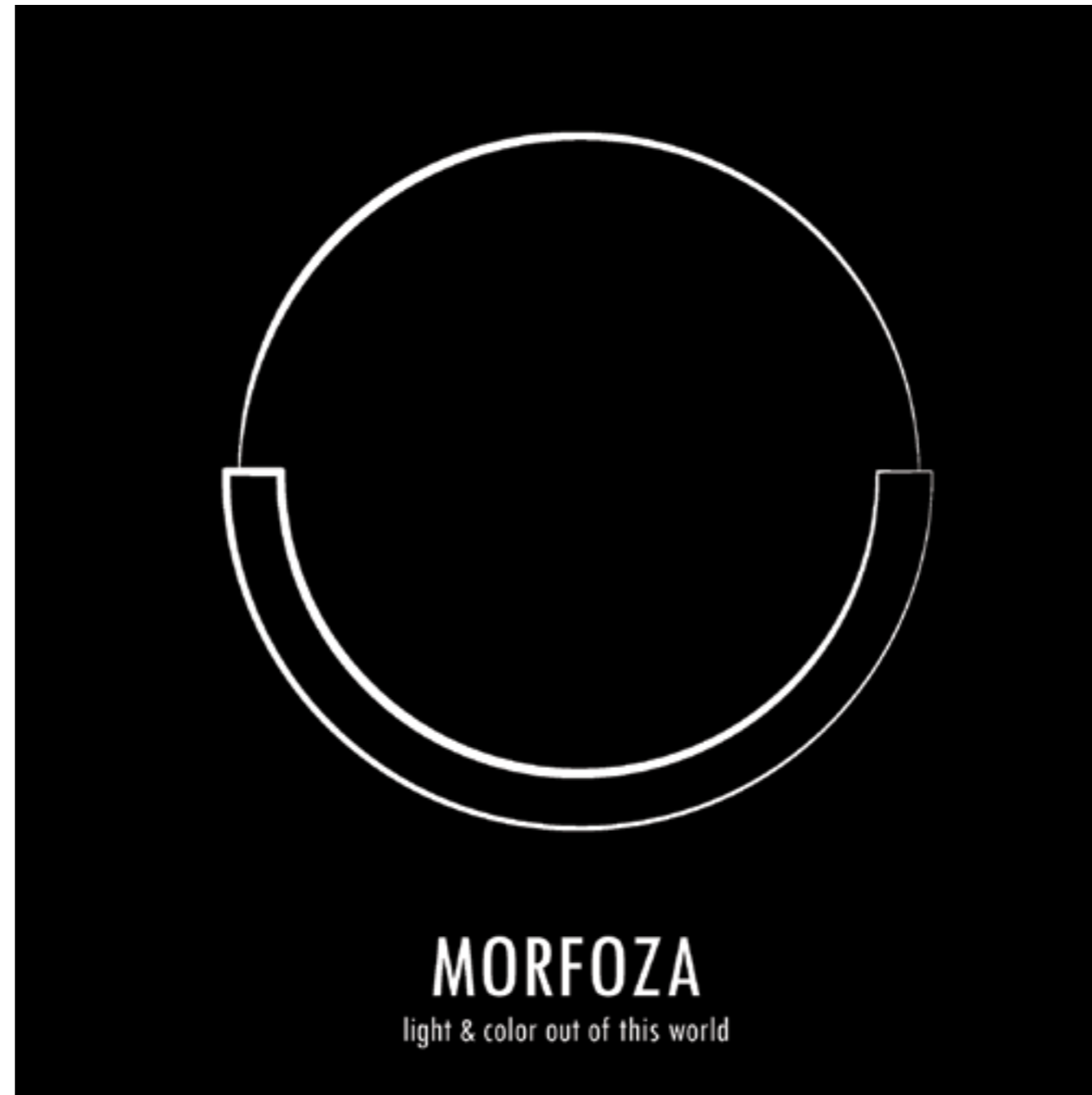
black holes collision



LIGO Silent mirrors



V.Morfoza



Morfoza : light & color out of this world, is a unique and versatile luminaire using the light spectrum to create mesmerizing light effects. The luminaire metamorphoses from a minimal monochrome light source into a full burst of colourful dynamic motifs. It offers an escape into a realm of otherworldly light and color whilst also questioning visual perception. The light effects are produced by humble materials such as plastic film and only uses white light. Our studio's innovative design solution brings these materials into a completely unexpected light. The almost surreal lightscape aims to question our perception of daily objects and experiences: What is real? How much of „reality” are we able to perceive?

