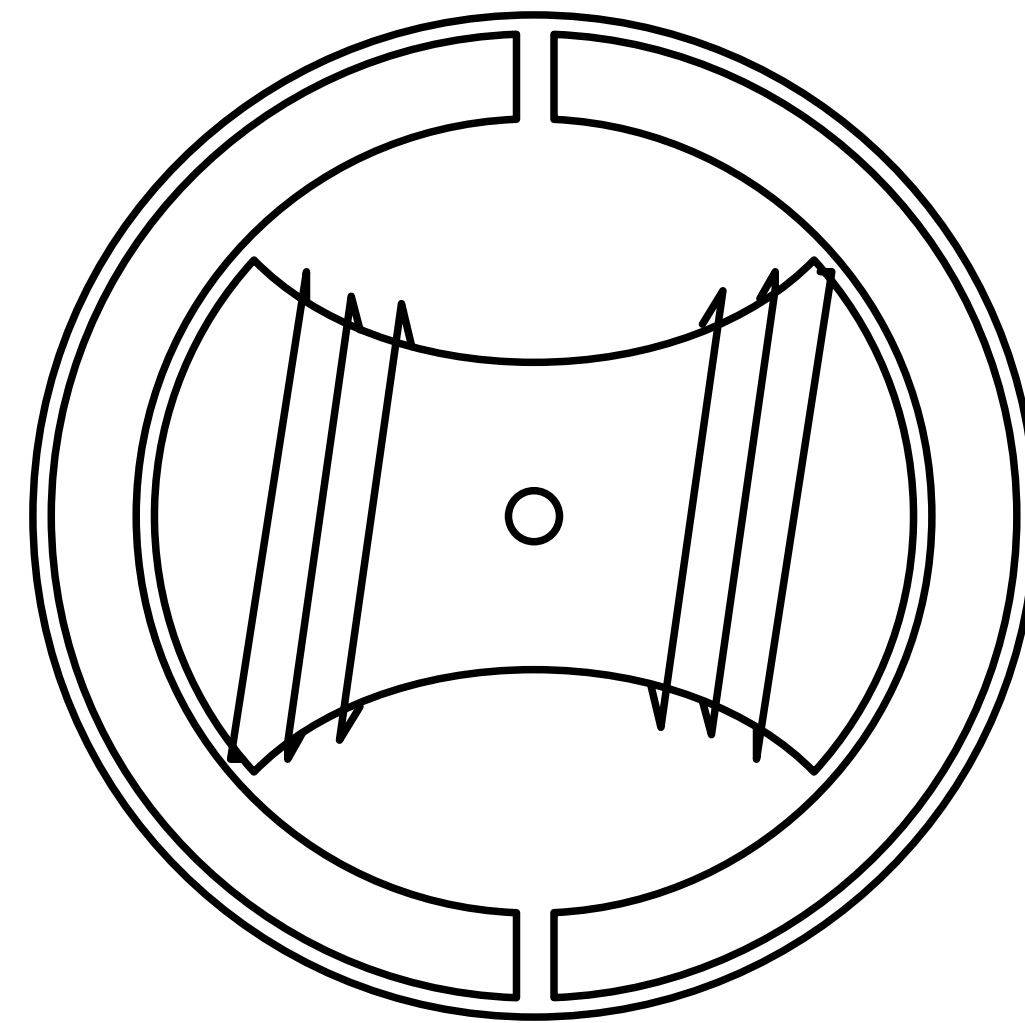


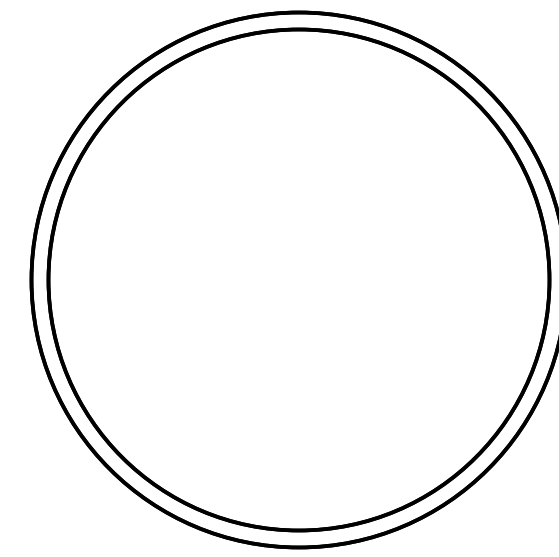
computational sensation

ACTUATORS

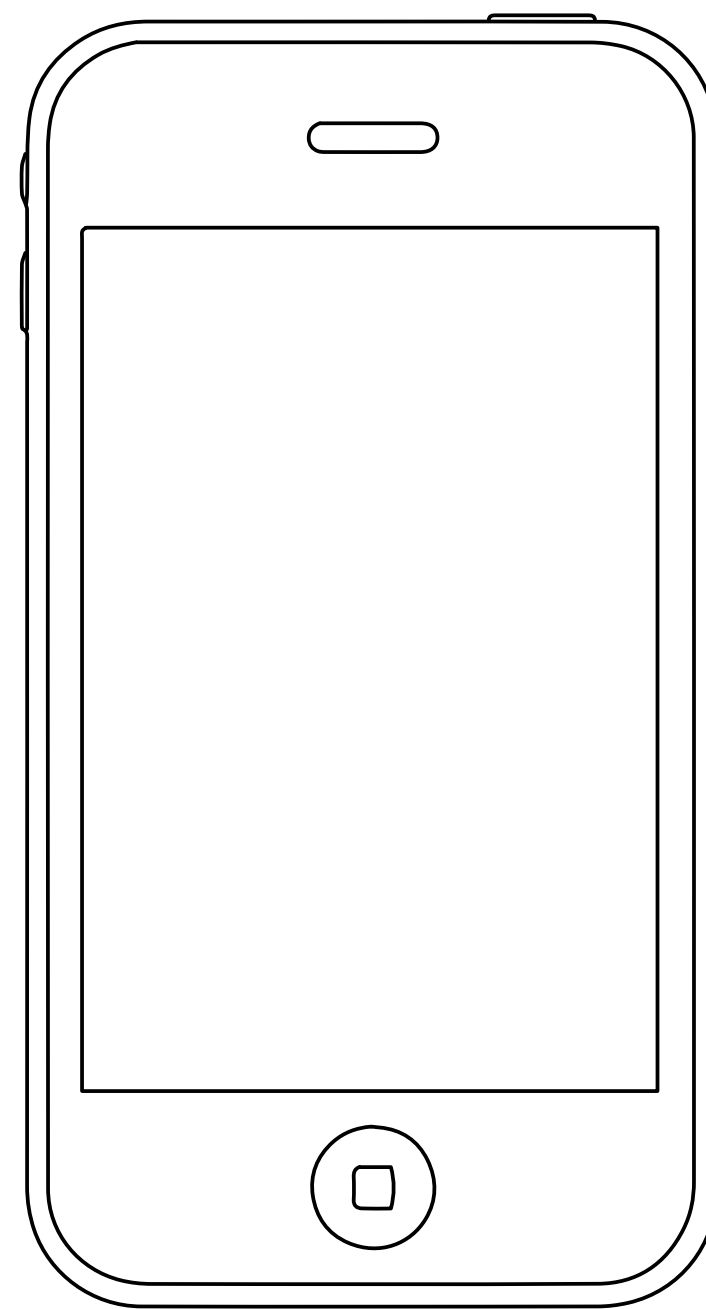
a list



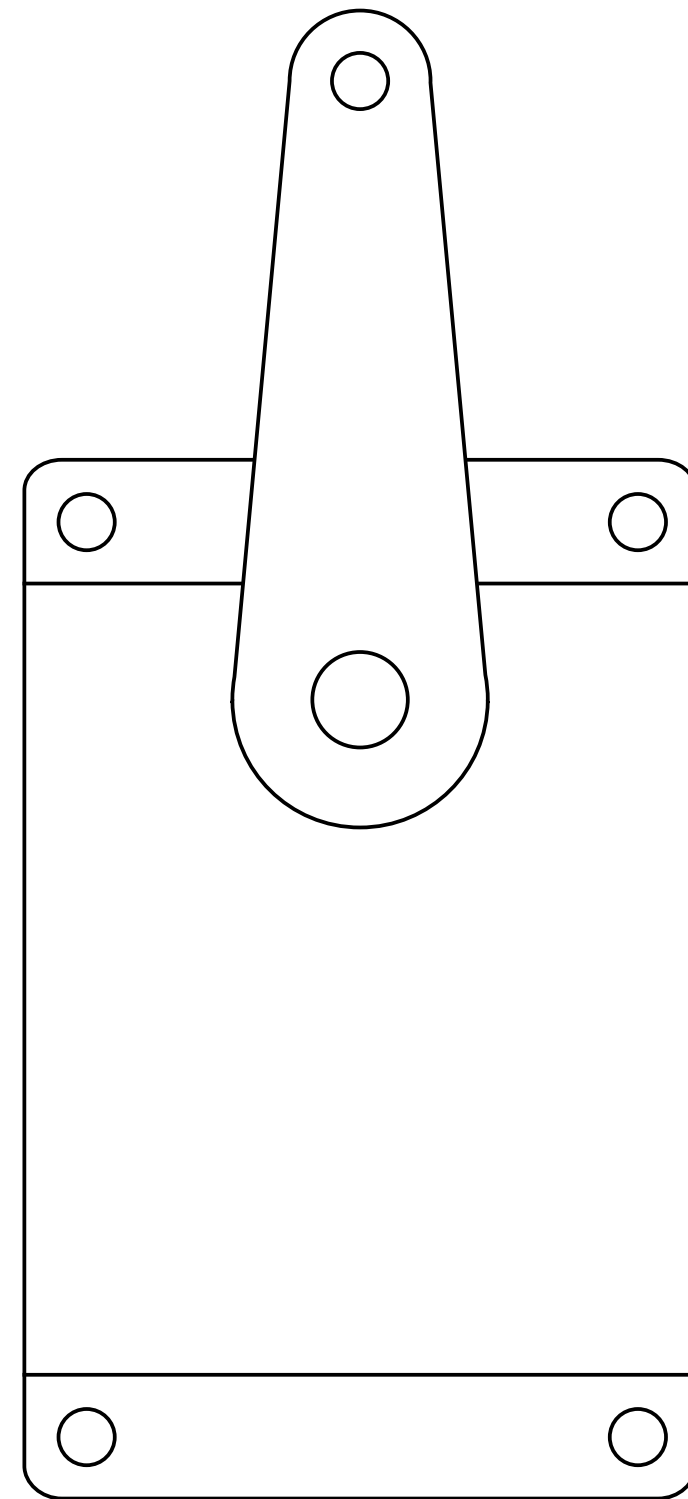
DC Motor



Vibration Motor



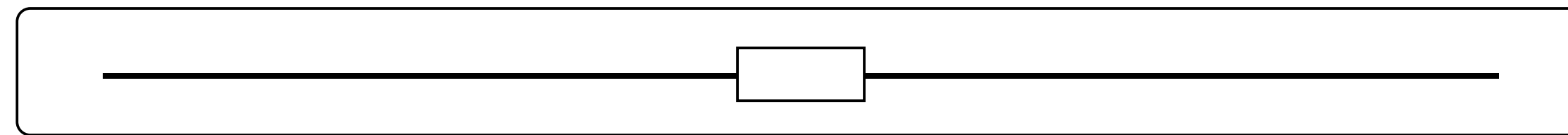
Notifications



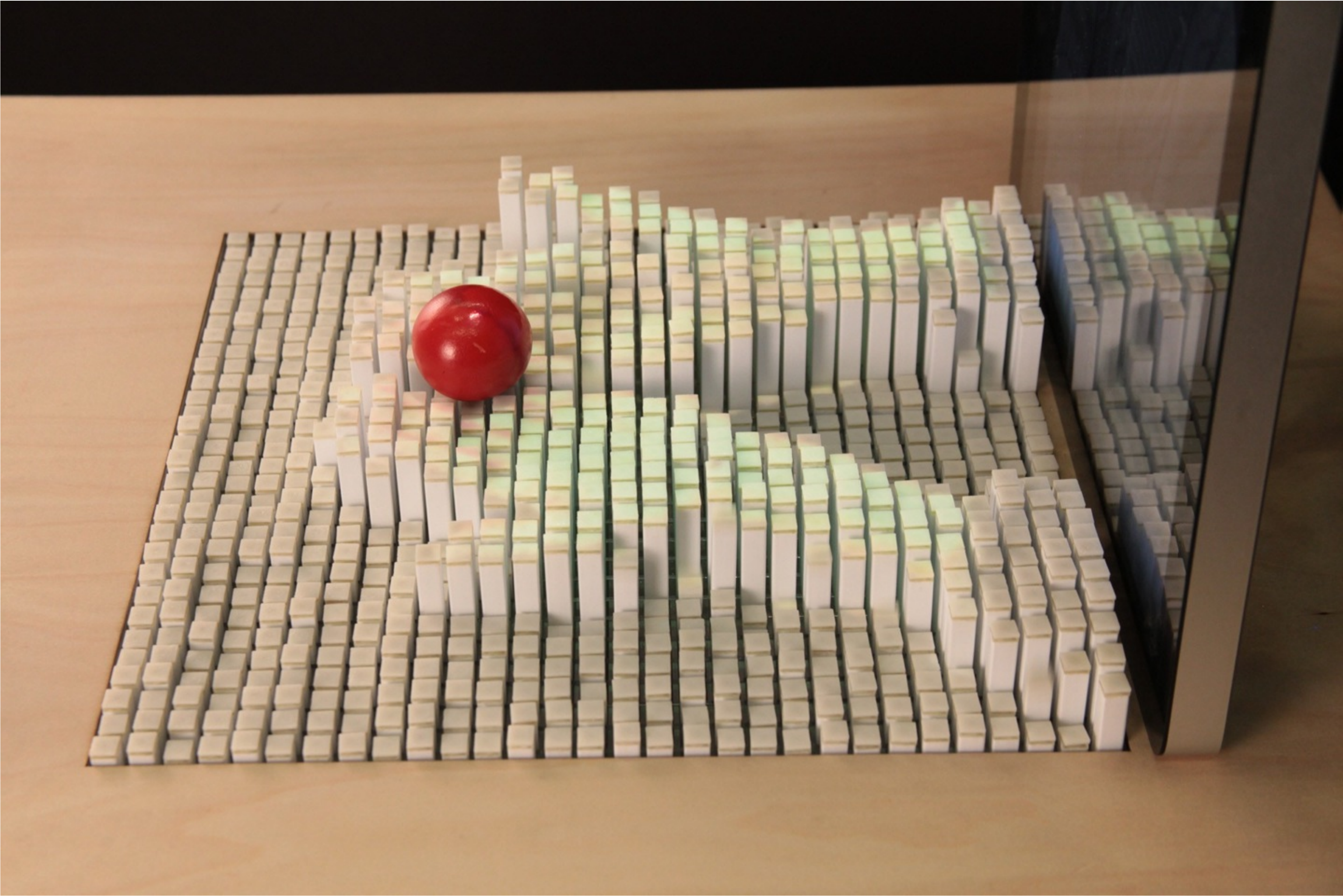
Servo Motor

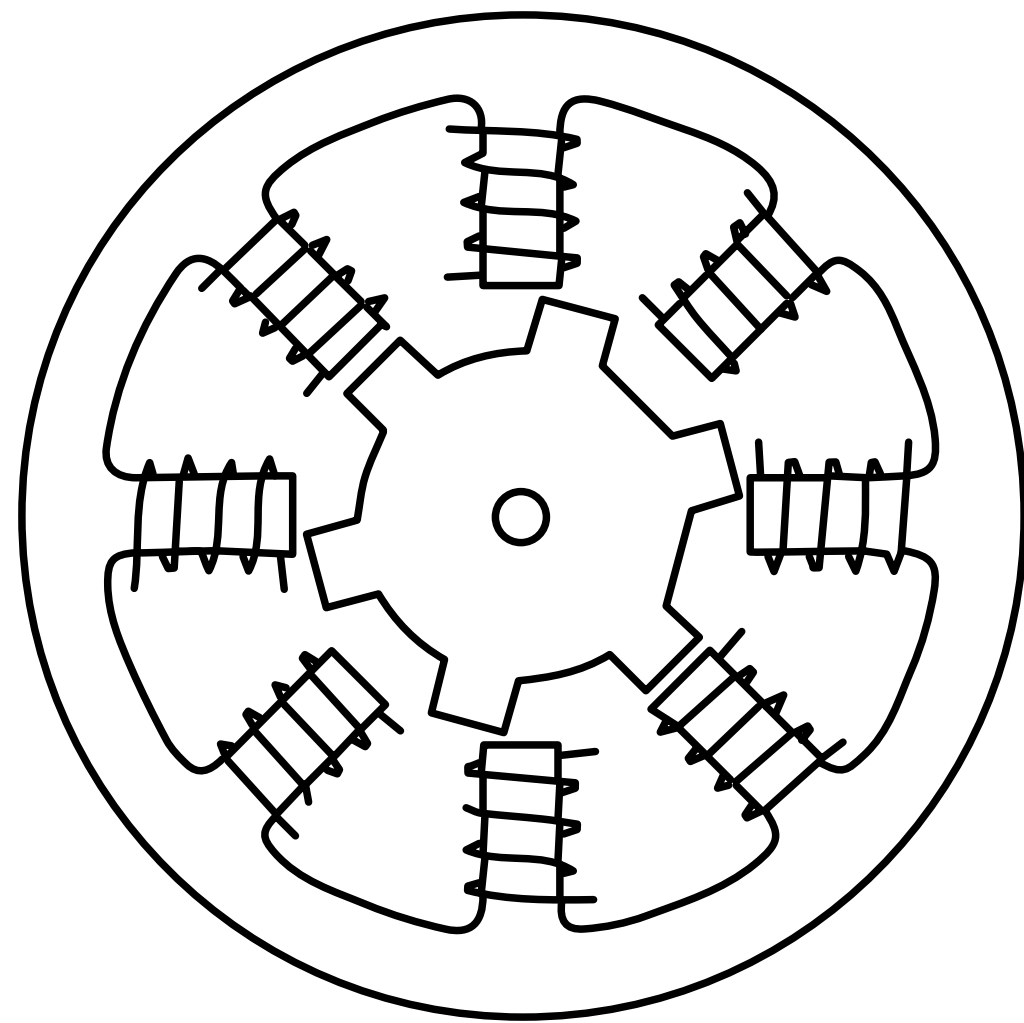


