

# PHOTONIC FATALITY

ON ROBOTIC SHORT-SIGHTEDNESS

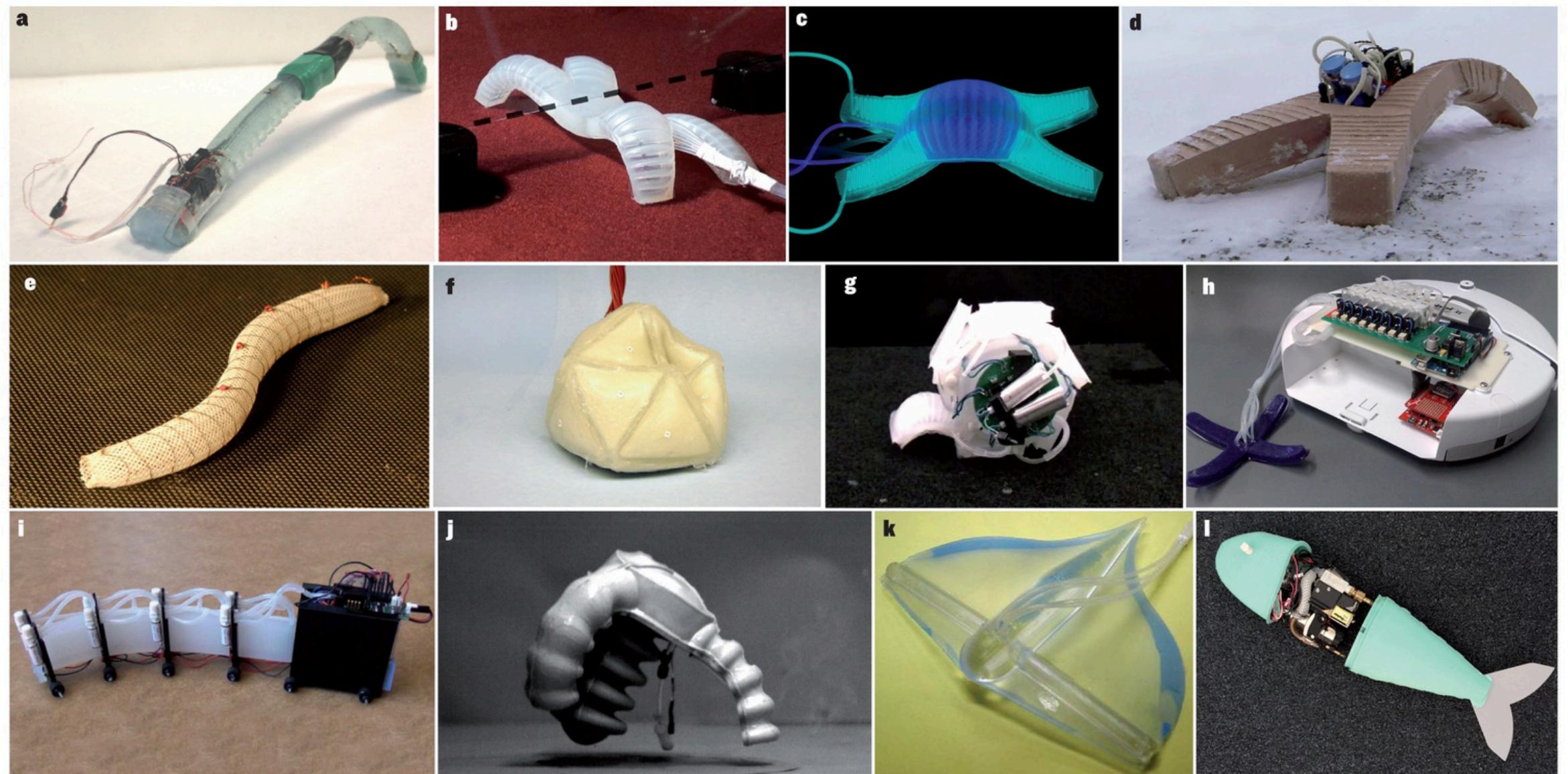


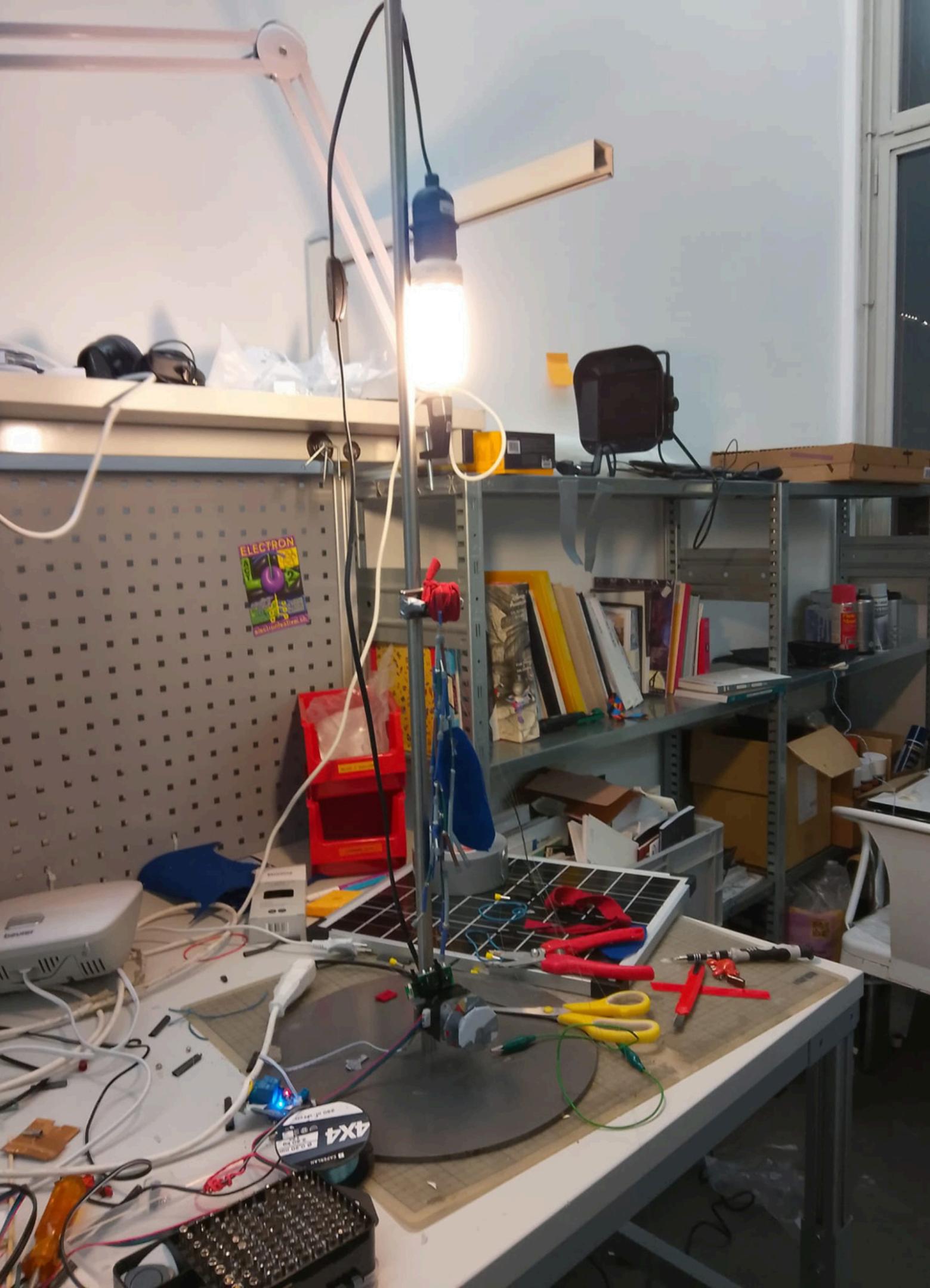
WRITE TWO  
PROTOTYPE  
SENTENCES.  
FREAK OUT.  
REPEAT.

# SOFT ROBOTS

Robot= embodiment of code

Soft robot = a robot that does so in a smooth, soft, elegant way and is composed of organic materials, that regenerates itself, that breathes and moves according to external natural stimuli.





# MEET THE ROBOT

## WHAT

A plant/anemone inspired robot that feeds itself with solar light but as it grows, it covers the solar panel that aliments itself, causing itself to die in an infinite cycle of death and resurrection, light and shadows.

## WHY

Speculation and provocation on the very core usefulness of robots in our everyday life (and more).