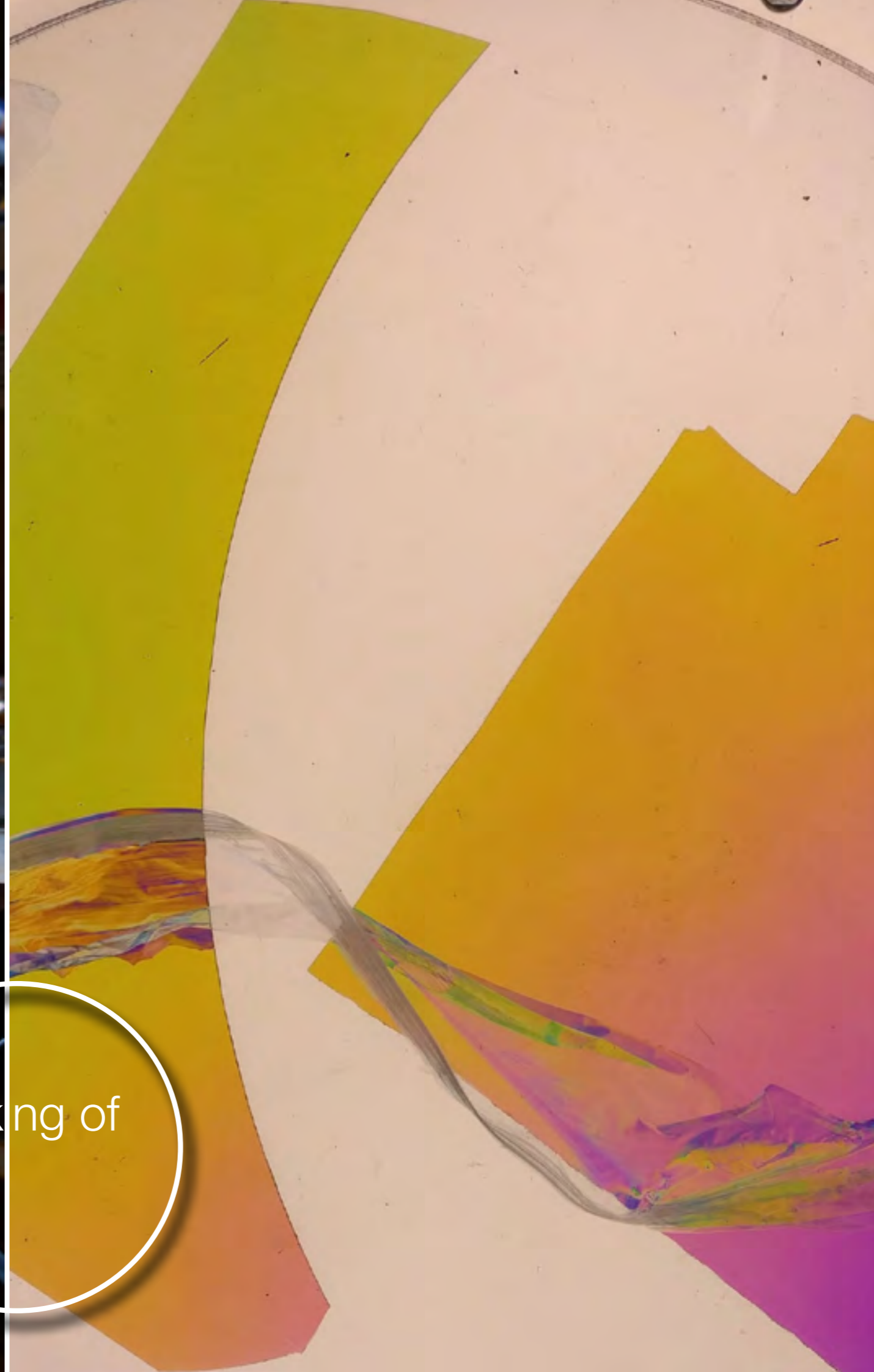


Inspiration

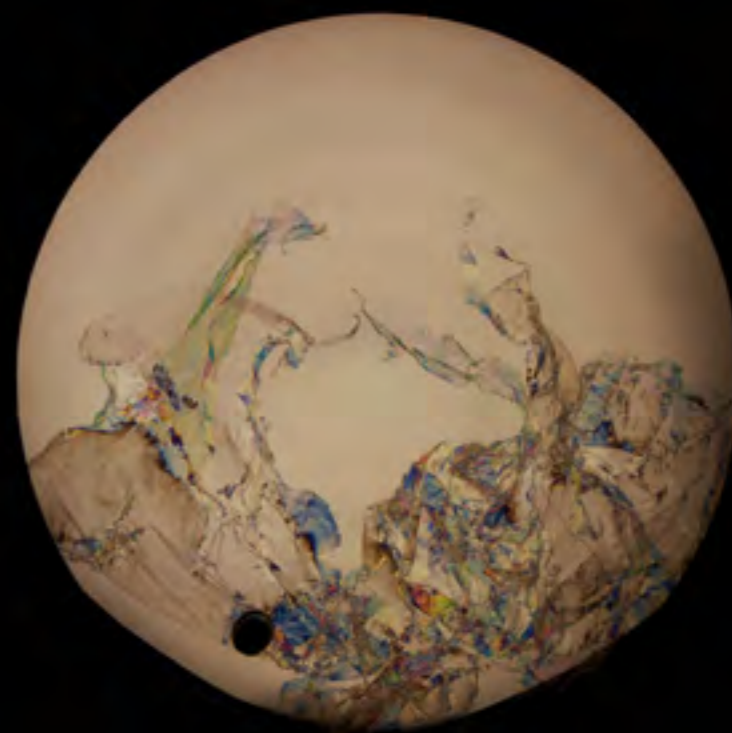
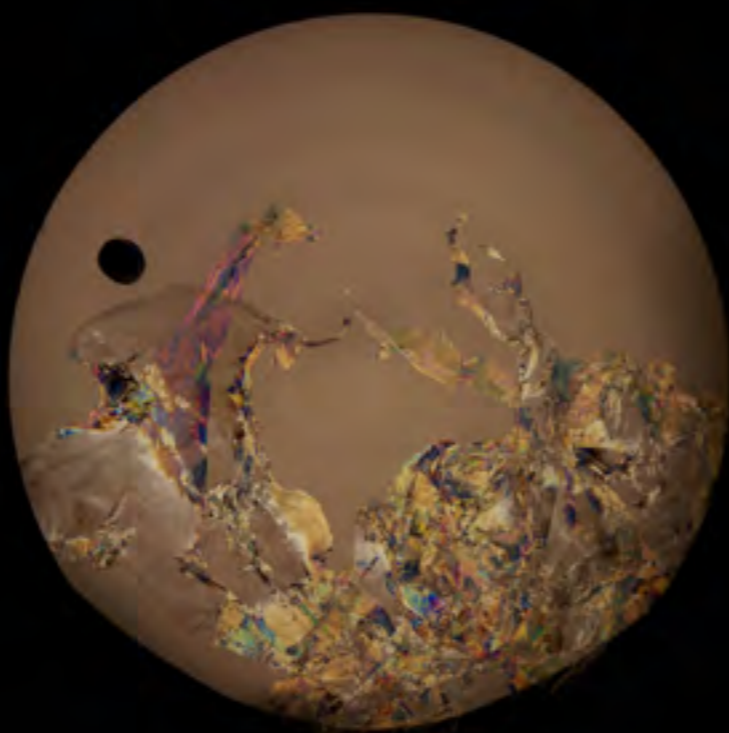
