

BODY AS AN INTERFACE

**EXPLORATION OF MOVEMENT  
ACTUATORS FOR WEARABLES**

**NOT A PRODUCT**  
**NOT A SOLUTION TO WORLD ISSUES**  
**NOT FOR A CUSTOMER**  
**NOT FOR BUSINESS**

...YET

FOR MY FUTURE  
POST-FABRICADEMY SELF  
TO BUILD PROJECTS ON

AND ANYONE ELSE WHO MAY BENEFIT

**CONCEPT**

**TECHNOLOGY**

**AESTHETICS**

**TECHNOLOGY**

+

**AESTHETICS**

**TECHNOLOGY**

**INPUT**  
**+**  
**OUTPUT**



- Vibration motor

# ACTUATOR SWATCH LIBRARY

- Magnetic field
- Hydrophobic/hydrophilic

- Transducers

- Motor: DC/stepper

- Shape memory alloy

- Exoskeleton/artificial muscles

- Pneumatics

- Fluids

- Other to discover!

**OR**  
**AN ILLUSION OF**  
**MOVEMENT**

# ILLUSION OF MOVEMENT

- LEDs
- Optical fibers
- Neopixels

# PHYSICAL SCREEN/DISPLAY

**AESTHETICS**

# **GEOMETRY: LINEAR SHAPES**

*I:*

*Line as point progression*

*Line as planar definition*

*Line as mathematical proportion*

*Line as coordinator for the path of motion*

*II:*

*Line as optical guide*

*Line as optical reason*

*Line as psychological balance*

*III:*

*Line as energy projection*

*IV:*

*Line as symbol of centrifugal and centripetal movement*

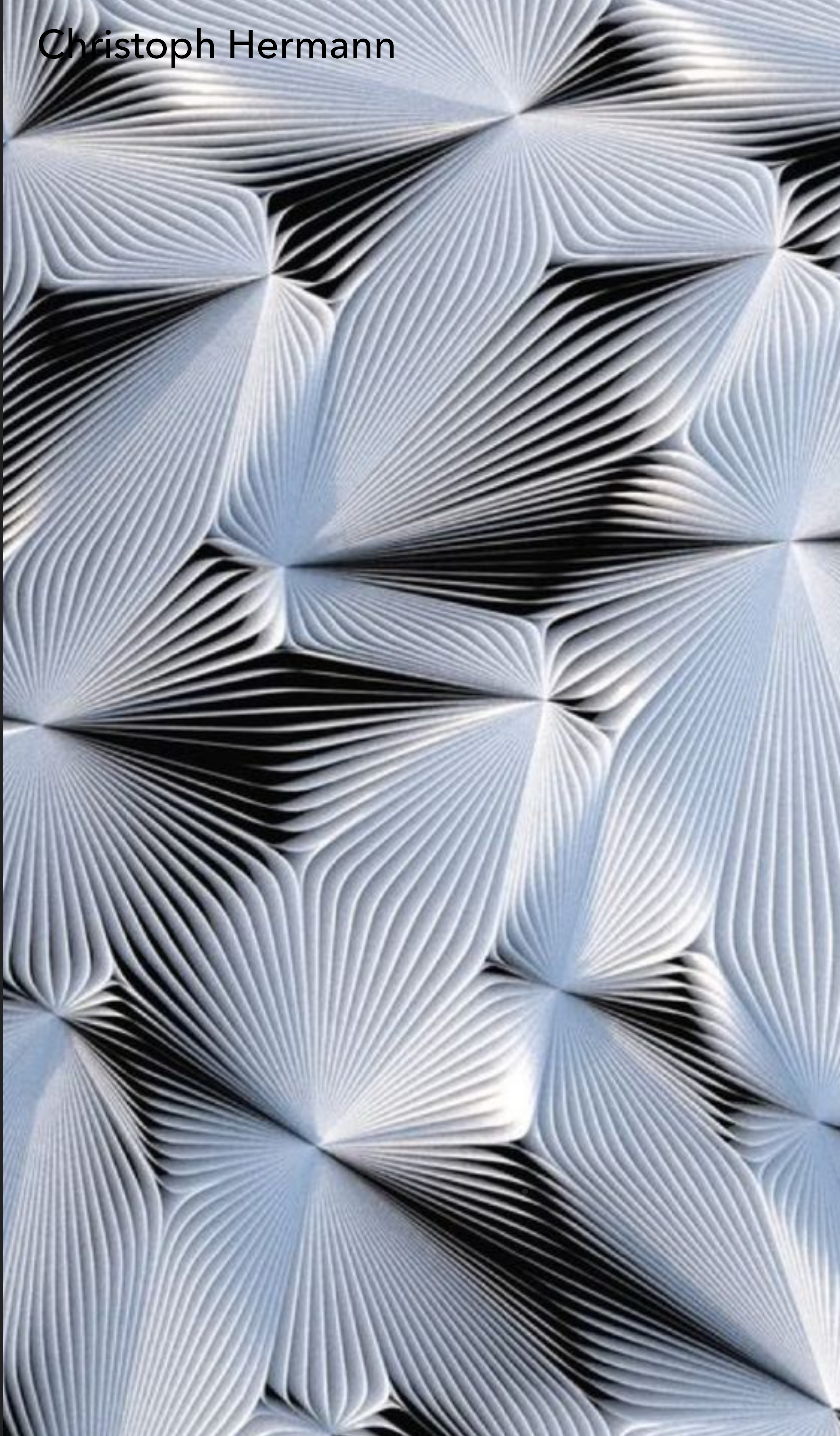
*Line as symbol of will and infinity*

*Line as symbol of color mutations and kinetic harmony*

*Sibyl Moholy-Nagy,*

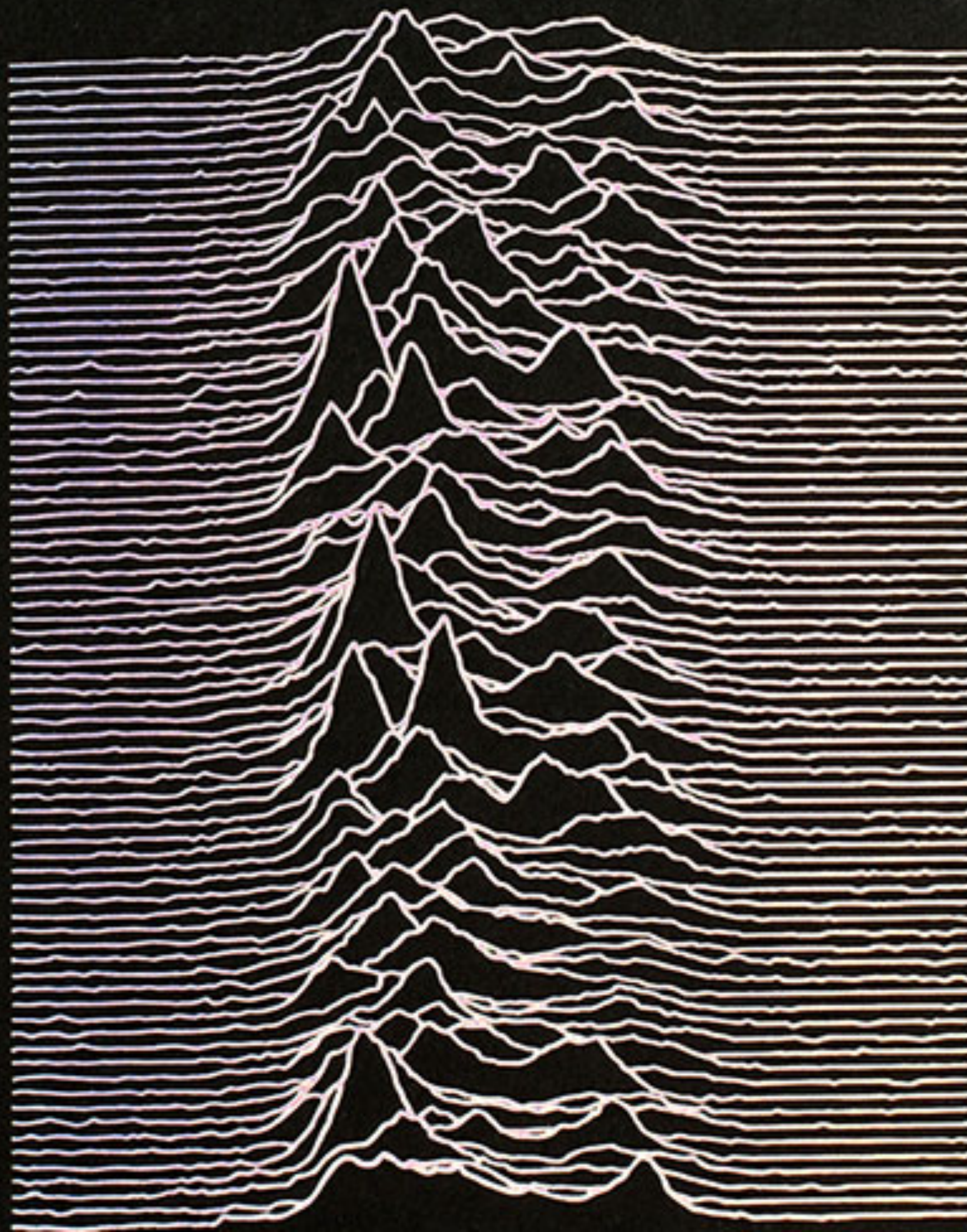
*summary of „Pedagogical Sketchbook“ by Paul Klee*