## HOW

Light detection, growth, composition and decomposition.  
Soft arms that are both rigid when alive, and soft when dead.

# CONCEPT RESEARCH

## MAKING USELESS ROBOTS

When we are asked to build robots that help clean the environment, I thought about the energy consuming production chain that is needed to produce them.

And about the role of robots in our everyday society. Are they useful? I wanted to explore the thought-provoking mechanism of a stupid/short-sighted robot.



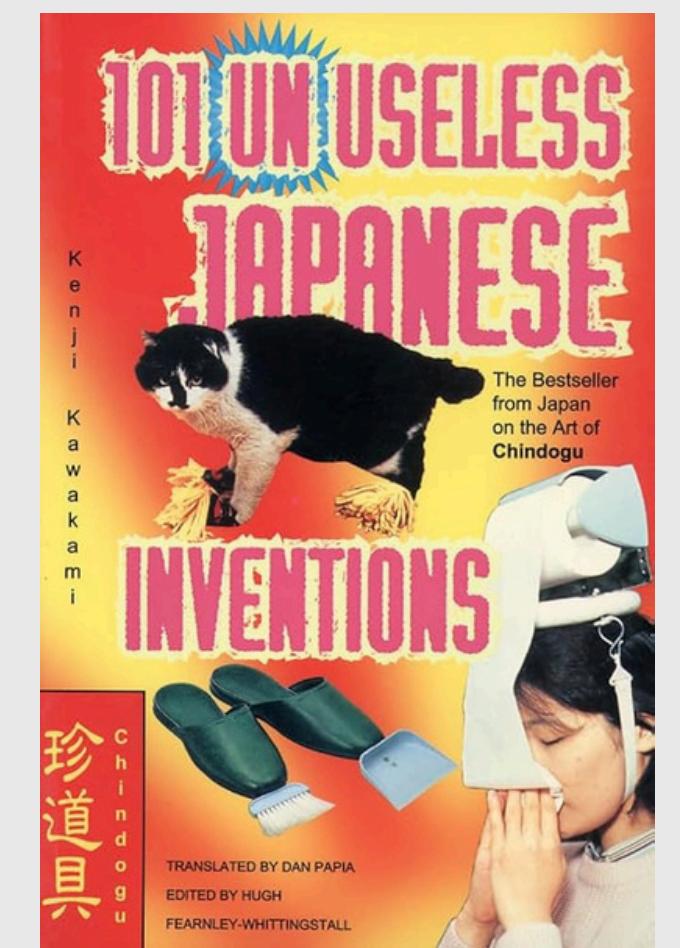
Chindōgu (珍道具) is the practice of inventing ingenious everyday gadgets that seem to be ideal solutions to particular problems, but which may cause more problems than they solve.