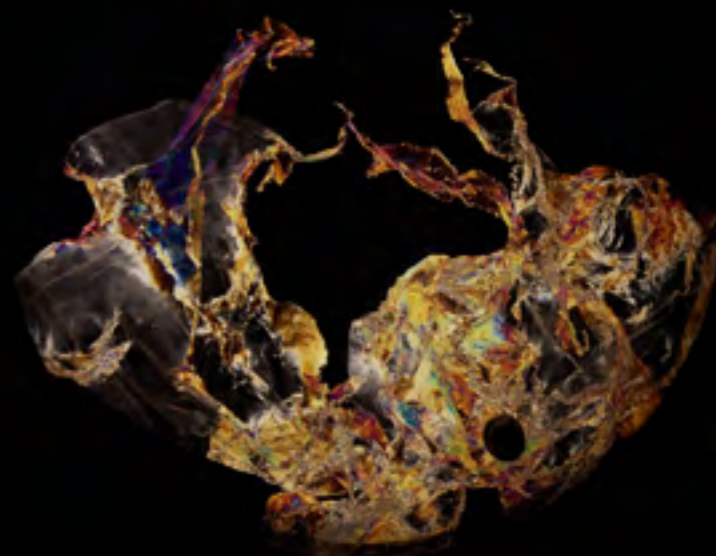
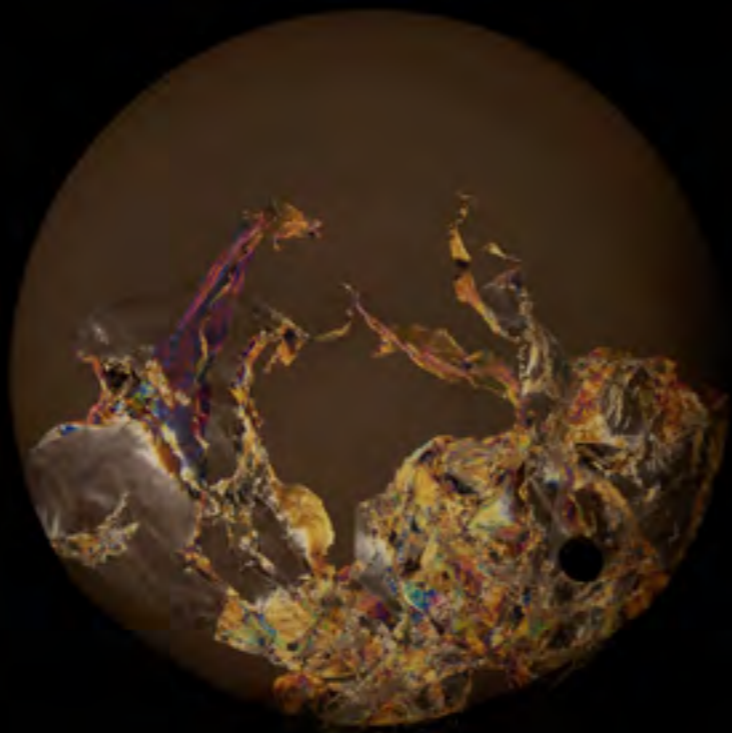
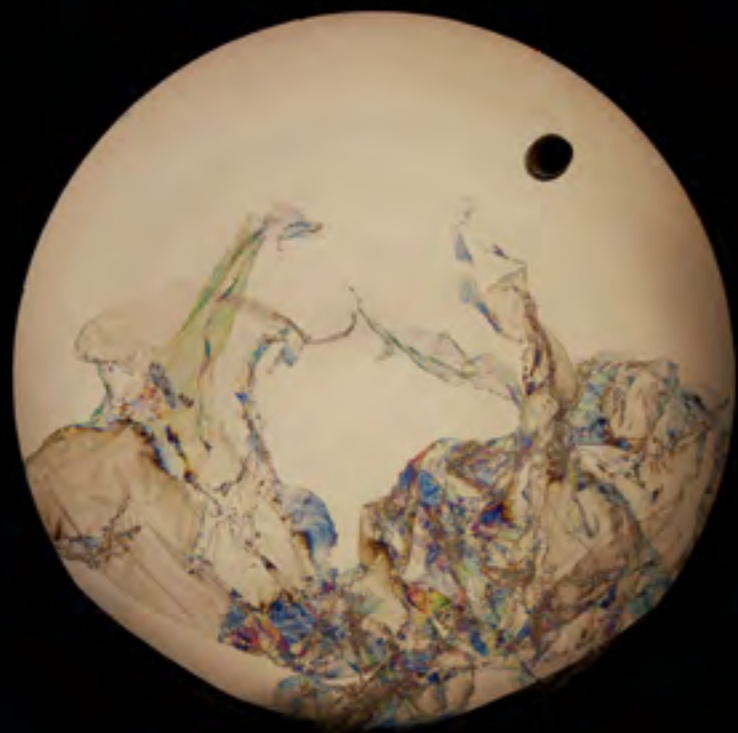