Topobo

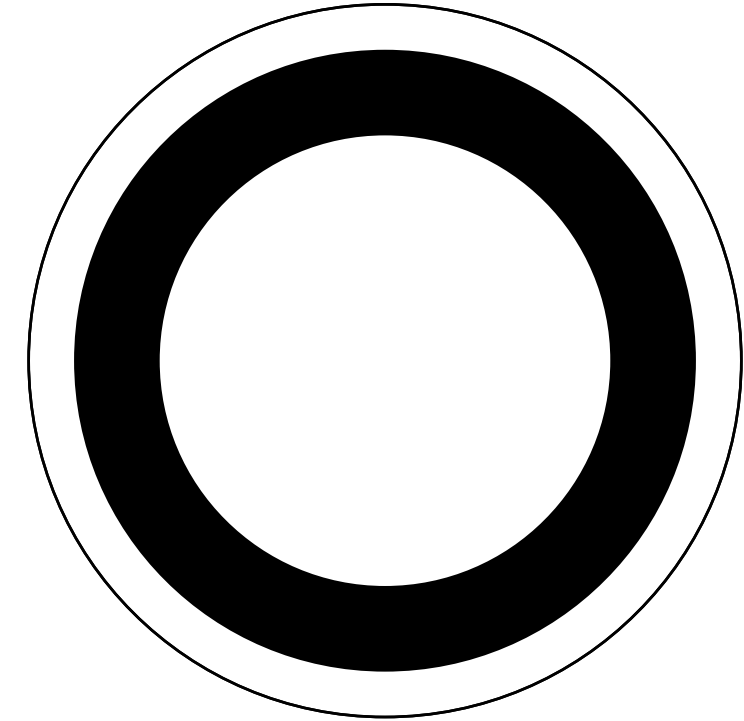


Linear Slider

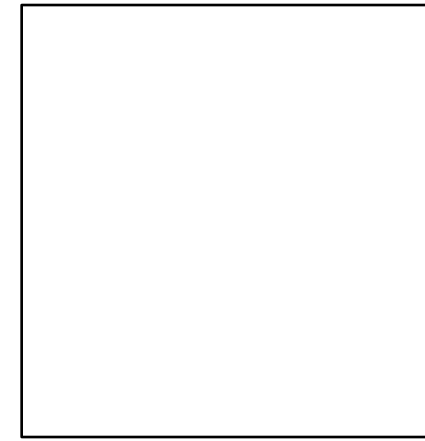




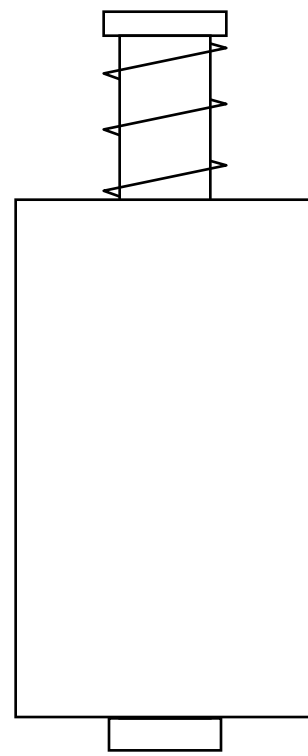
Stepper Motor



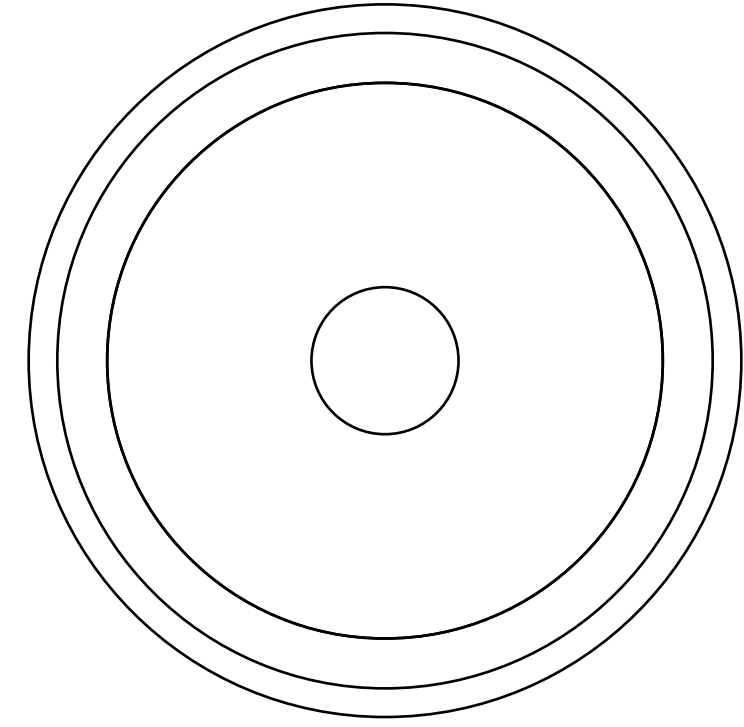
Electromagnet



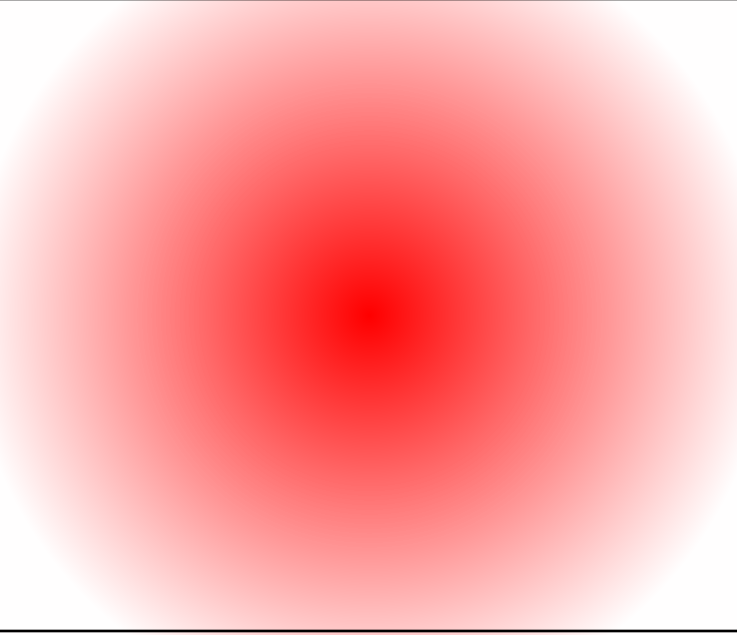
Electromagnet



Solenoid



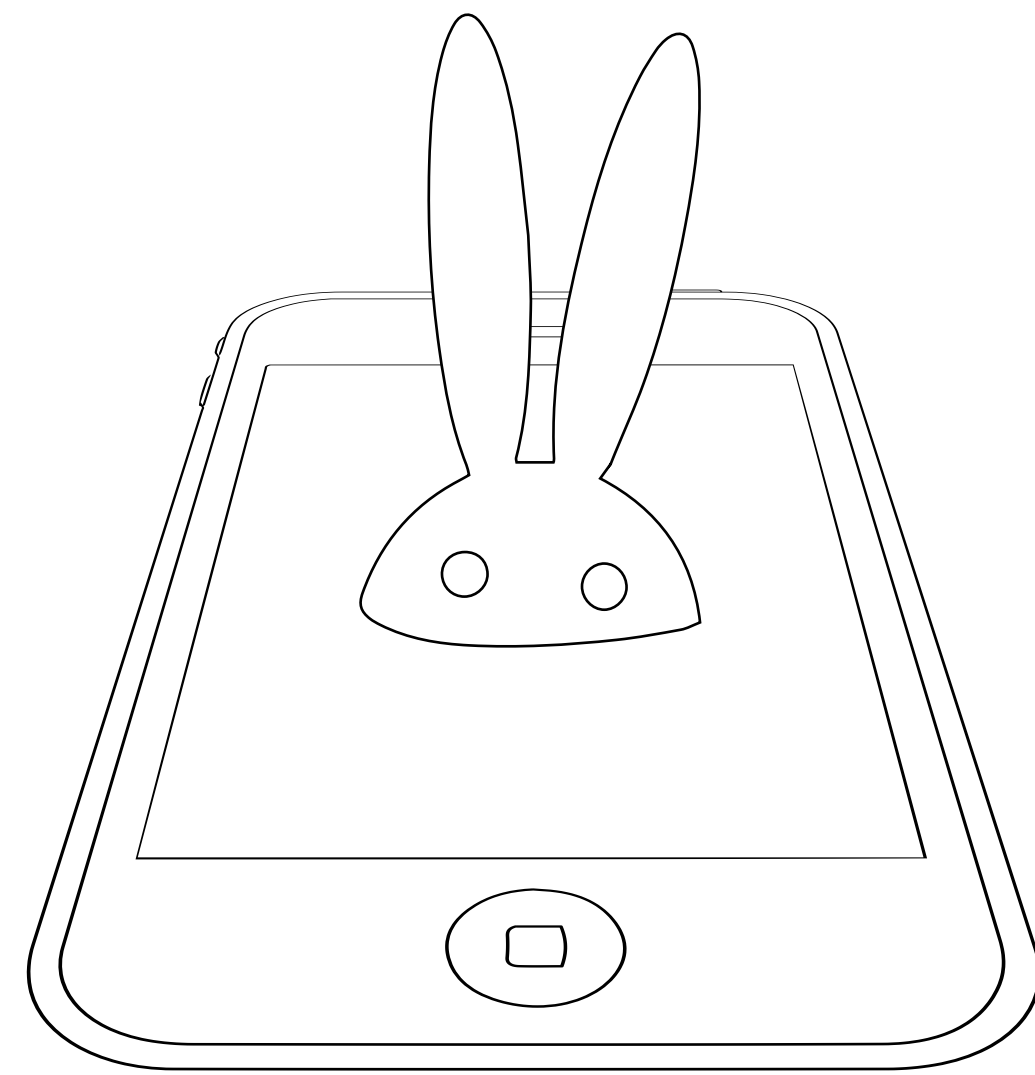
Speaker



Peltier