### LINKS

[The Stupid Shit No One Needs and Terrible Ideas Hackathon](#)

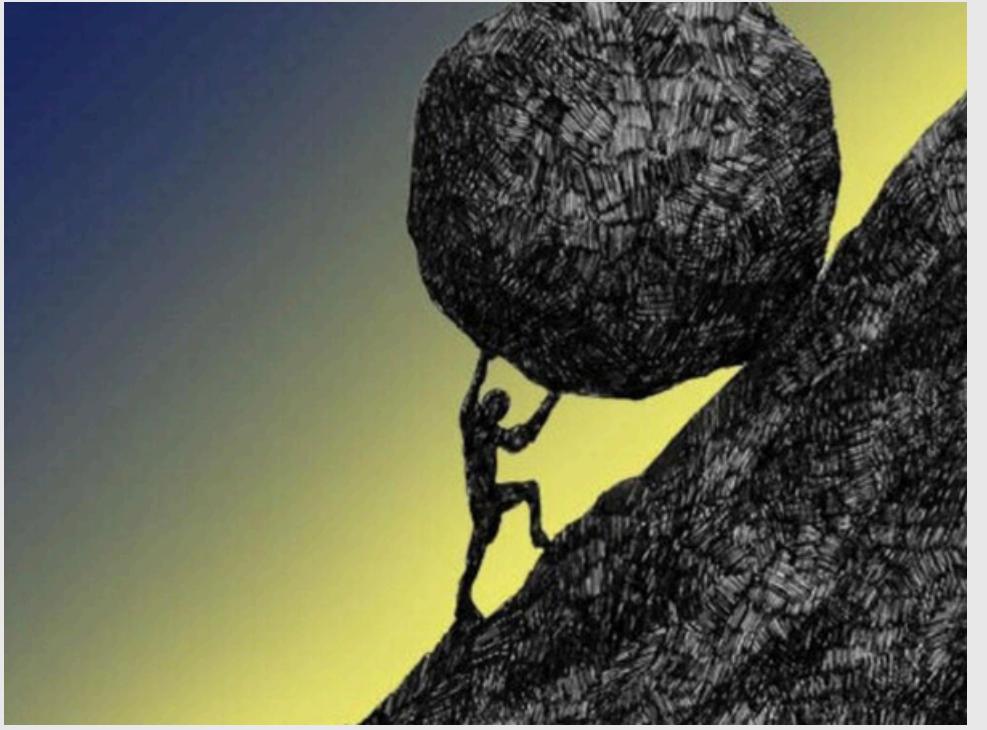
[In Praise Of Useless Robots](#)

[Socially robotic: making useless machines](#)



# RECURSIVE

Recursive processes – infinite actions



Sisifo



Prometeo

# RESILIENT

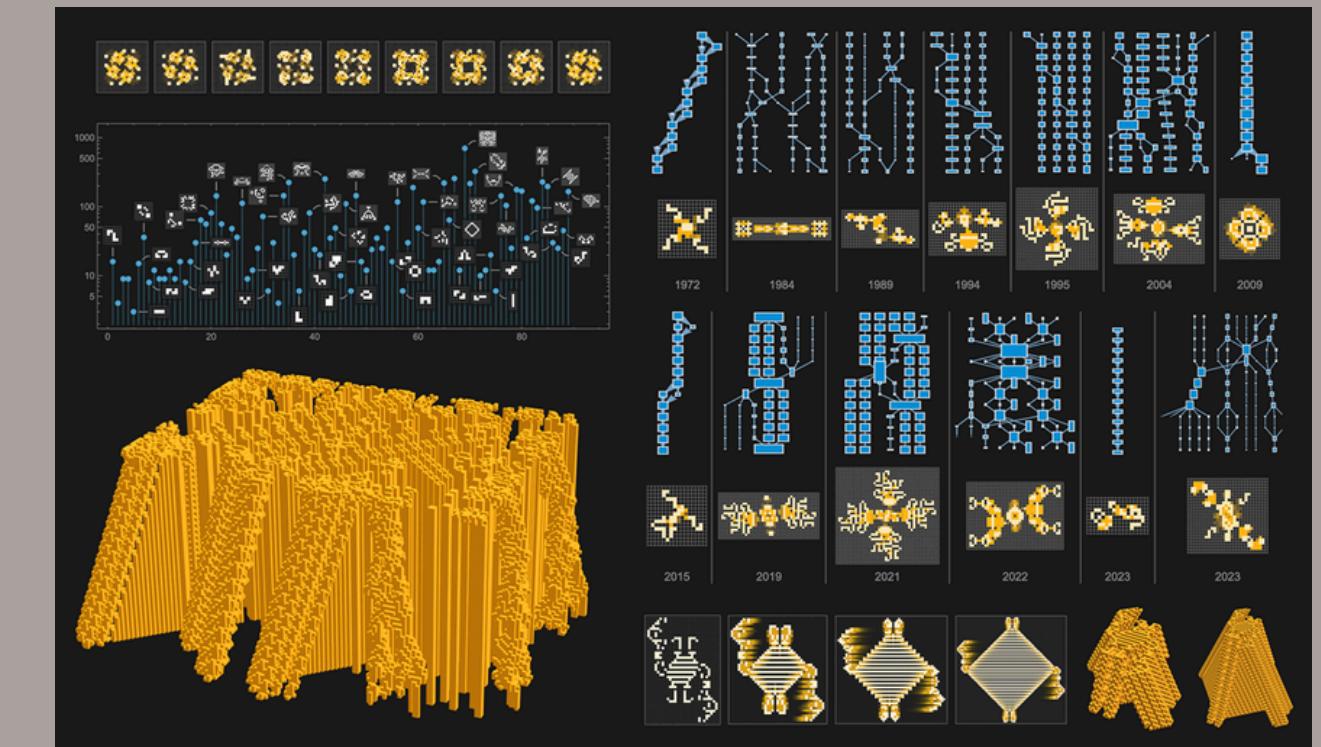
Resilient things that keep going forever – no need of external power.