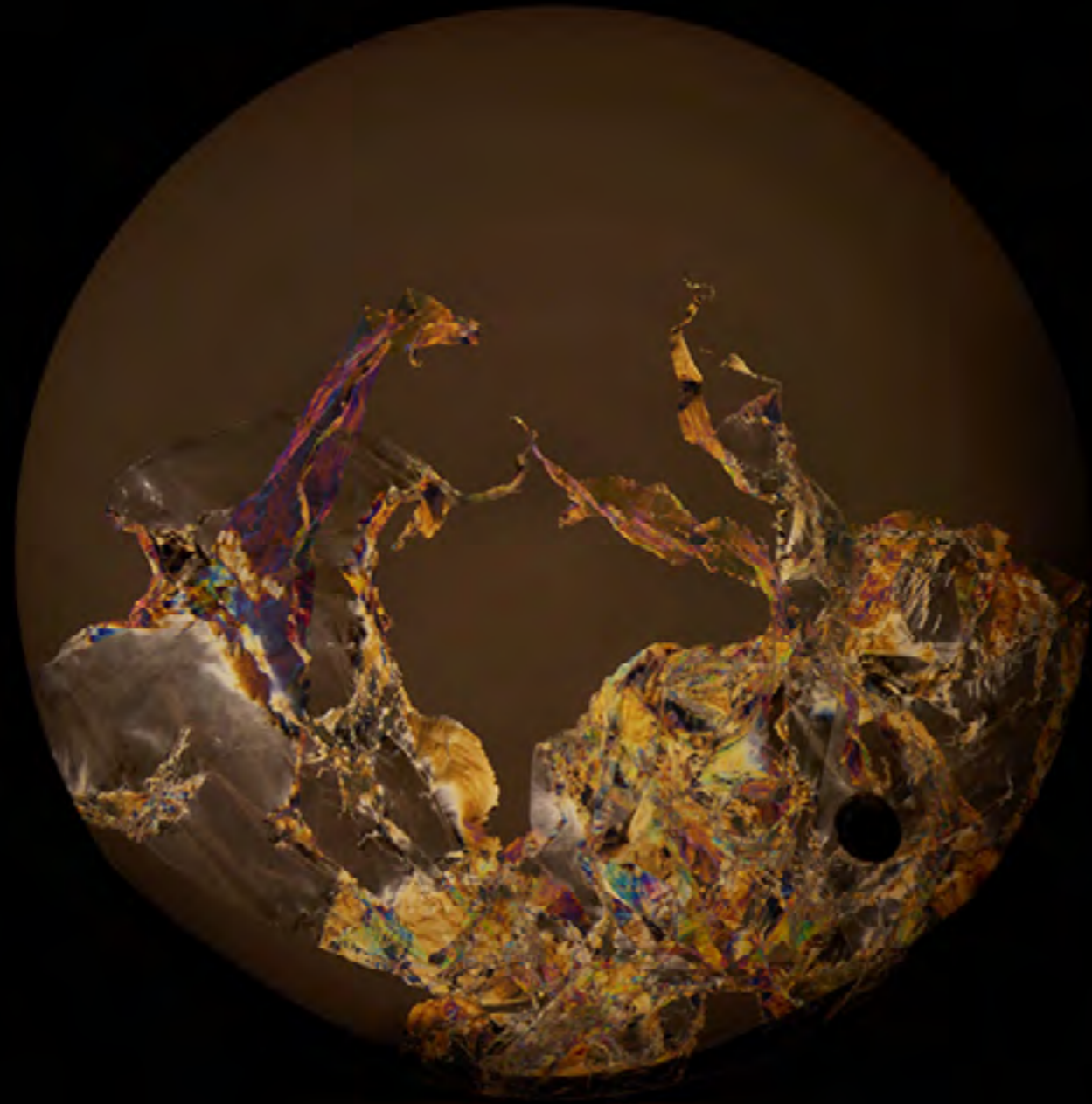
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