“A sufficiently advanced technology is indistinguishable from magic”

Arthur C. Clarke
Clarke's Three Laws



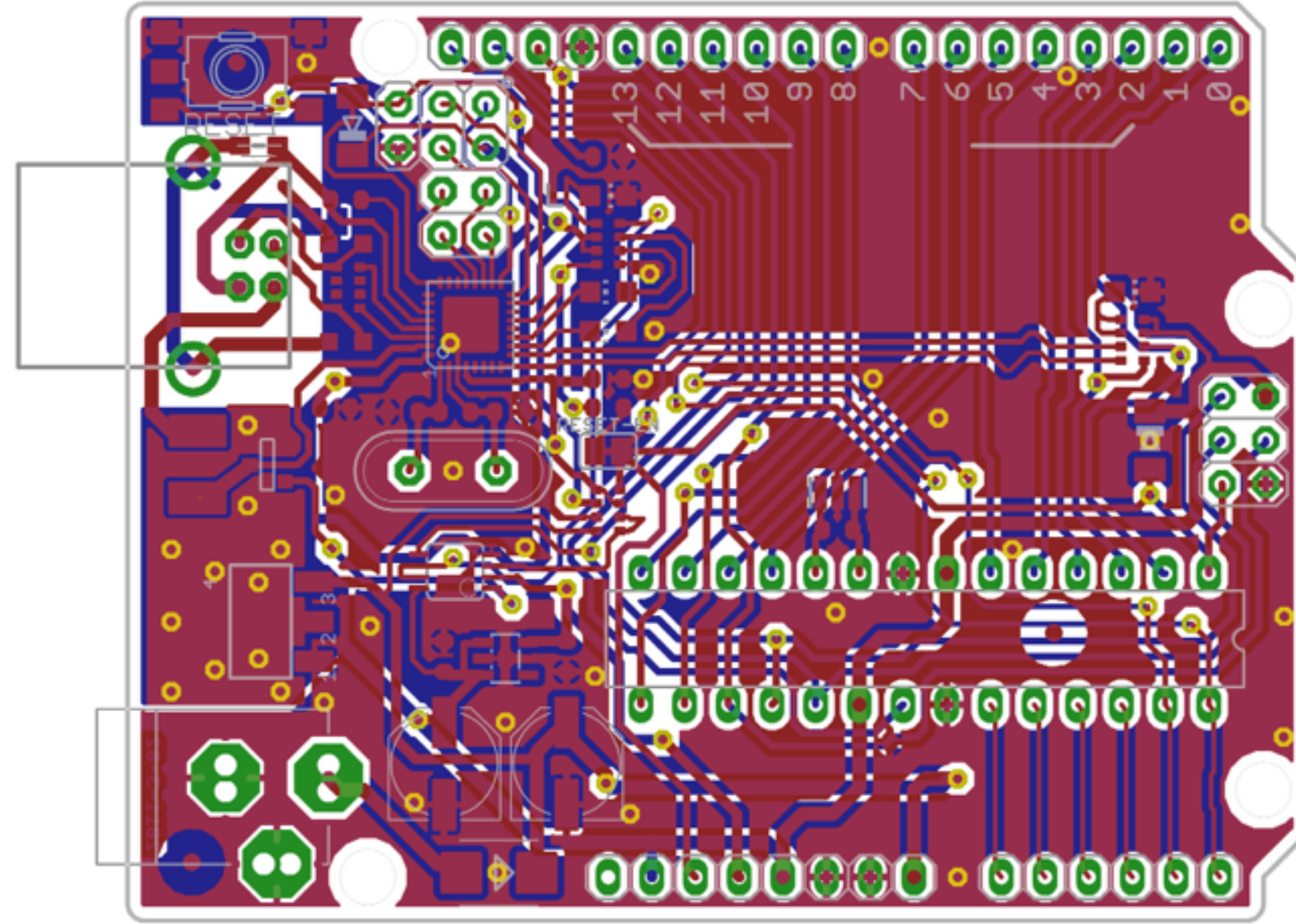
Magic?

“When a machine runs efficiently [..] one need focus only on its inputs and outputs and not on its internal complexity.

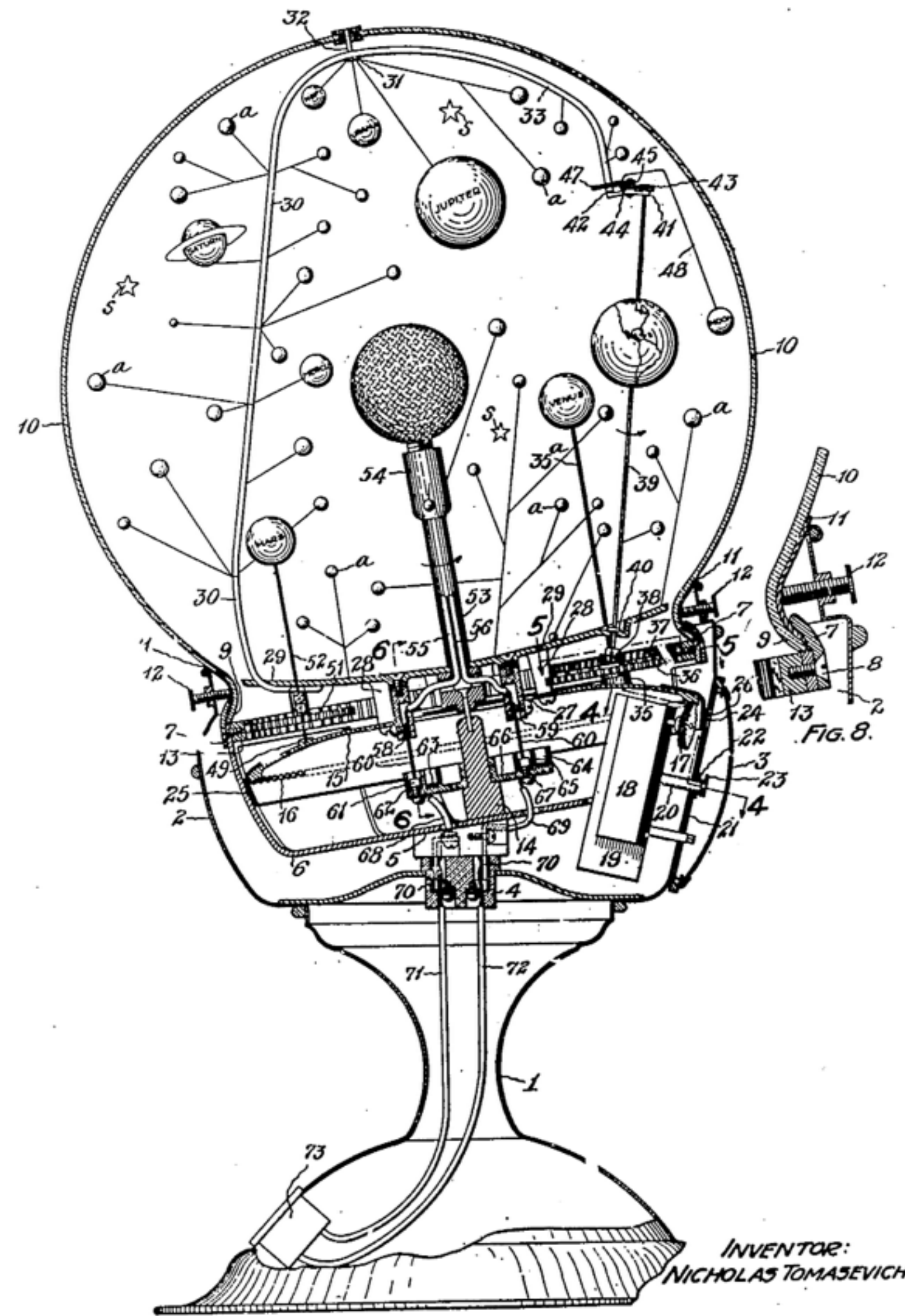
Thus, paradoxically, **the more science and technology succeed, the more opaque and obscure they become.”**