Algae that purify air

# AUTOPOIESIS

Self regulation and autopoiesis of complex systems



Cellular automata, game of life

# EASTHETIC RESEARCH



Sun Yuan and Peng Yu: Can't Help Myself



Oron Catts & Ionat Zurr



driestens vestappen, the factory, 1995

# MATERIAL EXPLORATION

## POTENTIAL LEAVES CONSISTENCY

### BIOPLASTIC

Agar agar  
85% glycerin  
water

## POTENTIAL LEGS

### HARD & SOFT

for the legs of the  
plant/insect

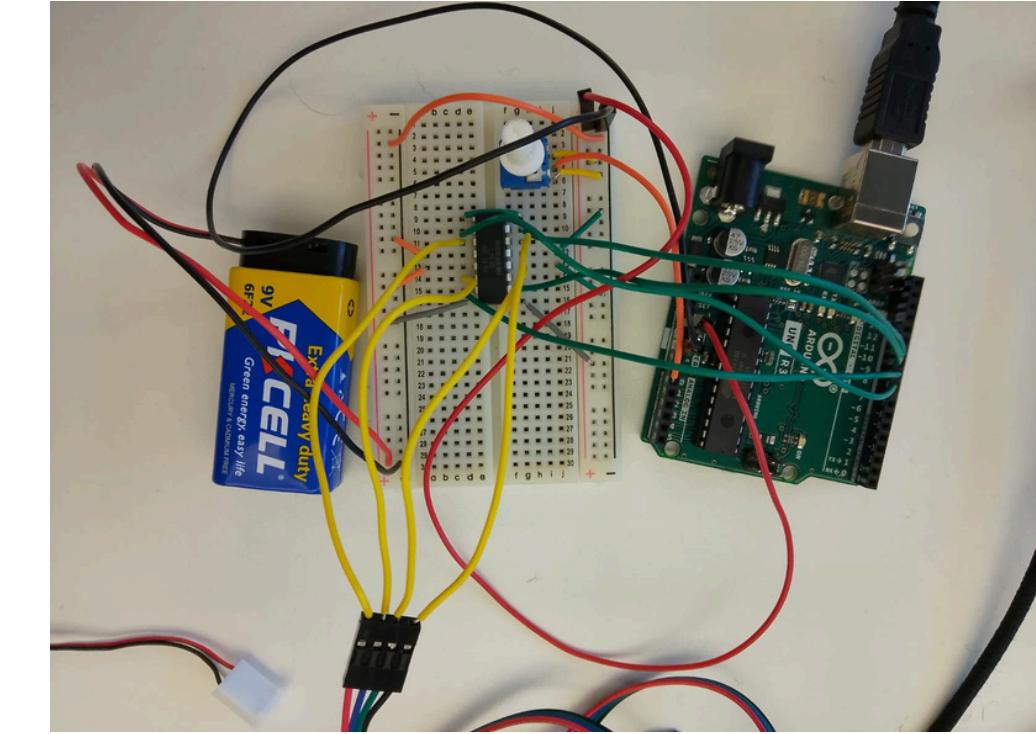
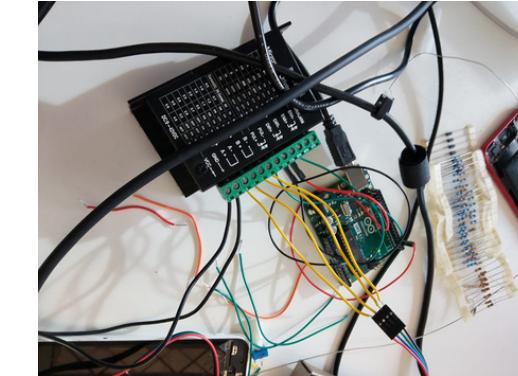




in the beginning, high ambition to power this  
with small solar panel...



or an alogen lamp...