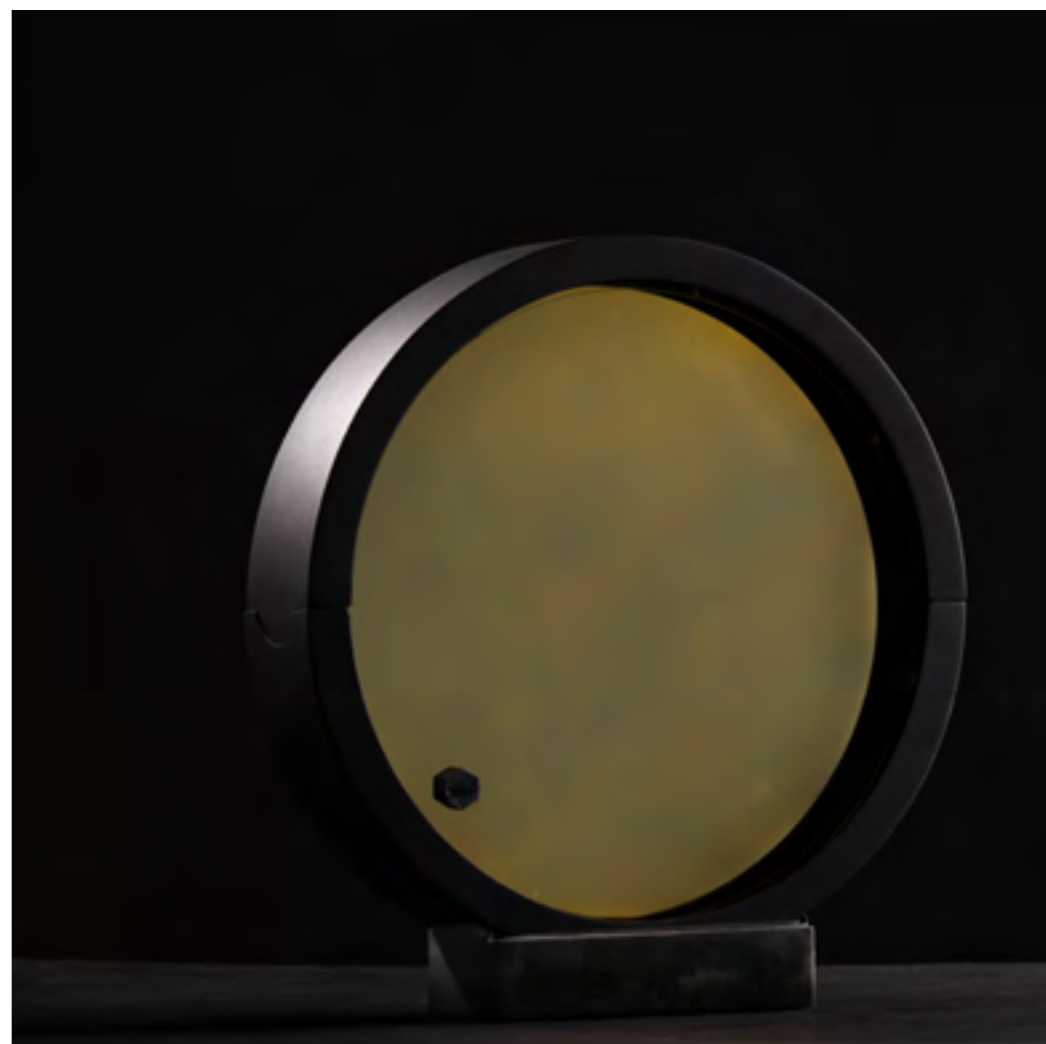
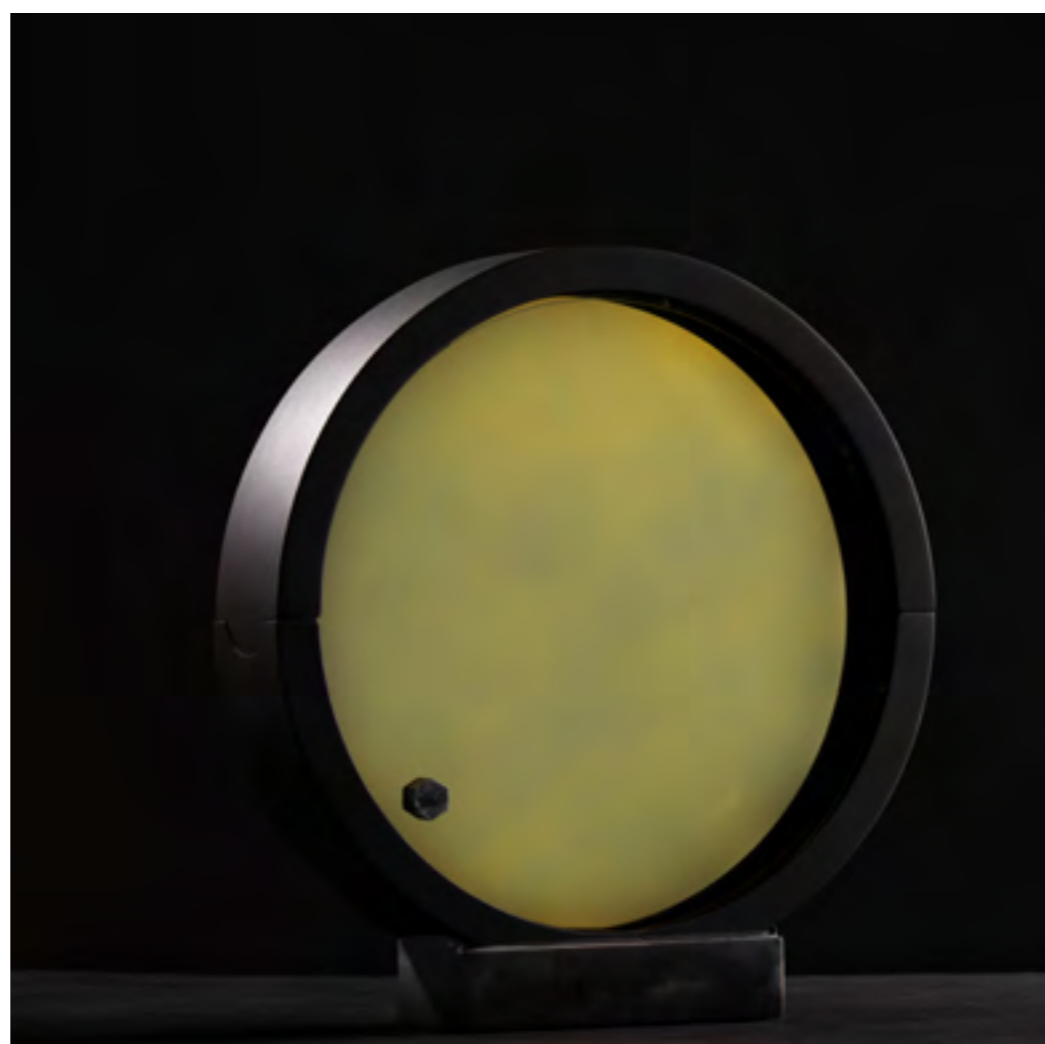