Bruno Latour

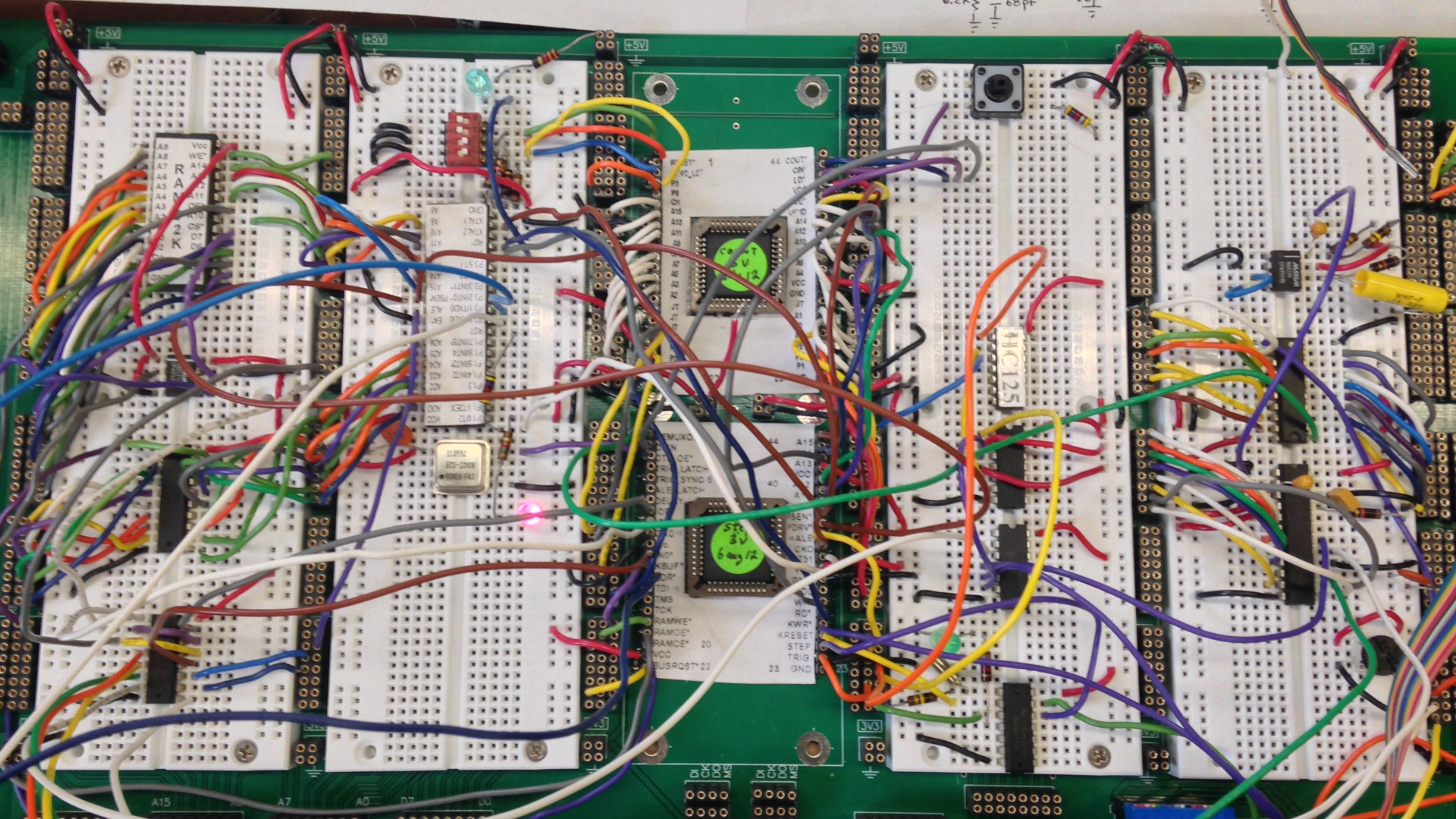


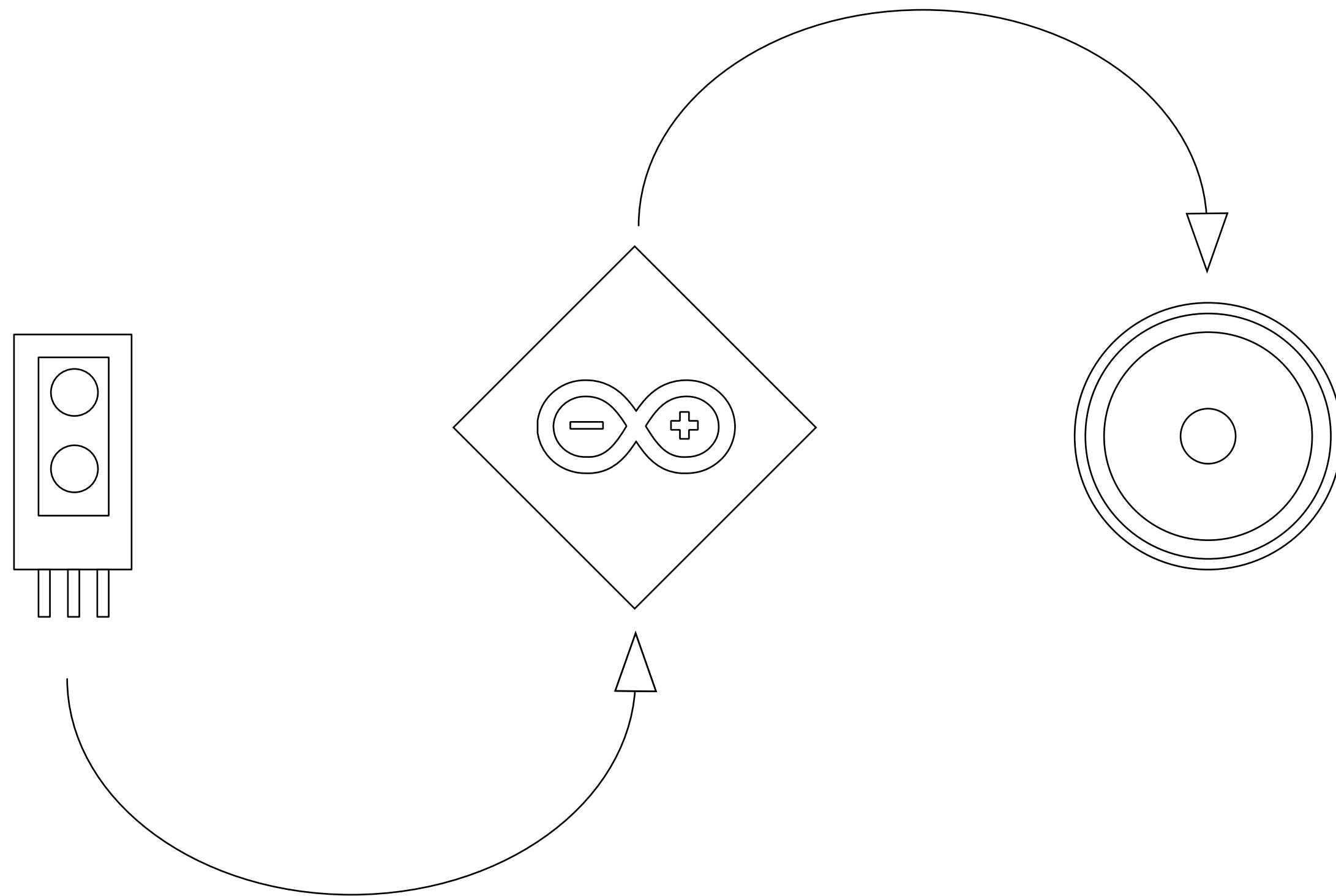


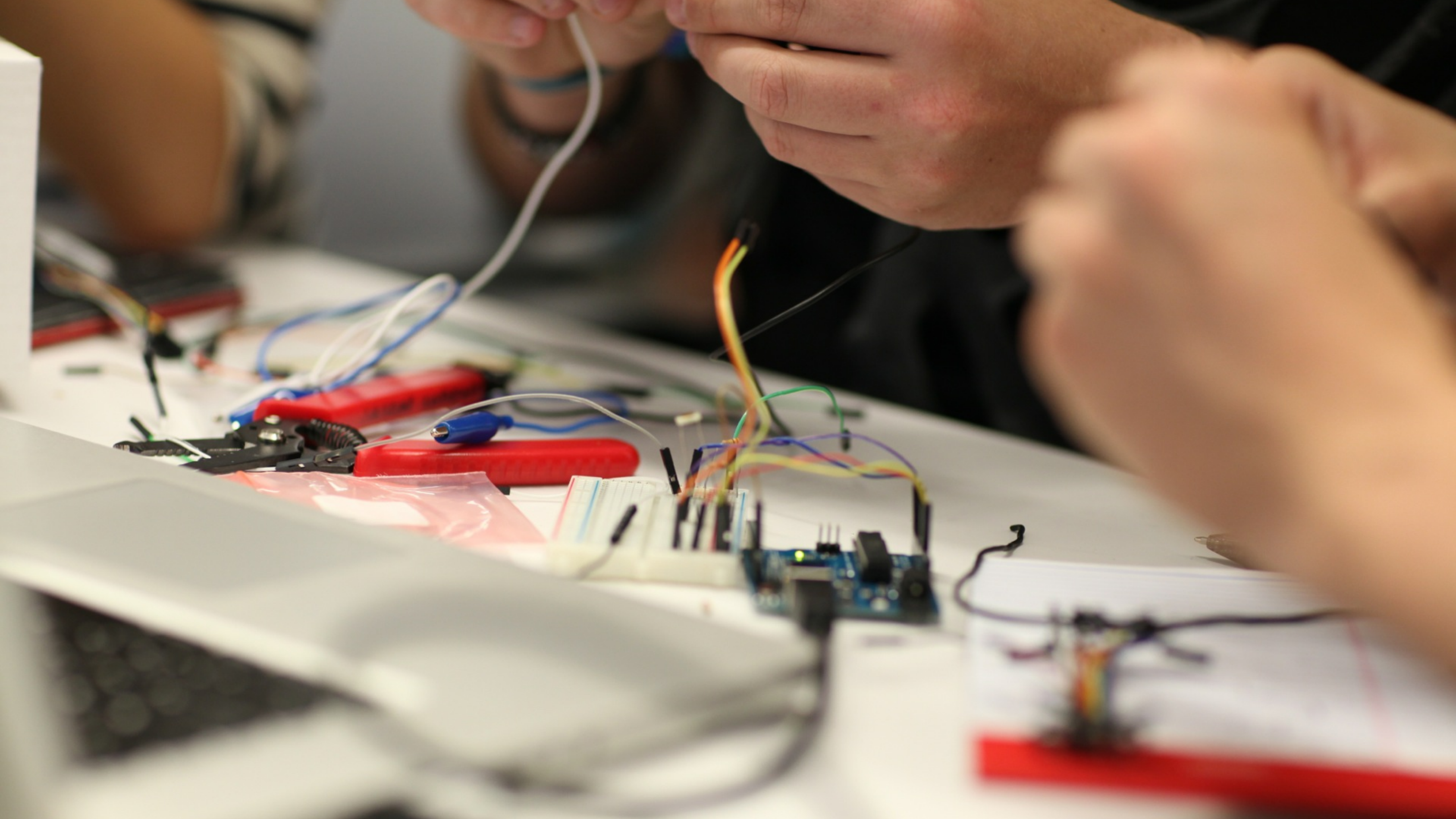
Blackbox



INVENTOR:
NICHOLAS TOMASEVICH

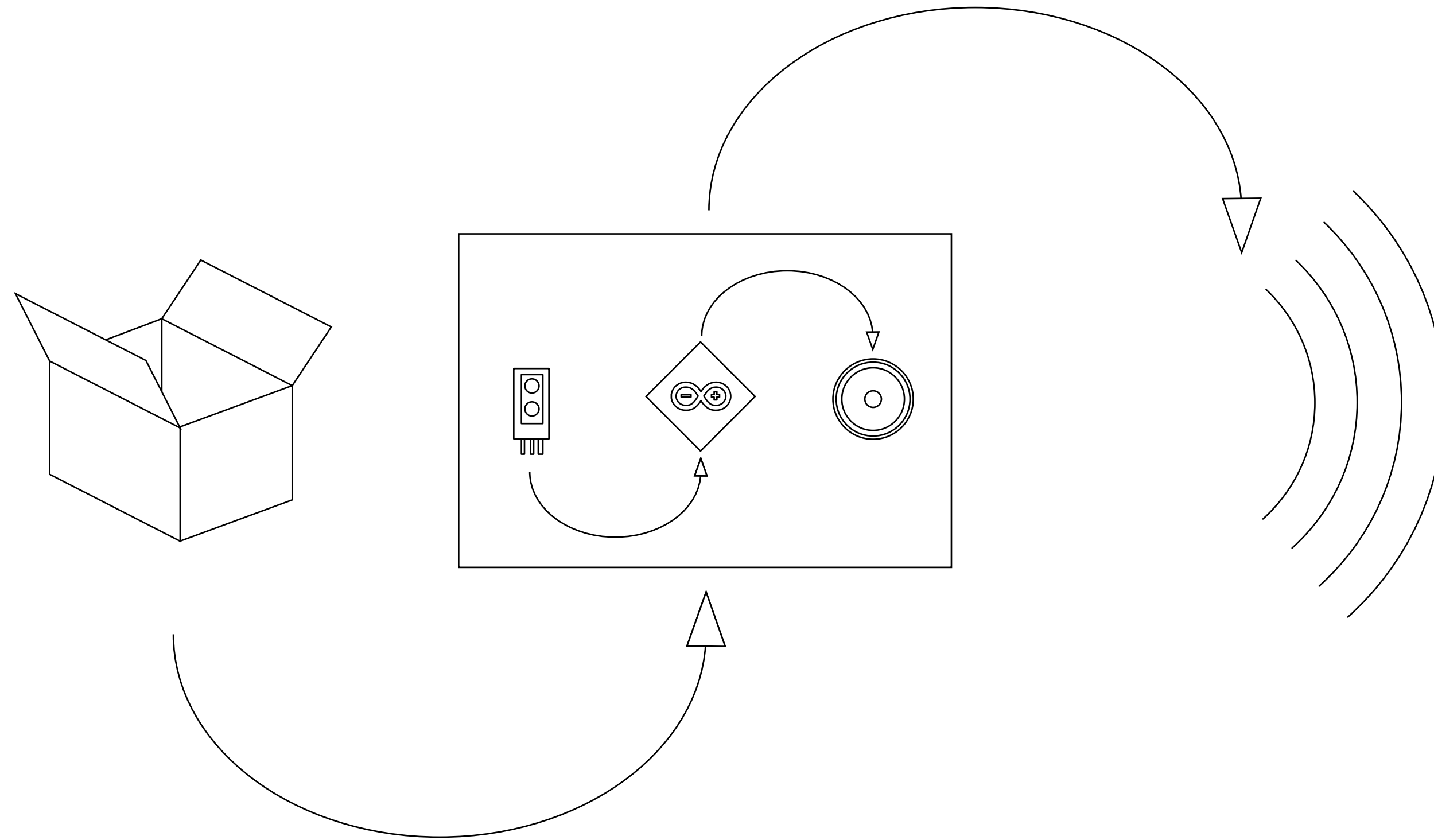