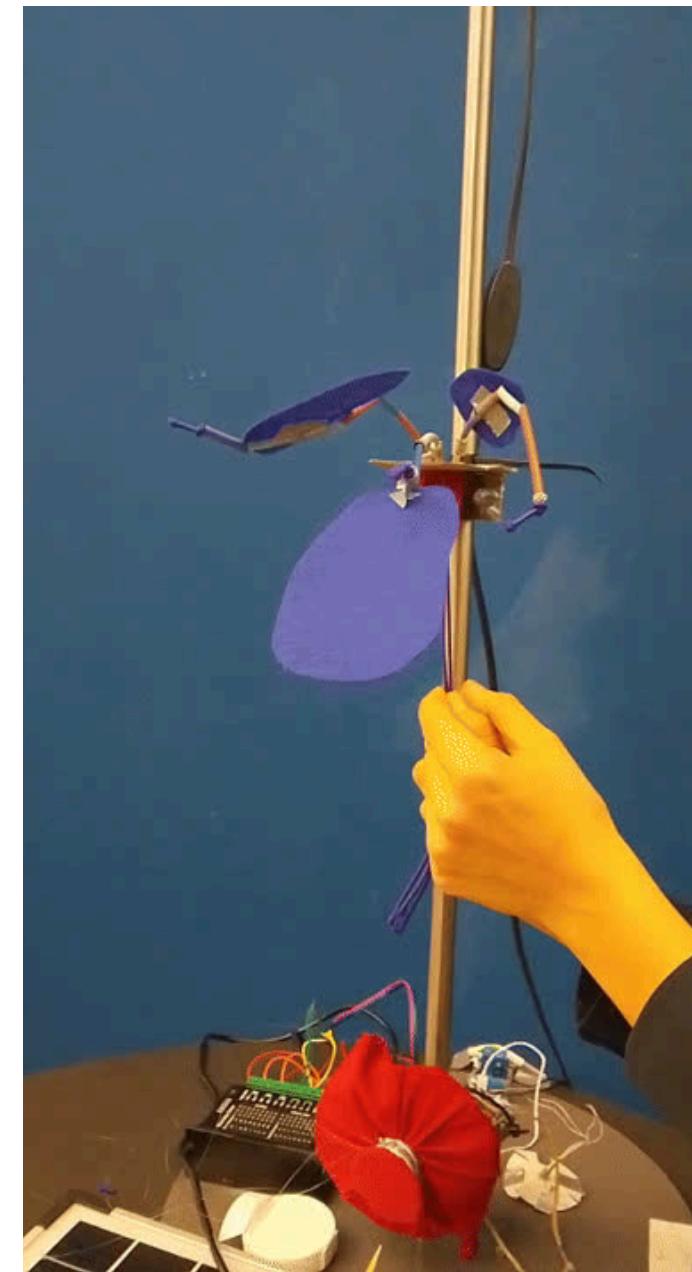
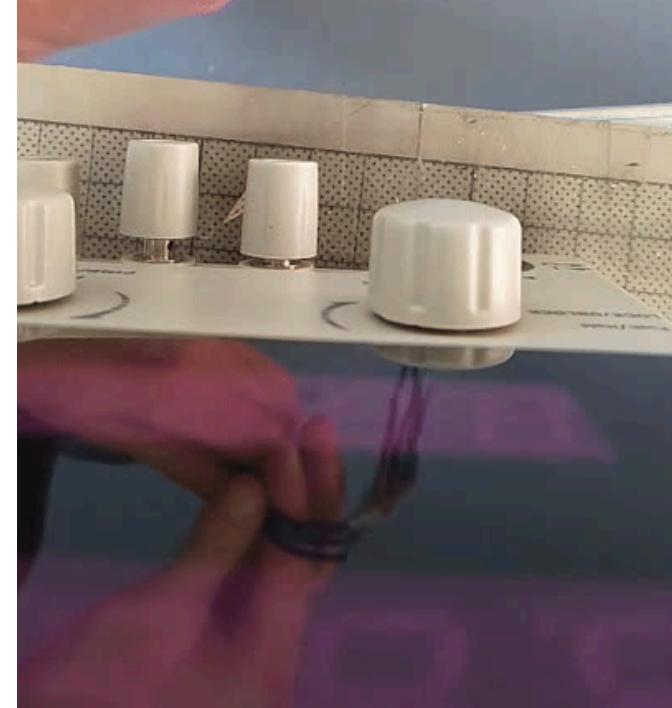
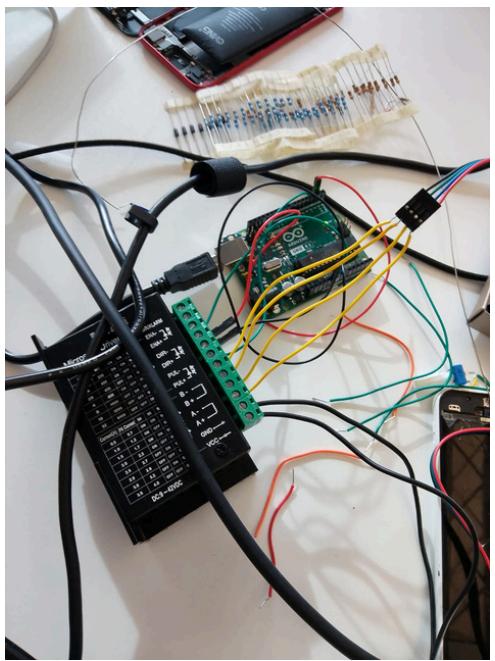