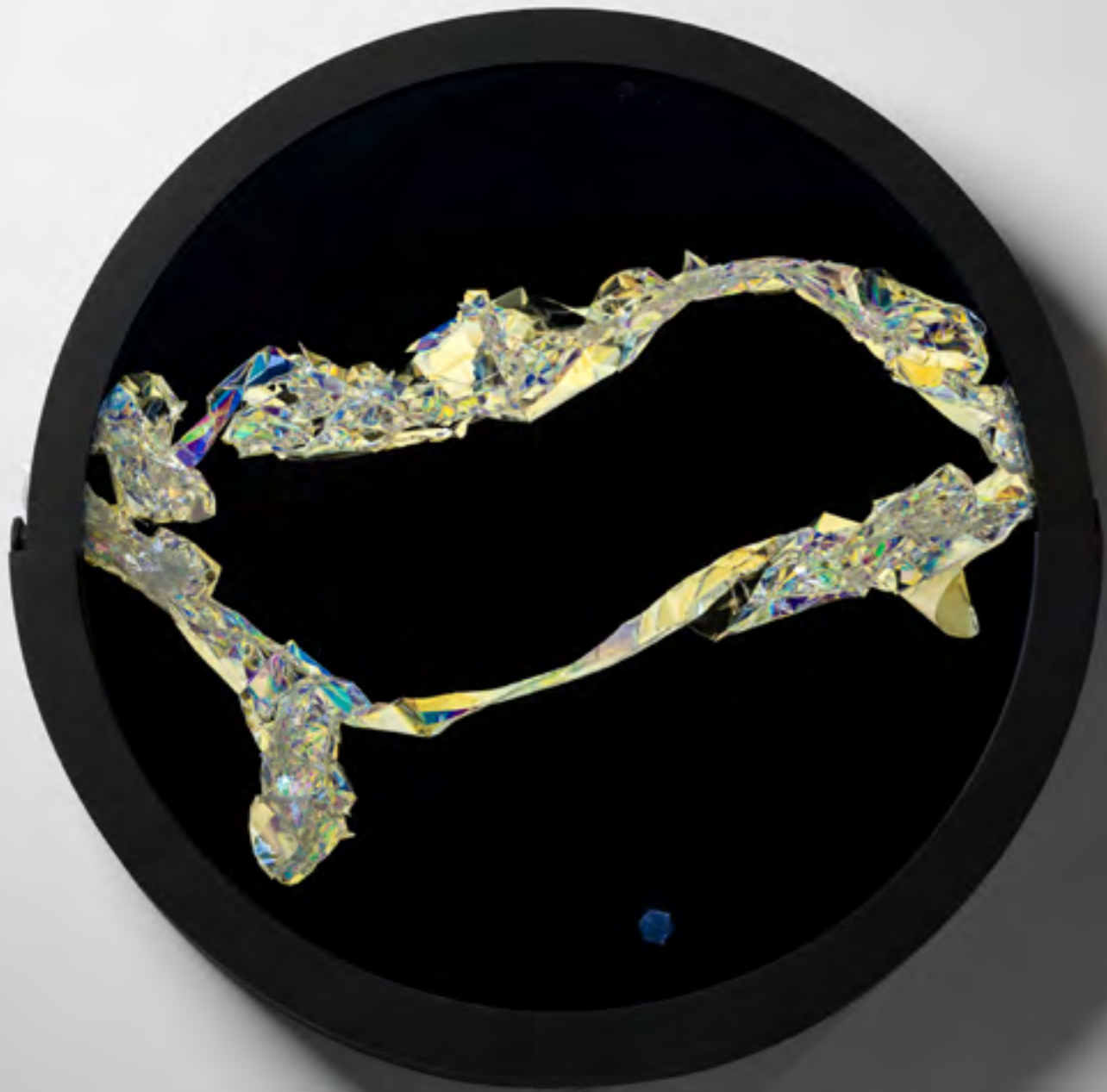


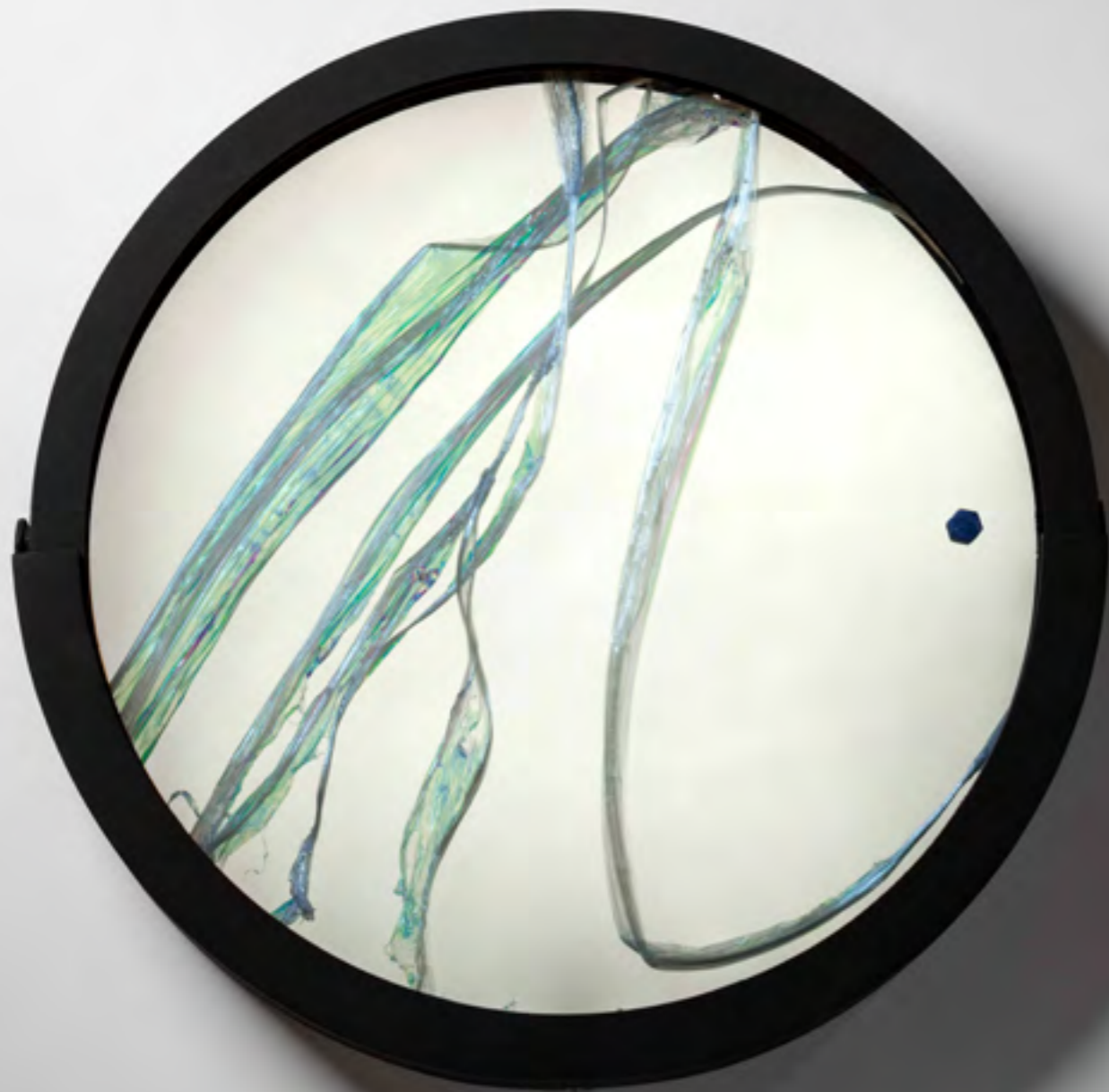












The lamp comes in two sizes and two fixture options: wall fixture and table lamp.

The five available light effects are:

Basic: dimming monochrome effect/Stripes pattern/ 3D iridescent pattern organic/ 3D iridescent pattern geometrical/ Color gradient