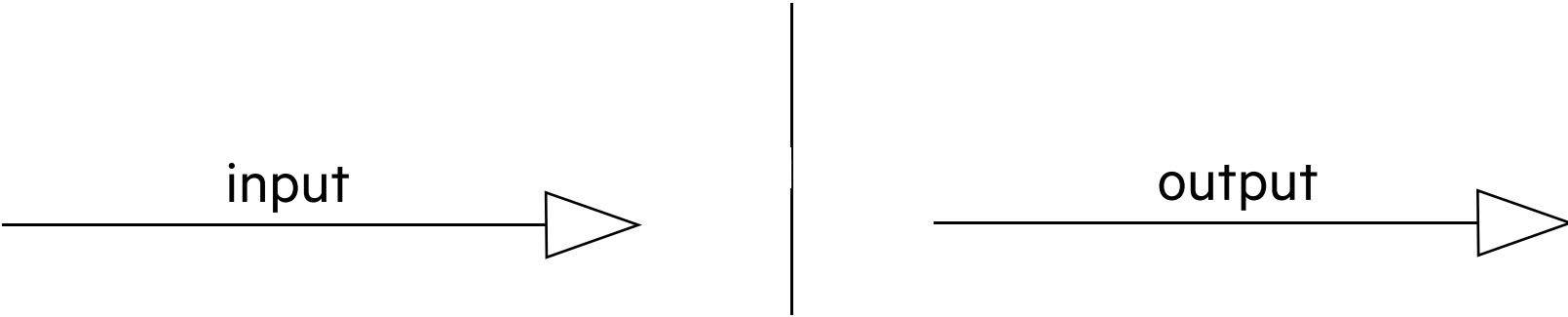


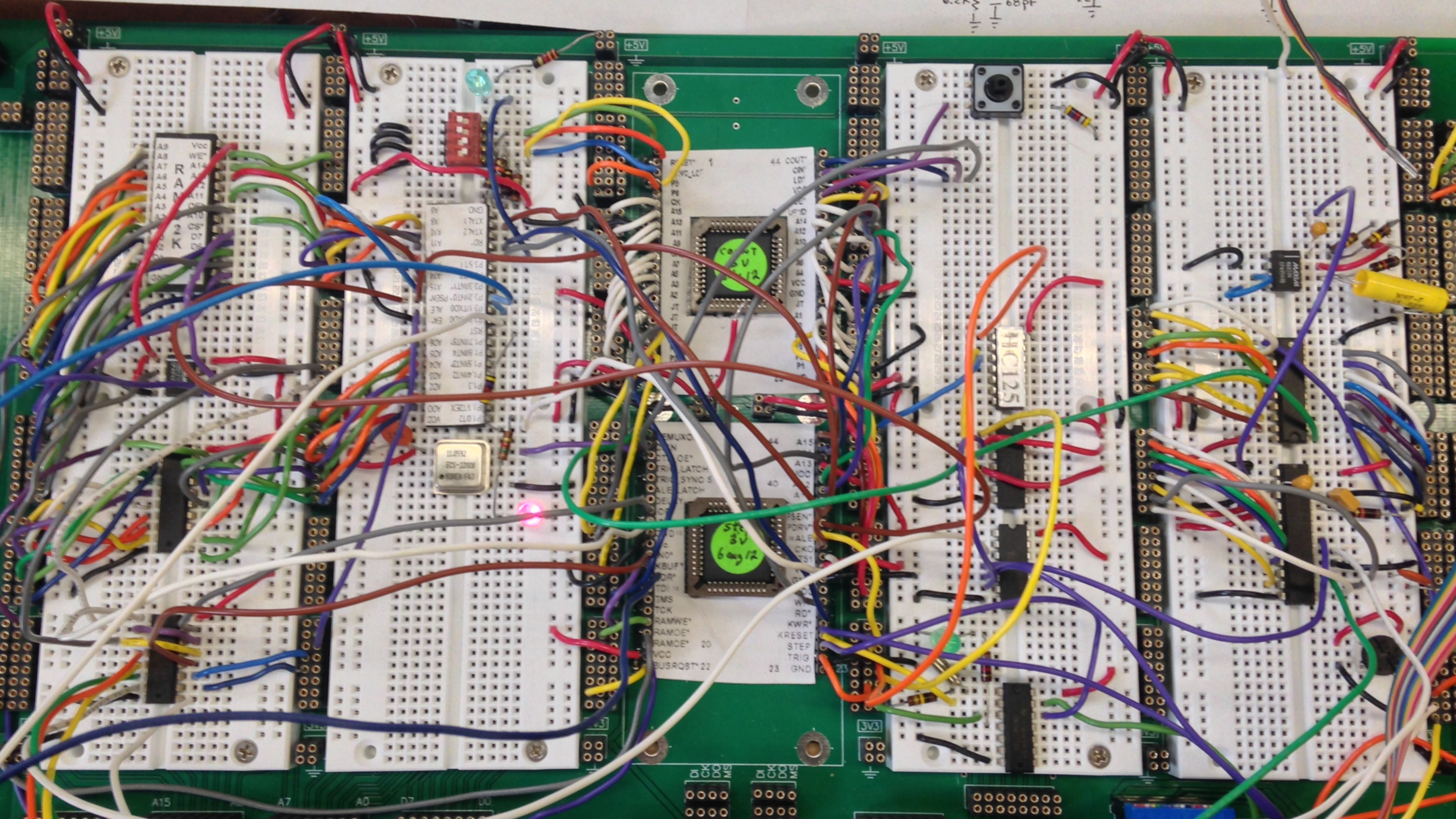


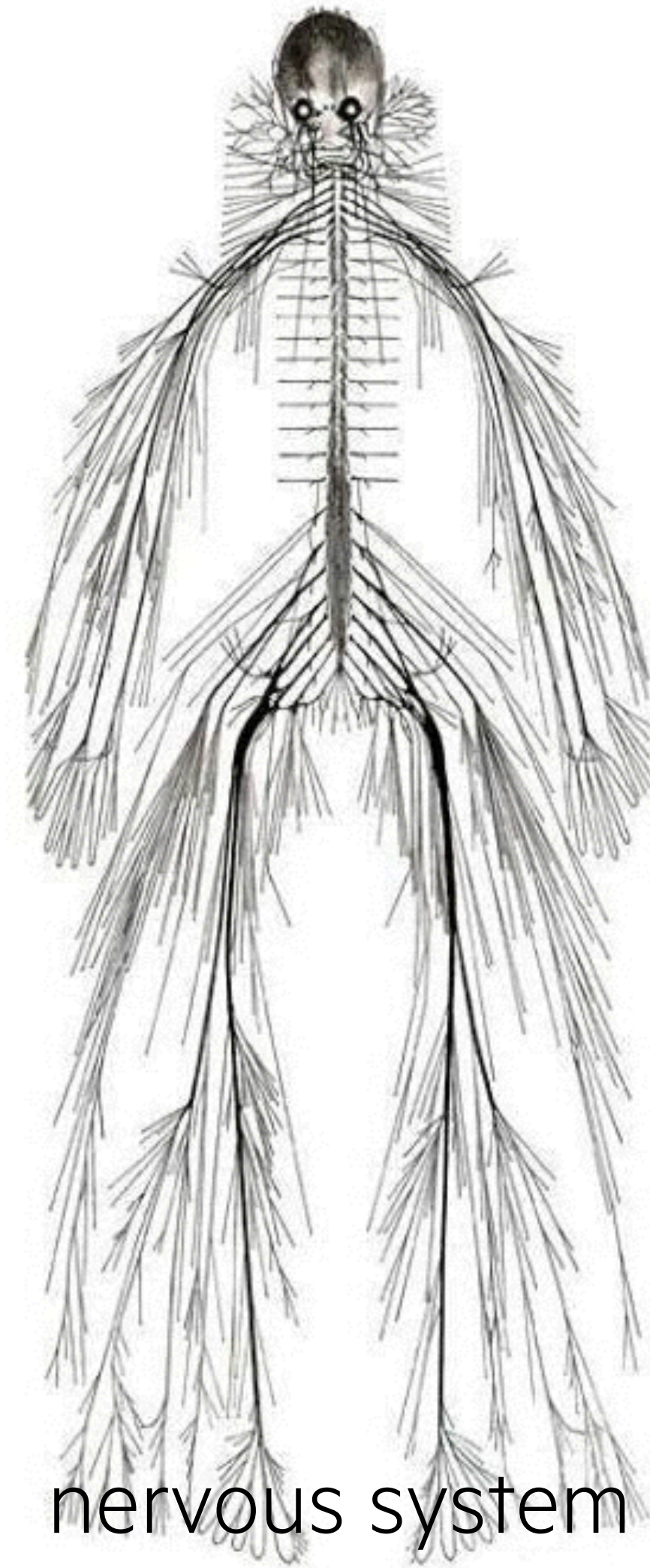
Class of 2013



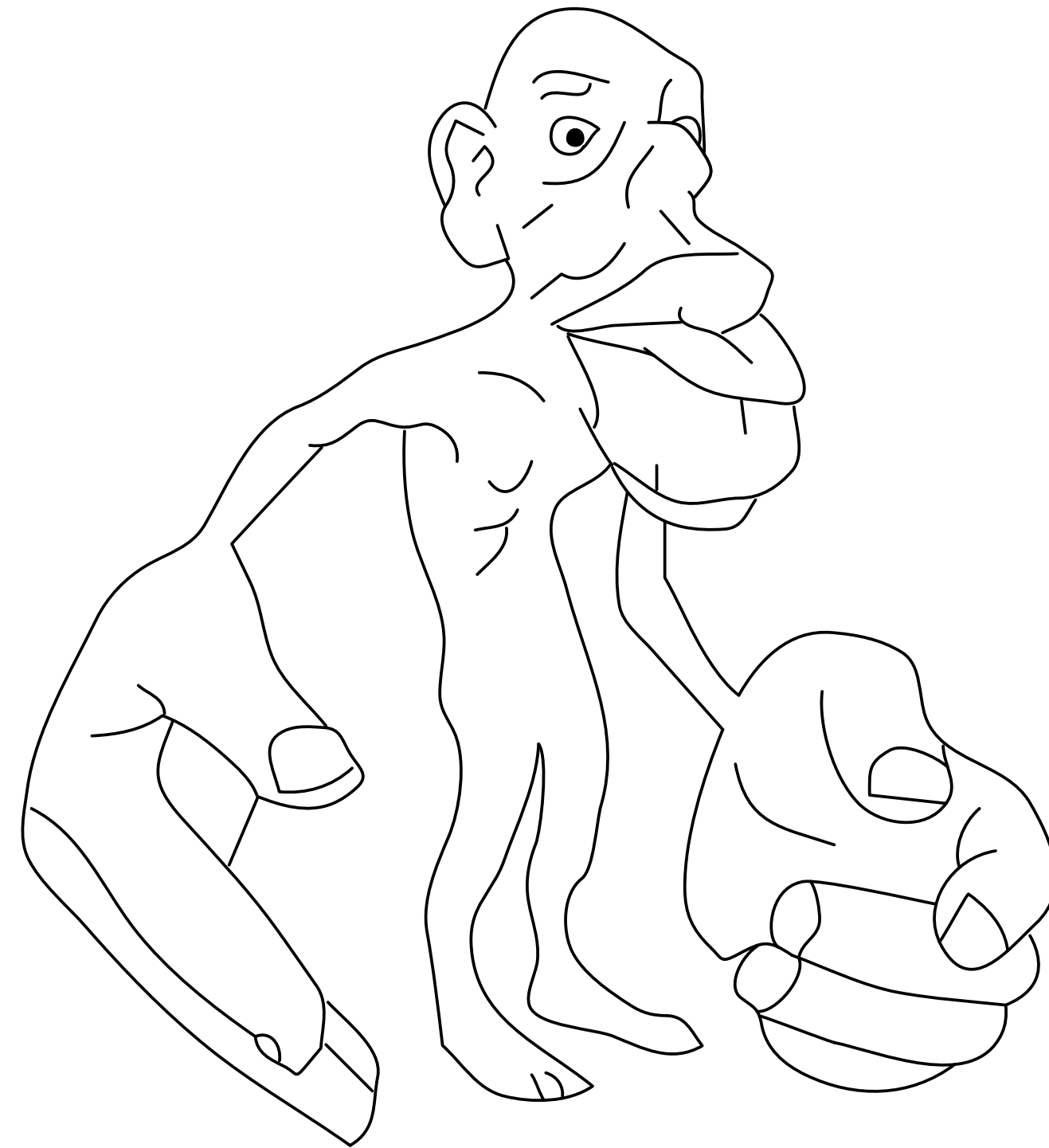