## SOLAR PANELS

- are inefficient
- output very low amperage
- need batteries or capacitors to give constant input

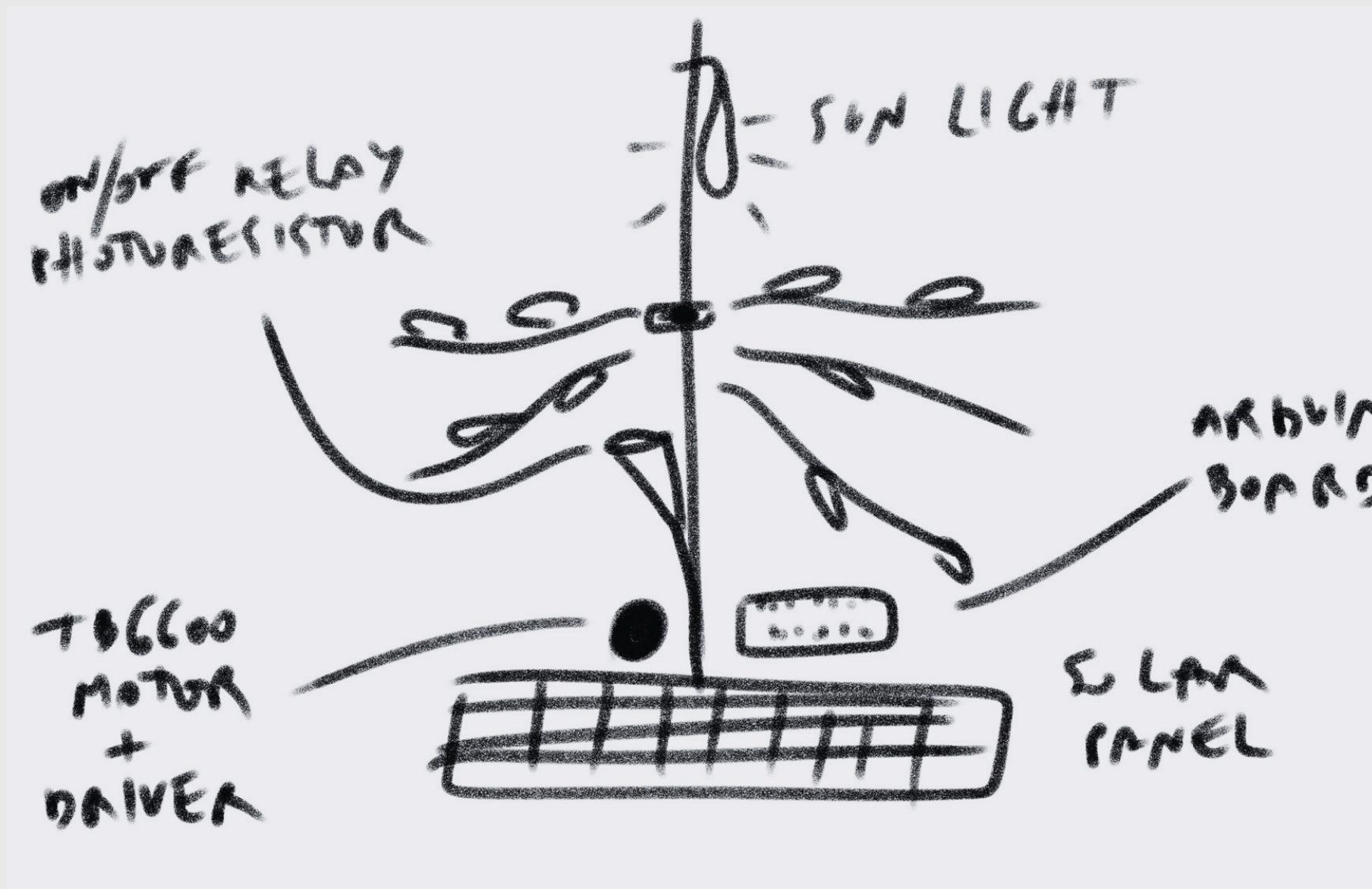
# ENERGETIC EXPLORATION





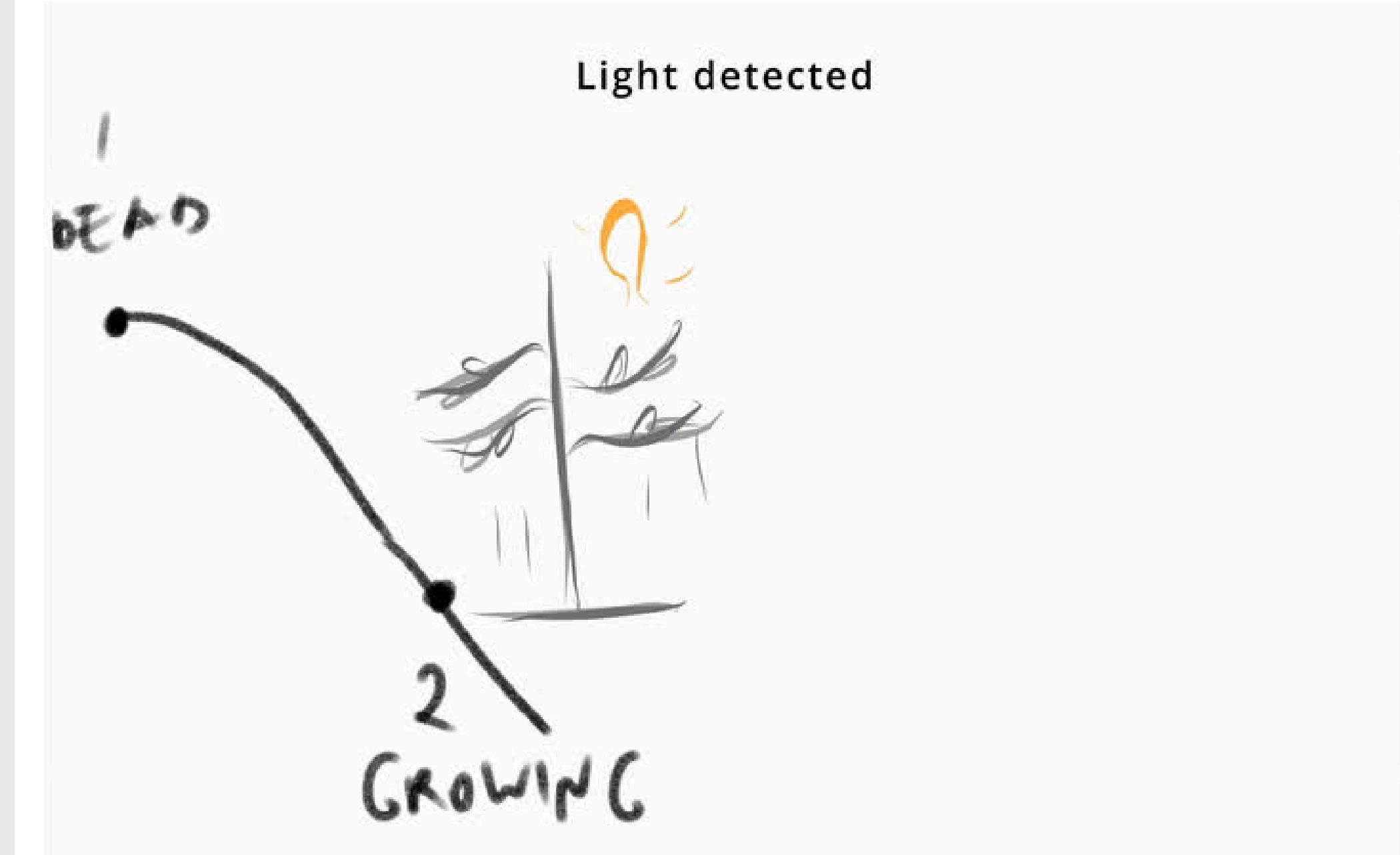