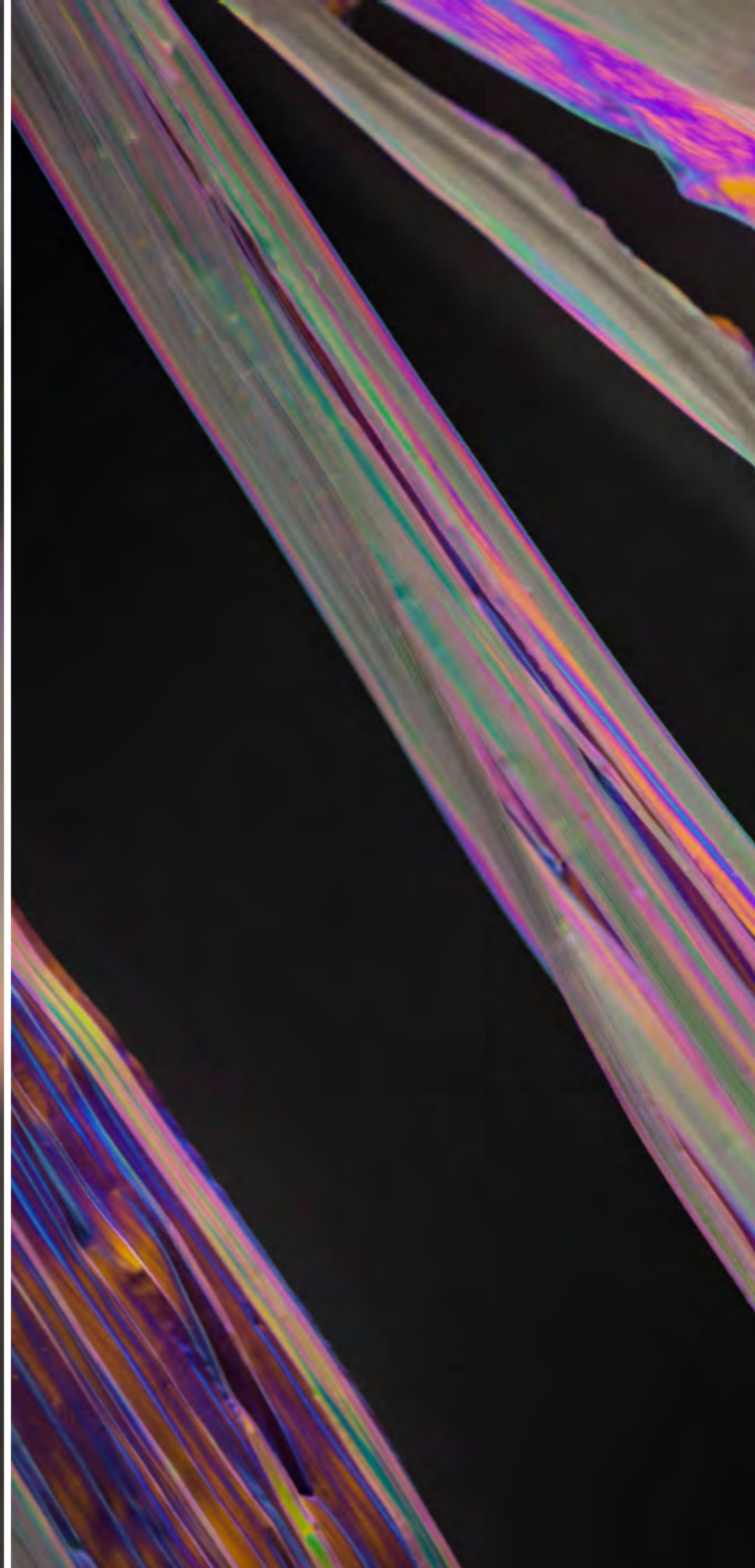
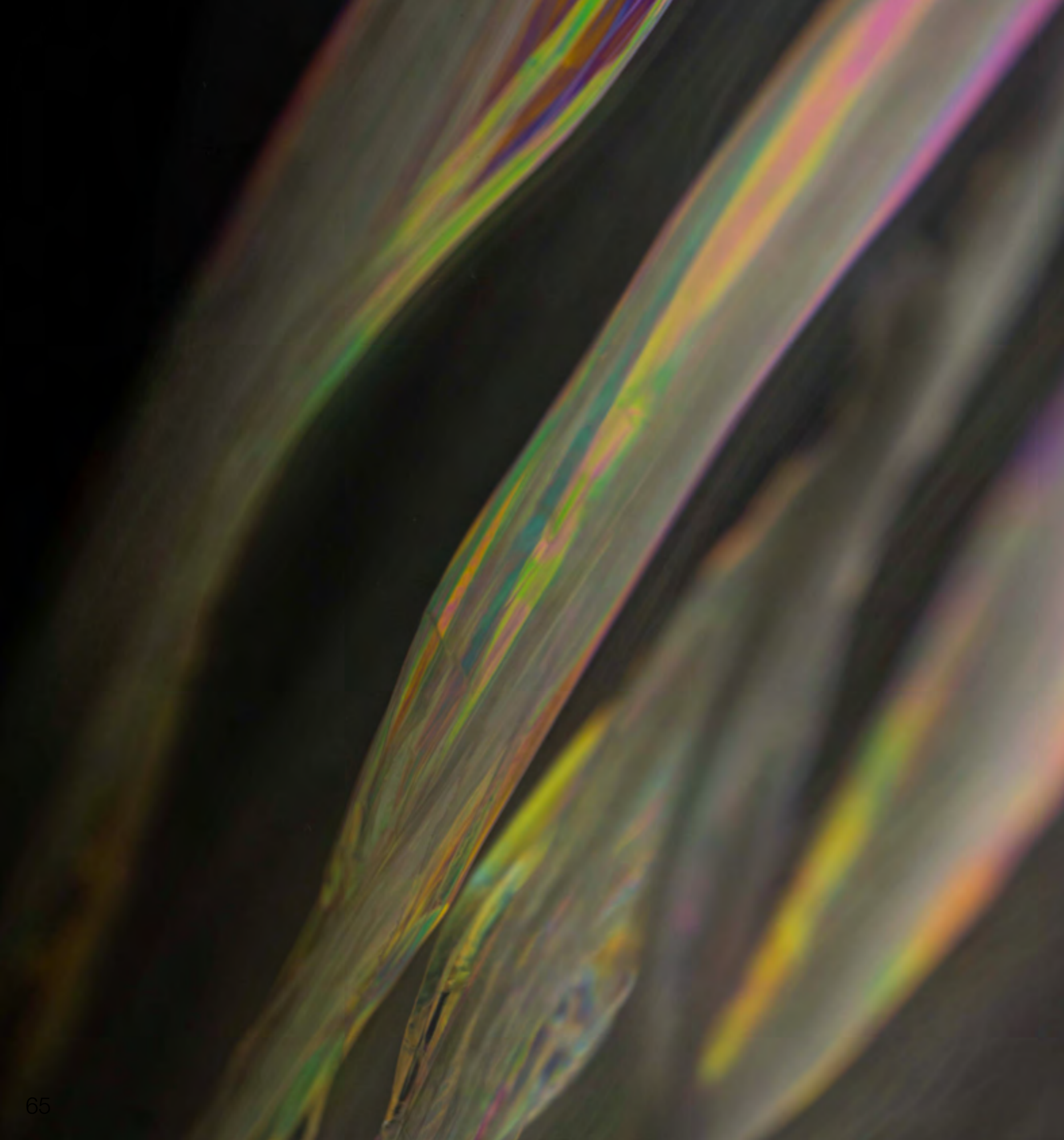


Our moods and needs are constantly changing. Morfoza is just as versatile as we are. The lamp displays a wide spectrum of 3D light&color effects from organic to geometrical; fully saturated to pastel and monochrome. The disks producing the light-effects can be easily interchanged.



MATERIALS : Frame-Aluminium, Filters-glass, plexiglass, resin, LED strip









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Andreea Cristurean