Christoph Hermann



Harold D. Craft, Jr

*6.7: Successive pulses from the first pulsar discovered, CP 1919, are here superimposed vertically. The pulses occur every 1.337 seconds. They are caused by a rapidly-spinning neutron star.*



Leonardo Solaas



# AESTHETIC CONSTRAINTS



**LIGHT**

**PROJECTION**

**LAYERING**

**TRANSPARENCY**

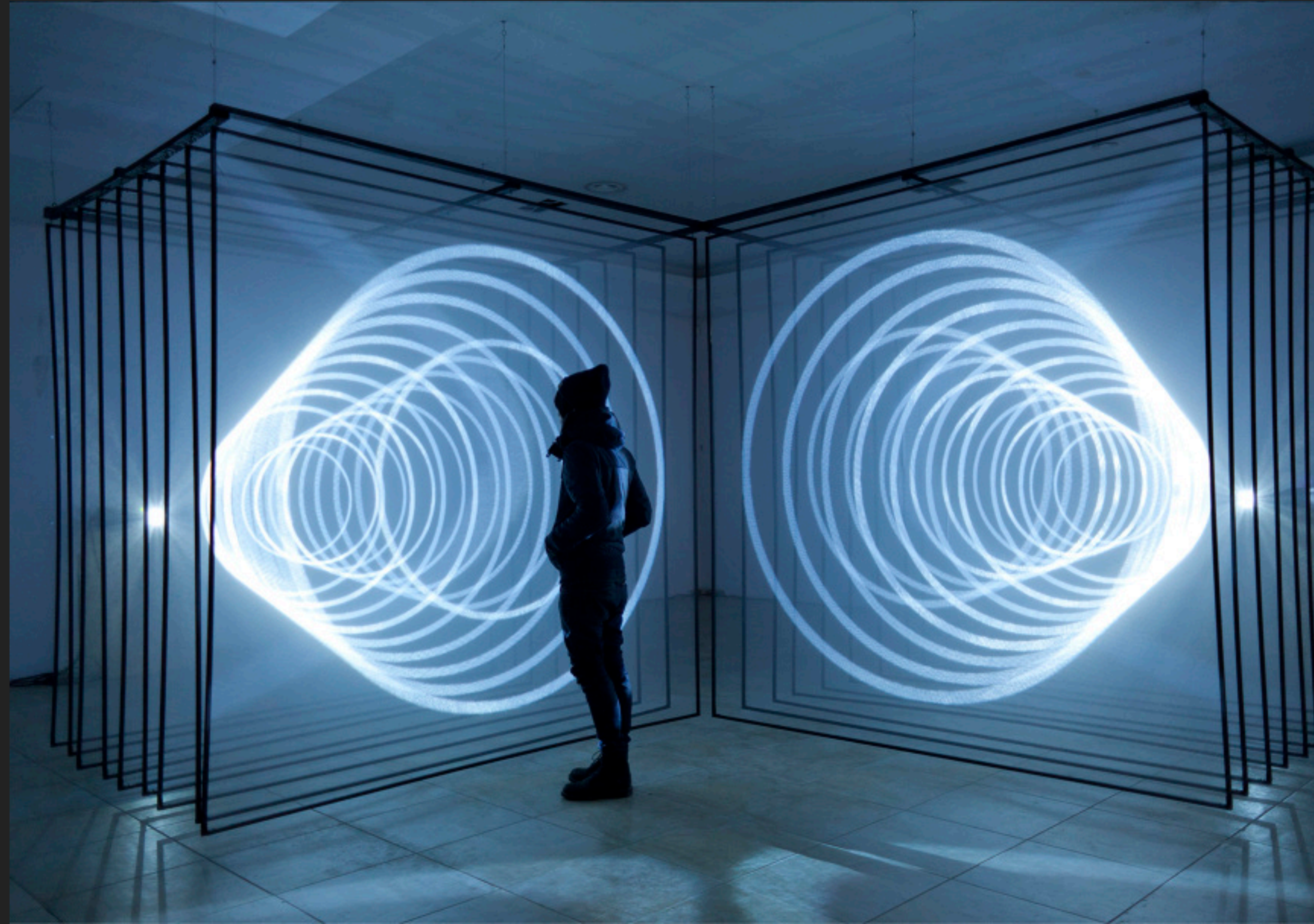
**REFLECTIONS**

**LIGHT&SHADOW**

Thilo Frank



Nanotak - Daydream



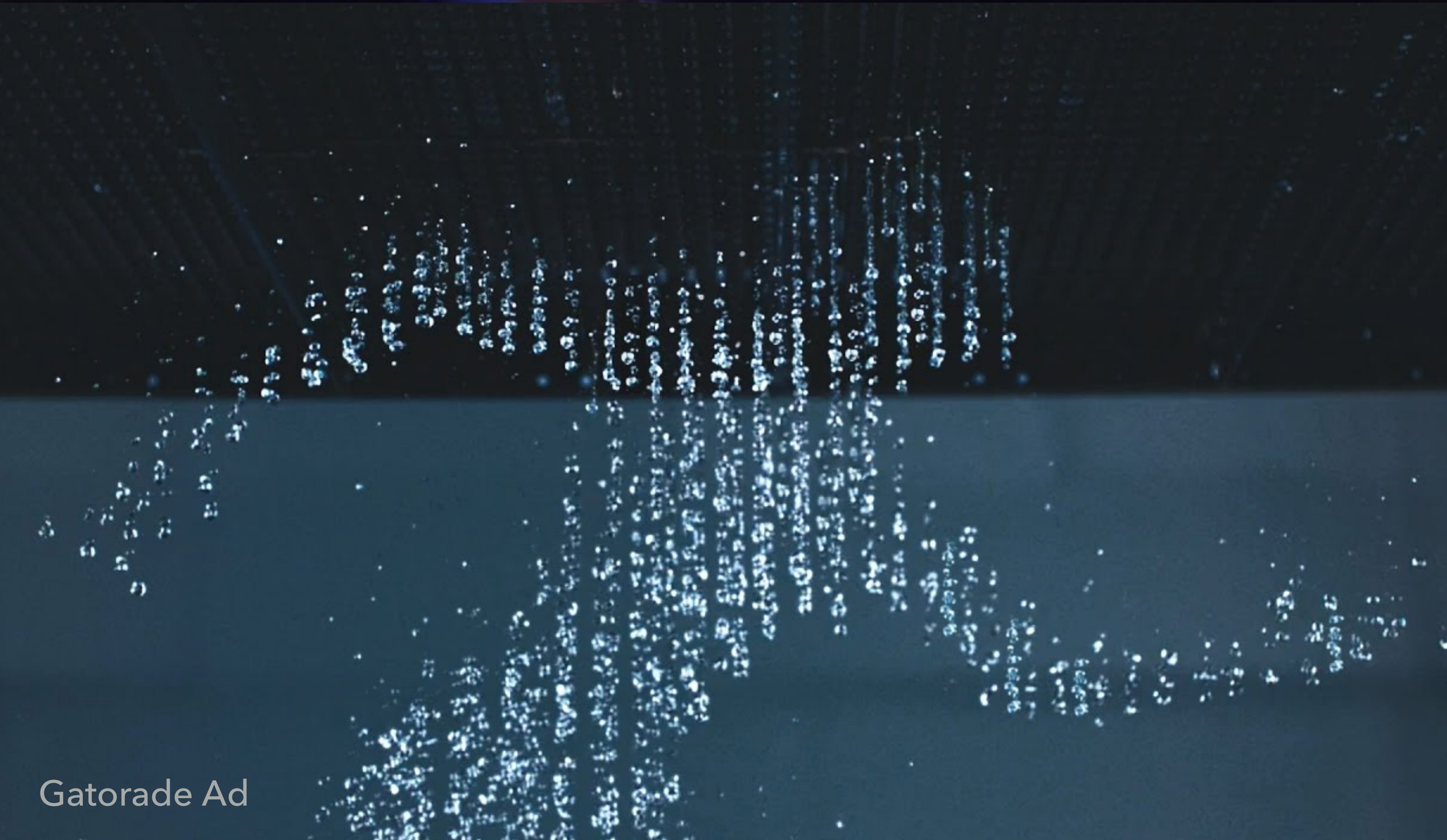
Kobakant



Malin Bobeck -Tadaa



Gatorade Ad



**CONCEPT**<sup>c</sup>

# BODY AS AN INTERFACE

# UNIQUE FEATURES AND AFFORDANCES OF WEARABLES

- EMBODIMENT
- INTIMACY
- PRIVACY
- PHYSICALITY, DIRECTEDNESS
- OTHER TO DISCOVER!

**MOVEMENT**

**=**

**CHANGE**

**PROGRESS**

—

**REGRESS**

**CHAOS**

—

**ORDER**

**SIMPLICITY**

—

**COMPLEXITY**

**COMFORT**

—

**DISCOMFORT**



# PLAYFULNESS

- PLAYFUL WAYS TO CRITICISE TECHNOLOGY THAT IS CLOSE TO OUR BODY
- FACILITATING EXPLORATION, CREATIVITY, INNOVATION
- FOSTERING SOCIAL COMPUTING
- ENCOURAGING CRITICAL THINKING AND CONVERSATION AROUND TECH
- OBSERVING AND NOTING USERS COMING UP WITH NOVEL WAYS OF UTILISING THE AFFORDANCES AND PHYSICAL FEATURES OF THE ARTEFACTS