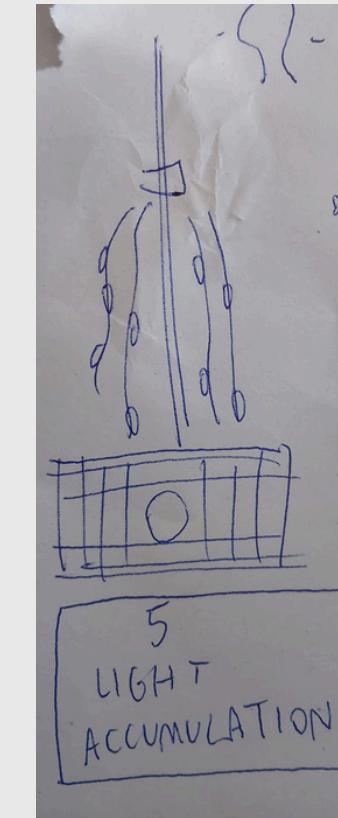
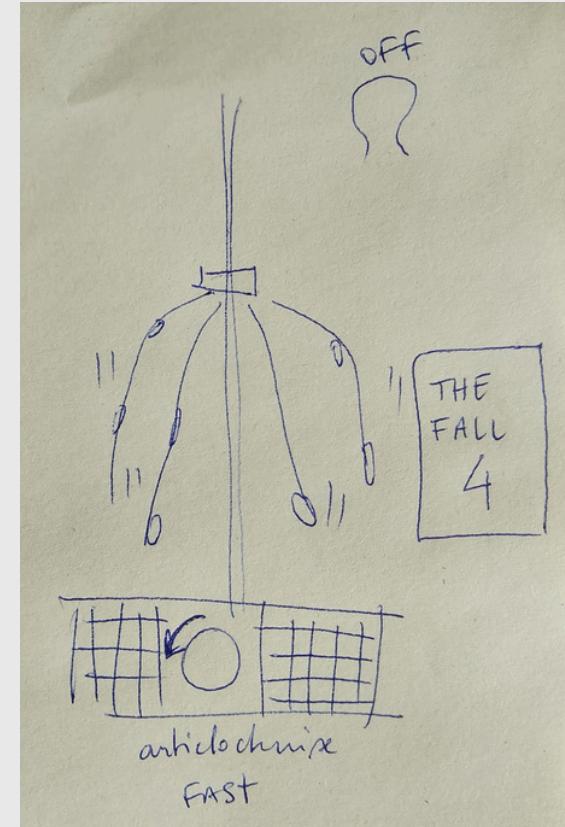
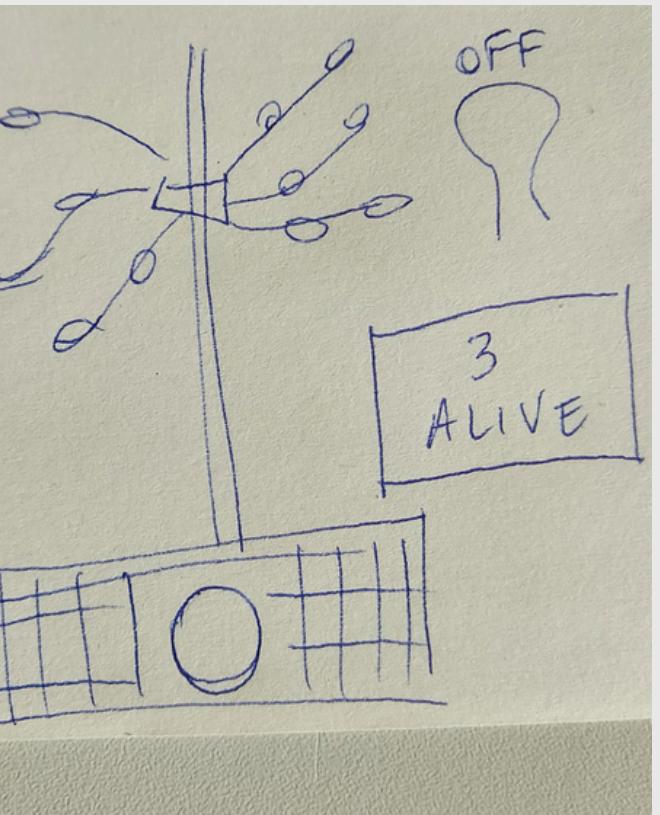
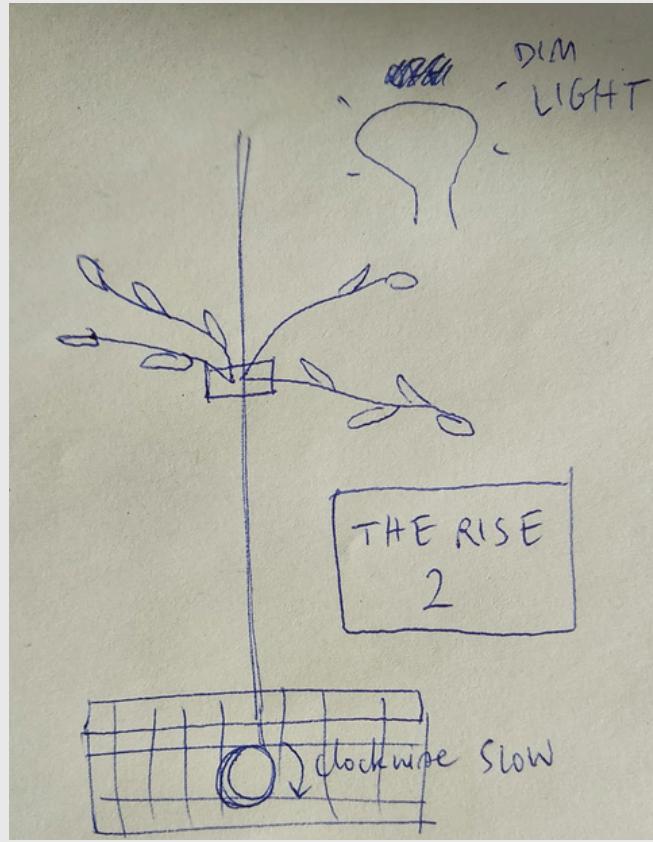
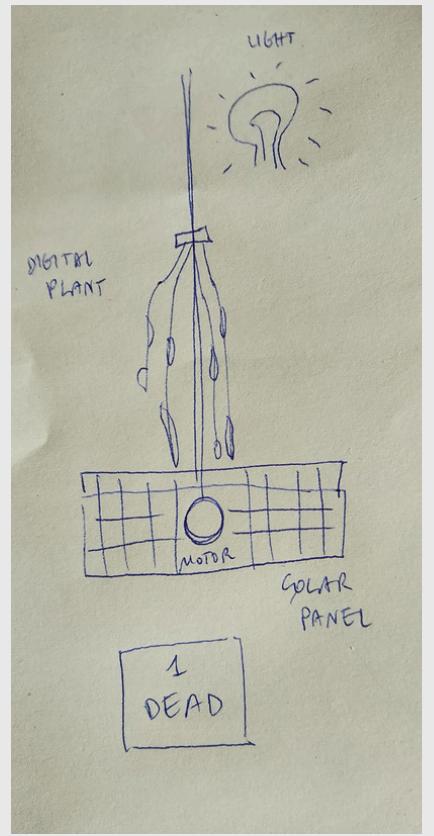
# PROCESS

# COMPONENTS



Straws (all materials)  
felt  
elastic  
a looot of tape  
Lisa's t-shirt  
solar panel  
old iphone5  
photoresistor  
relay  
arduino board  
light bulb  
stepper motor  
stepper motoor driver  
cables, cables, cables  
beeds  
wires  
etc

# MECHANISM



# **LET'S DEMO !!**