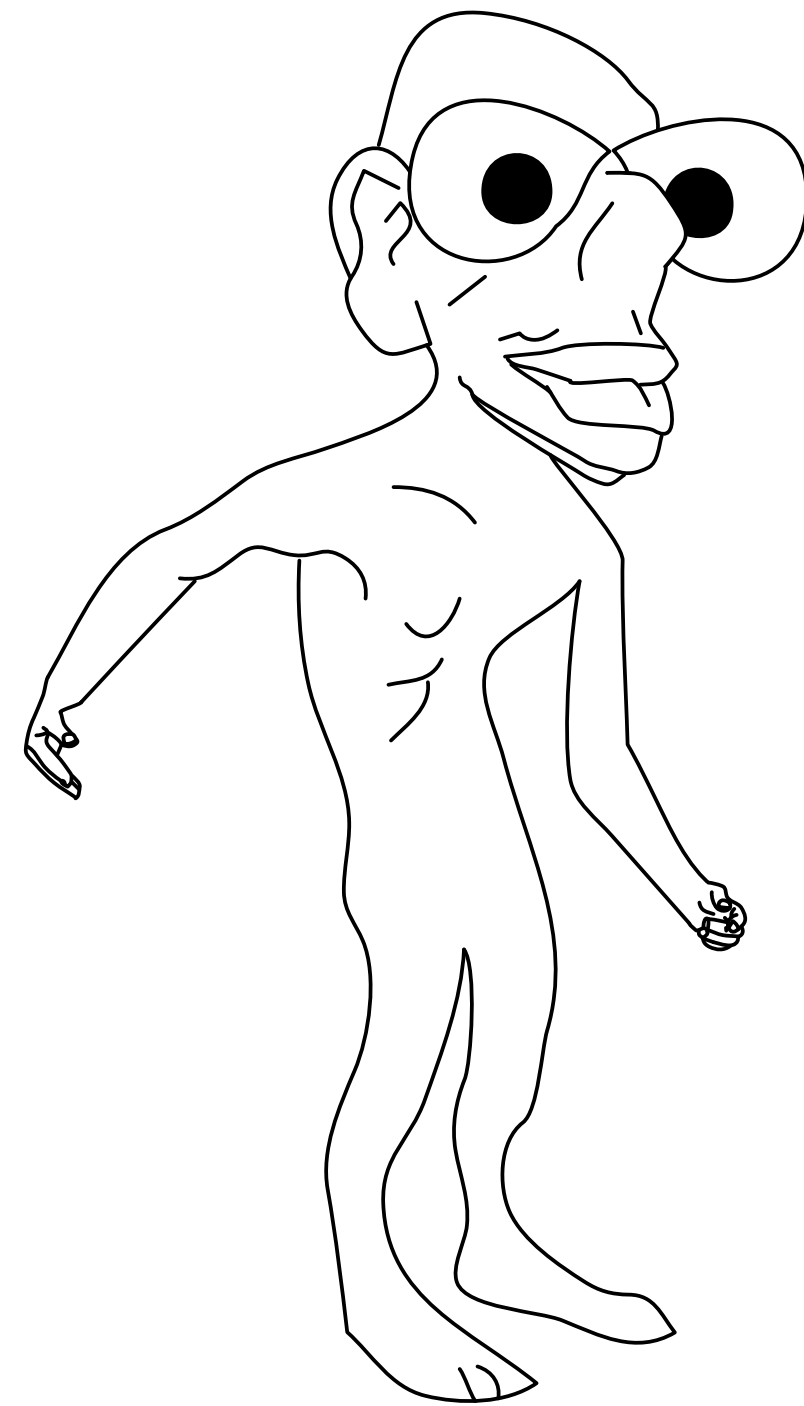




nervous system



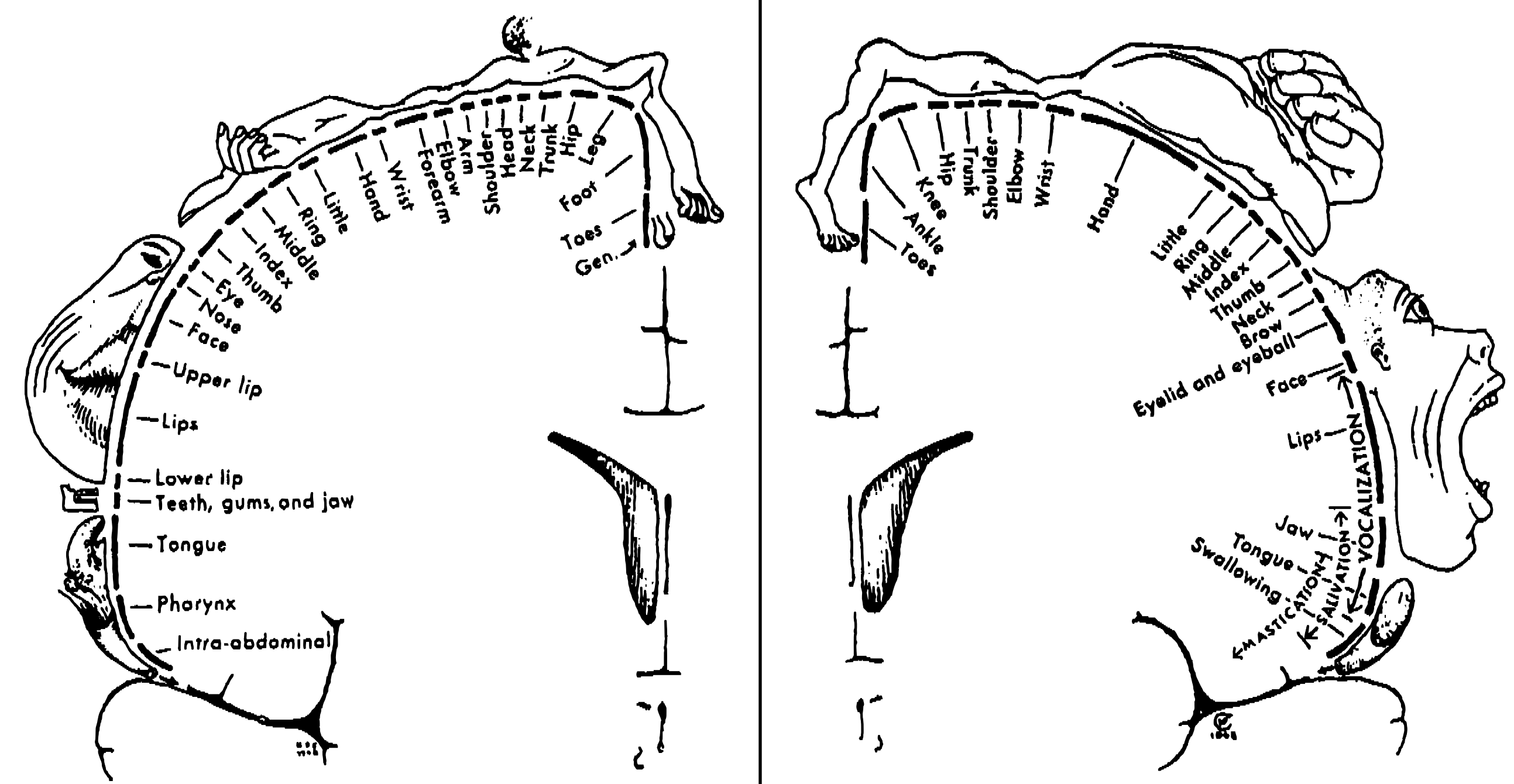
sensory homunculus



GUI homunculus

sensor

motor



homunculus

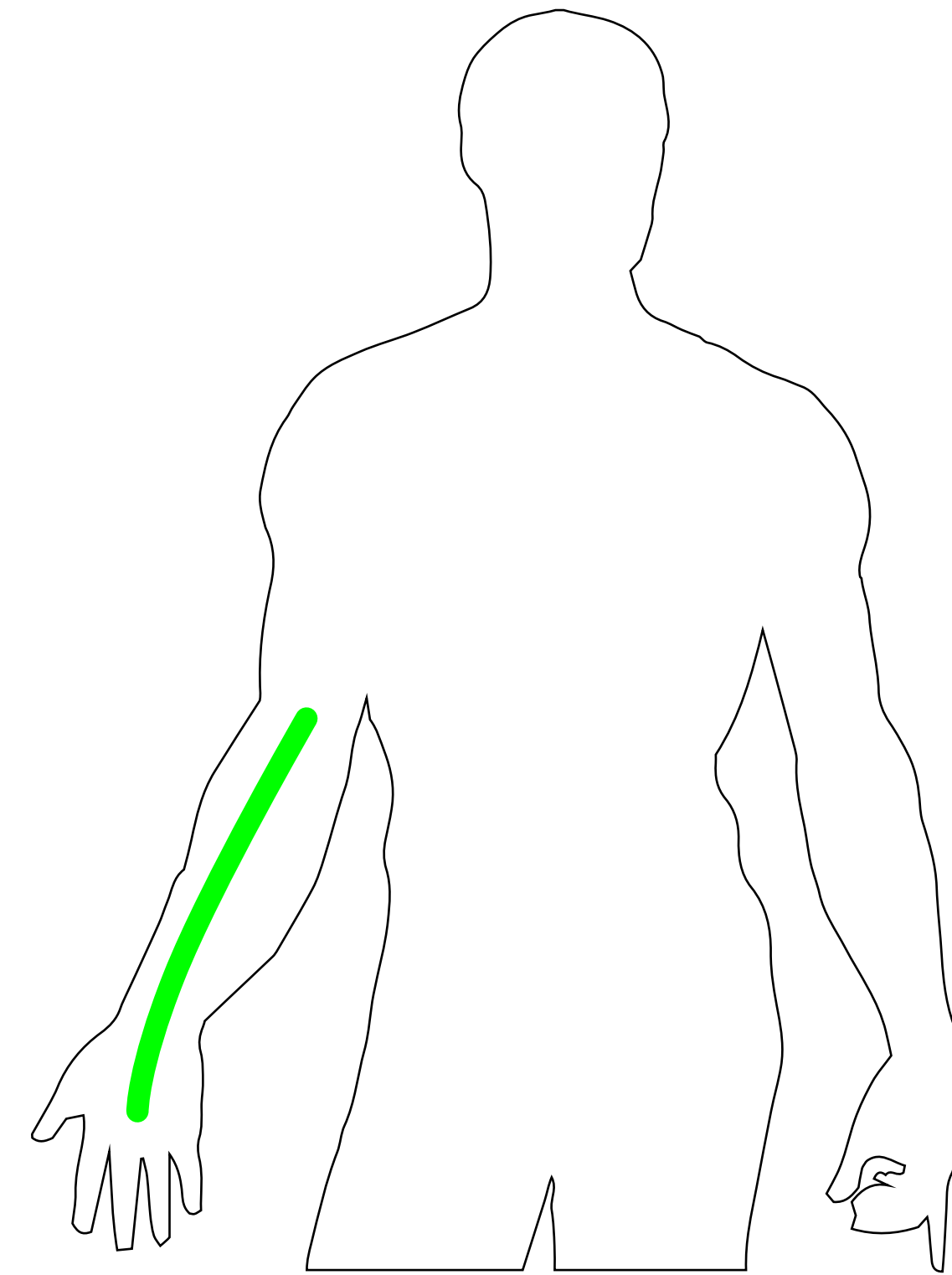
Wilder Penfield (1951)

The Human Loops



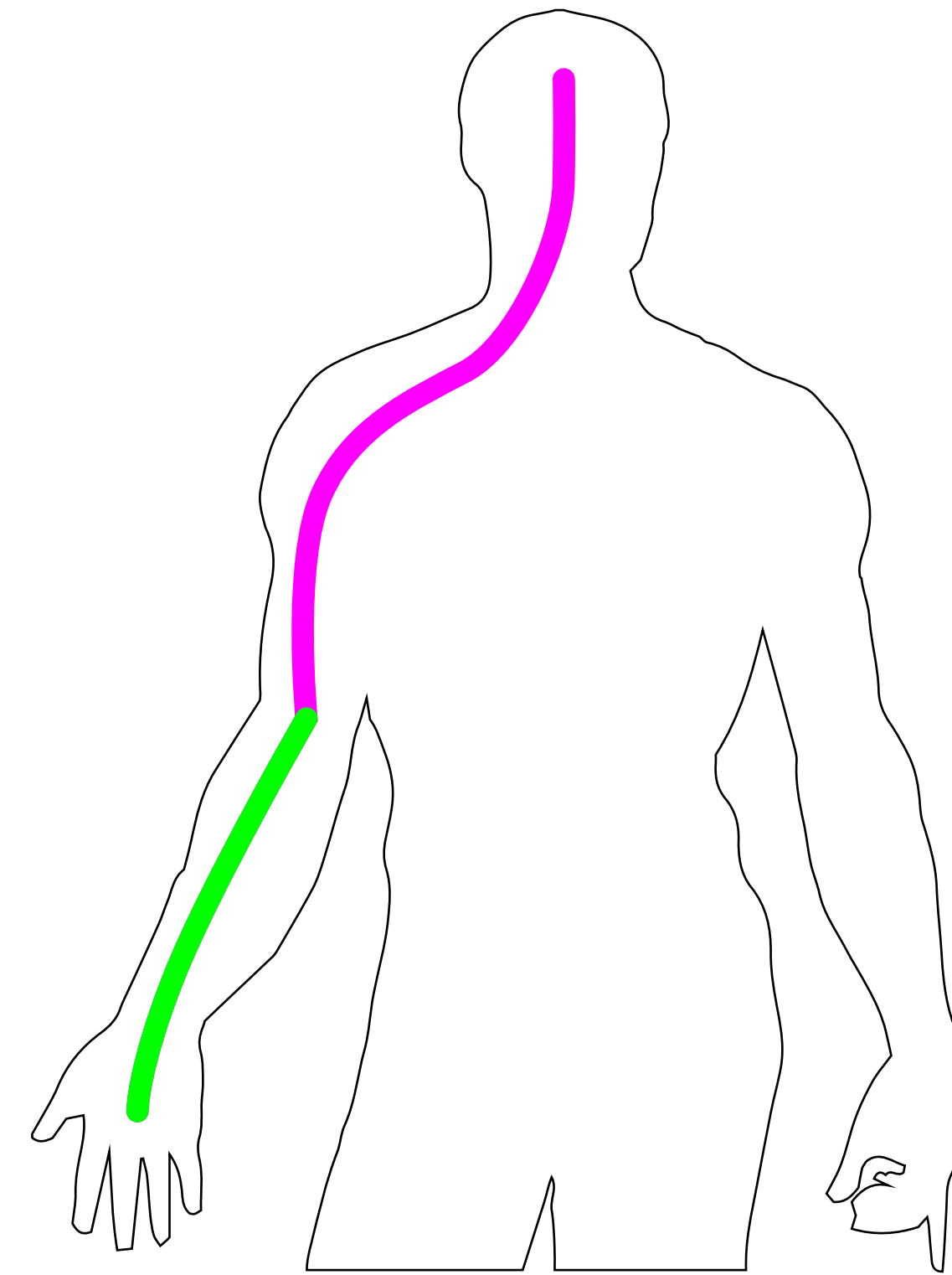
The Human Loops

■ first touch



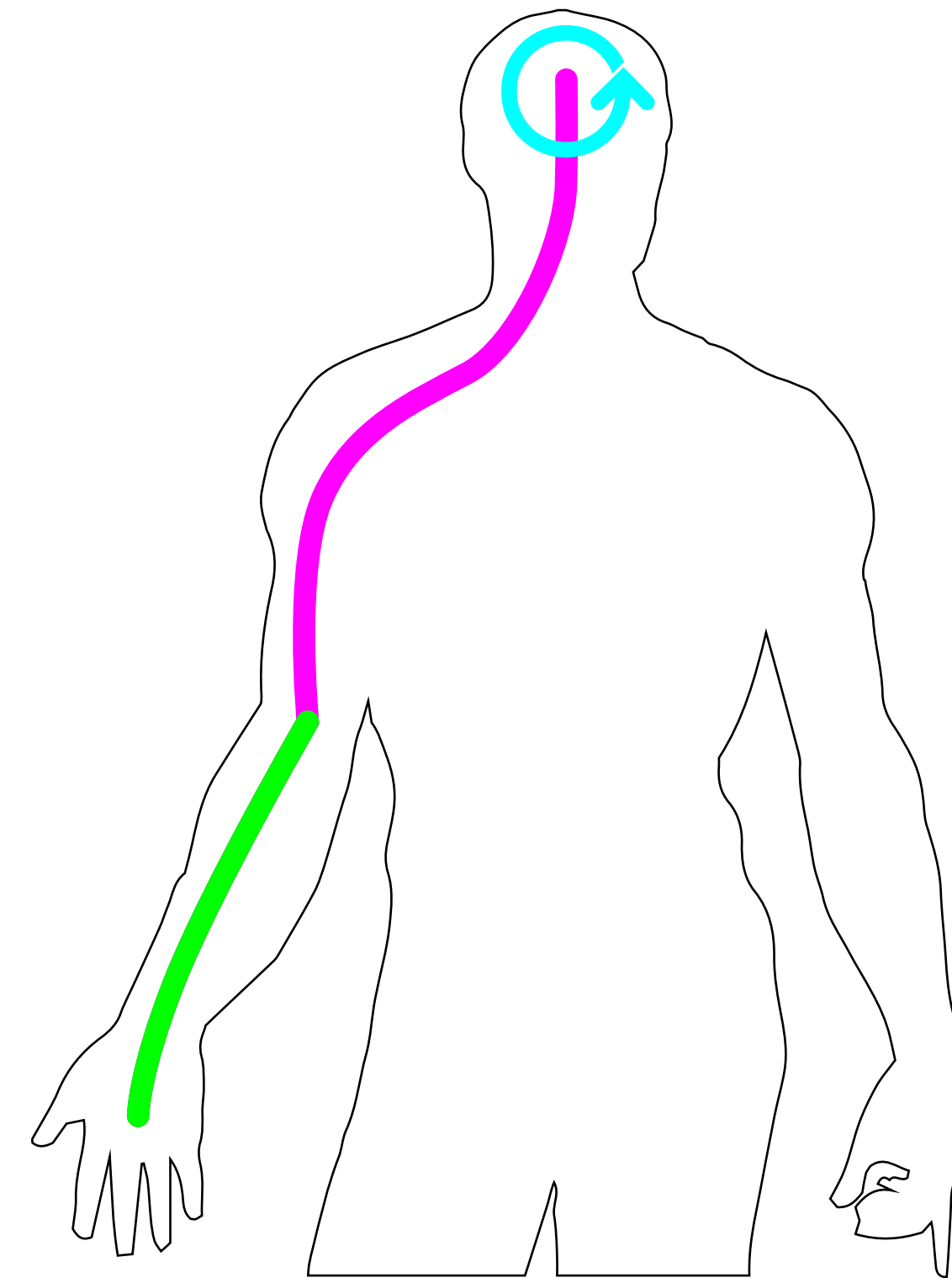
The Human Loops

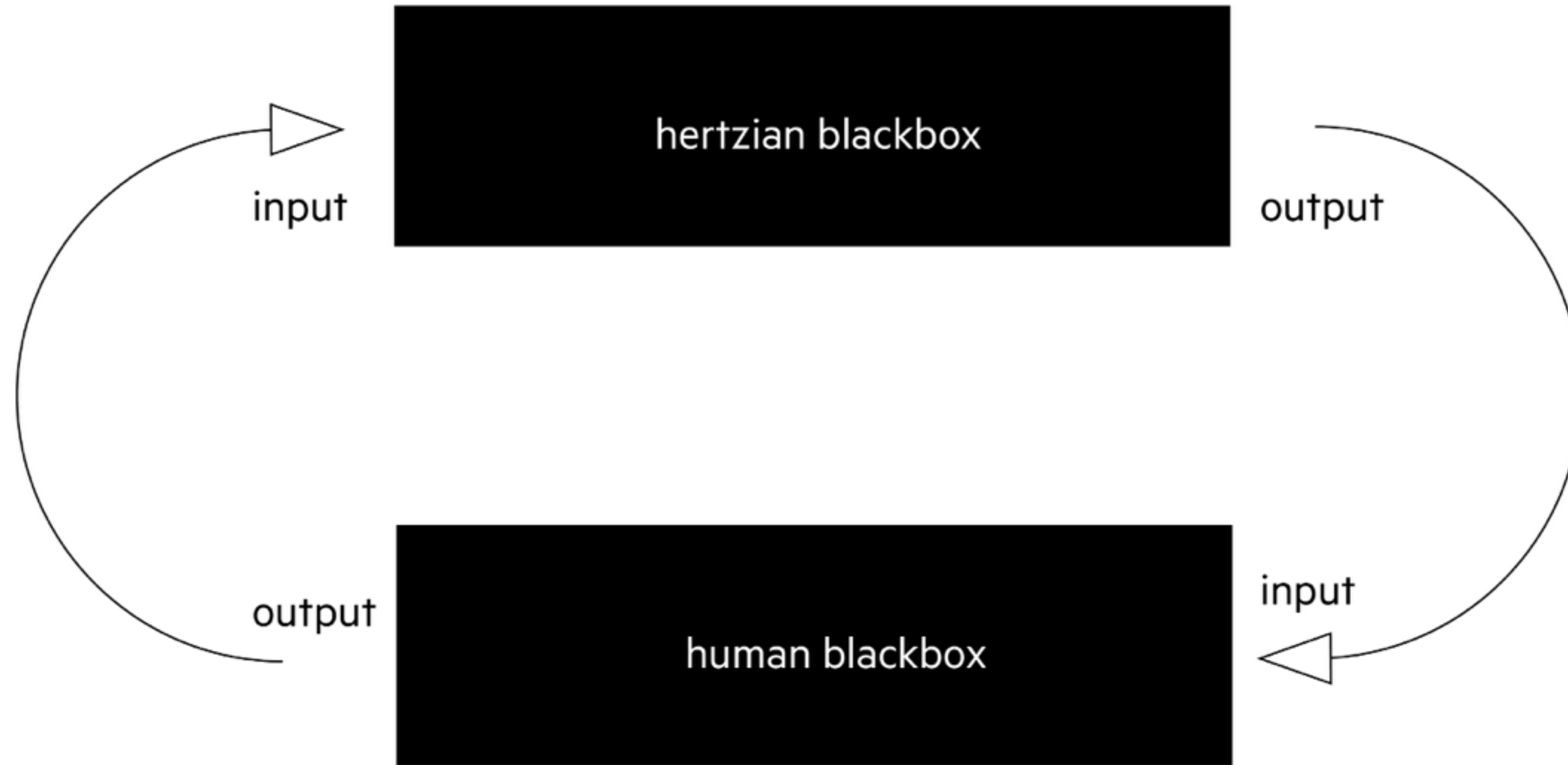
- first touch
- human augmentation



The Human Loops

- first touch
- human augmentation
- complex interaction



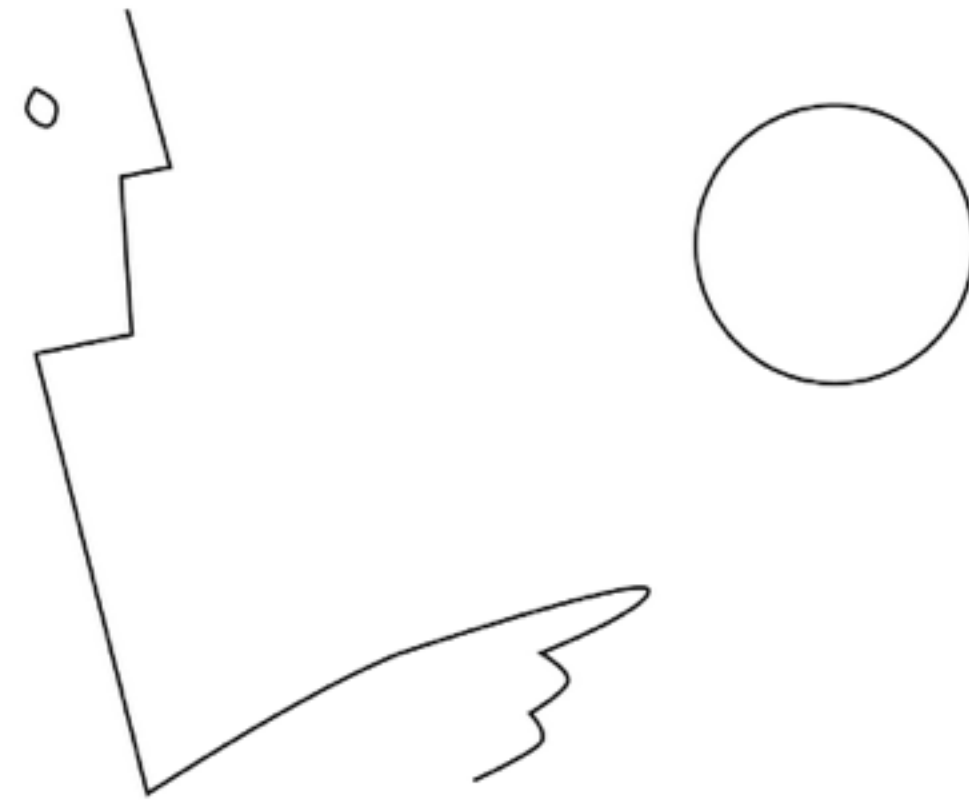


connected experience

3 Questions of Interaction Design

by Bill Verplank

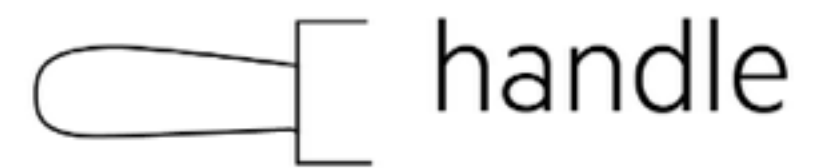
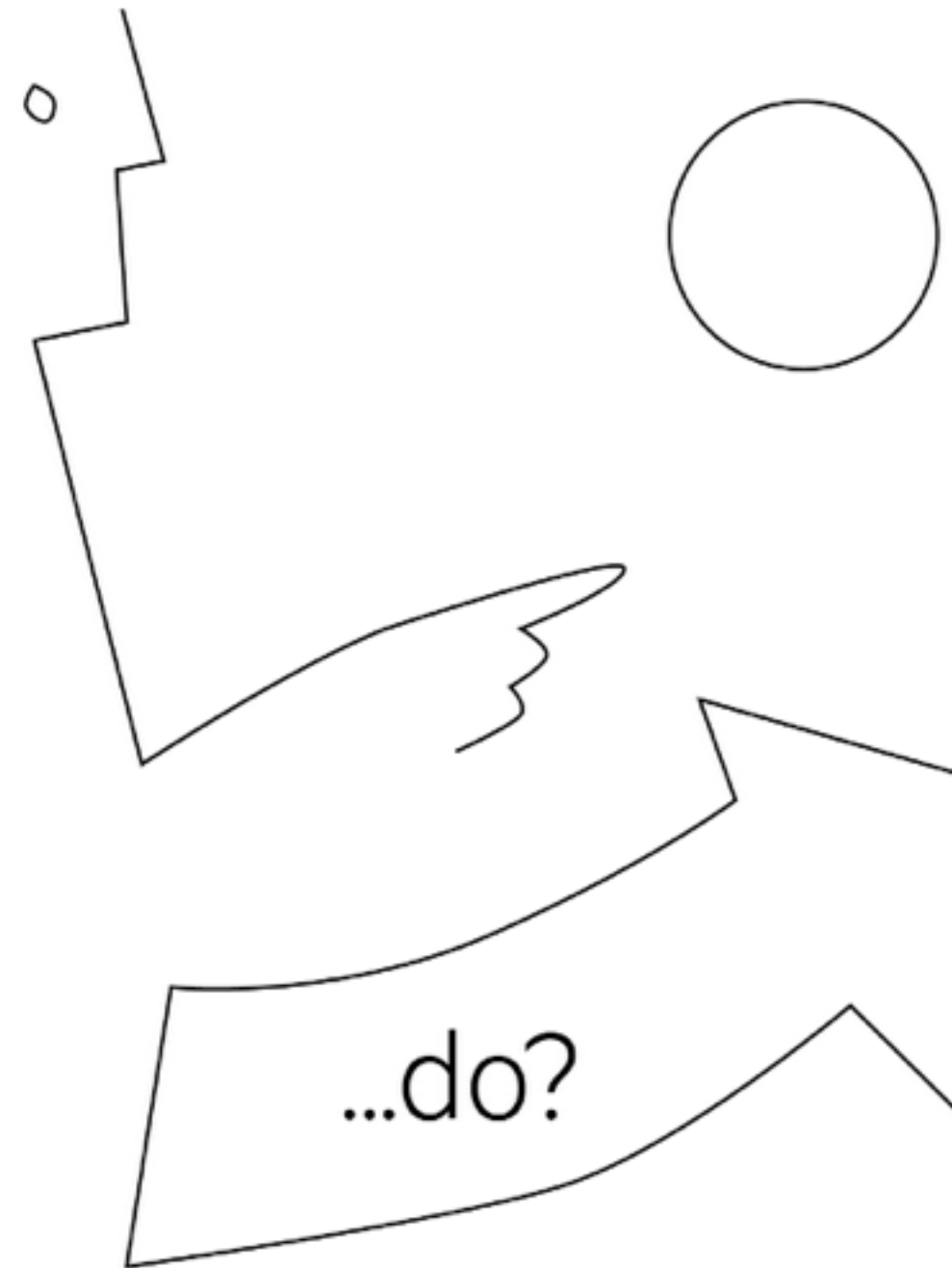
How do you...



3 Questions of Interaction Design

by Bill Verplank

How do you...



handle

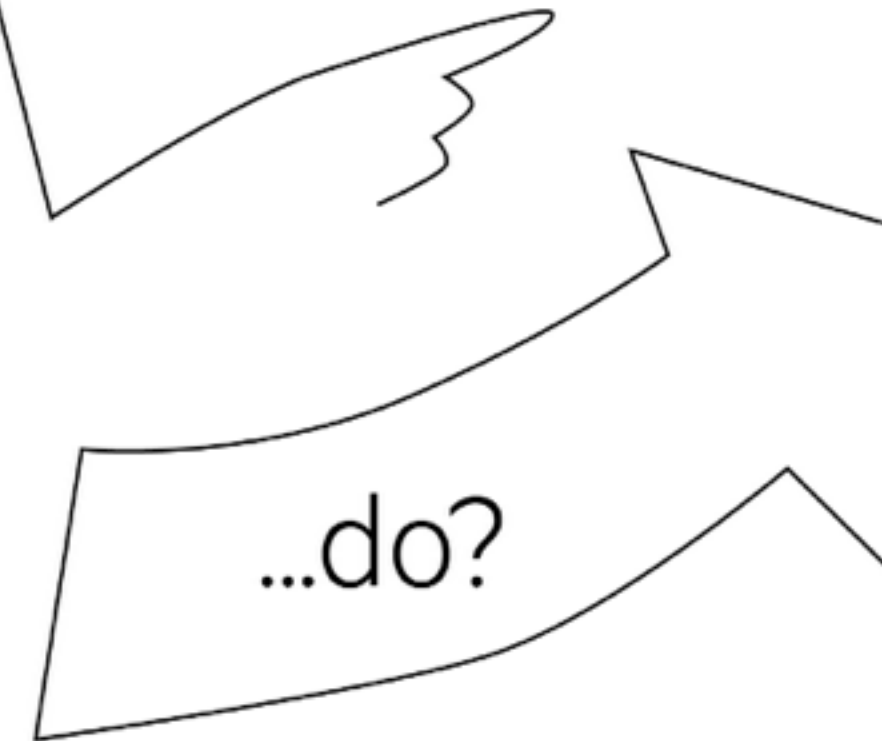
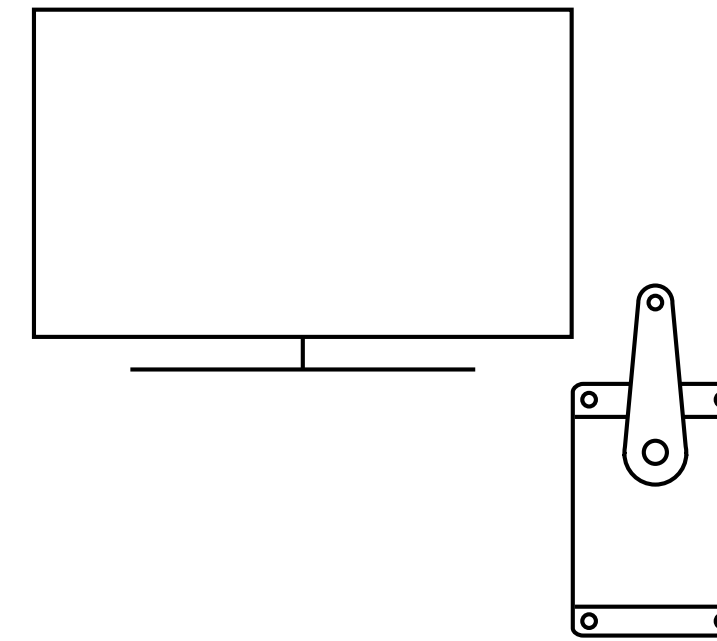


button

3 Questions of Interaction Design

by Bill Verplank

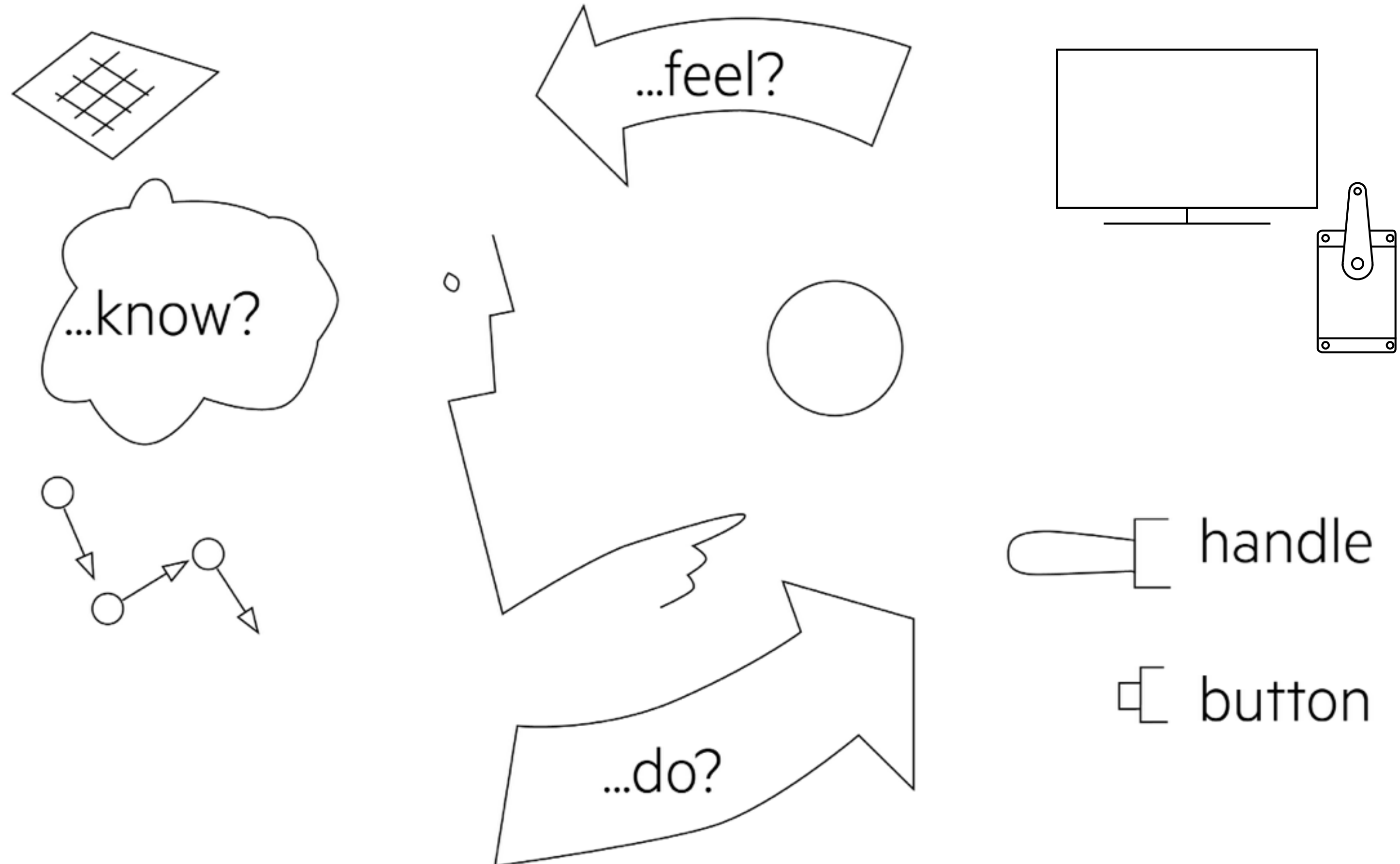
How do you...



3 Questions of Interaction Design

by Bill Verplank

How do you...



...feel?

...know?

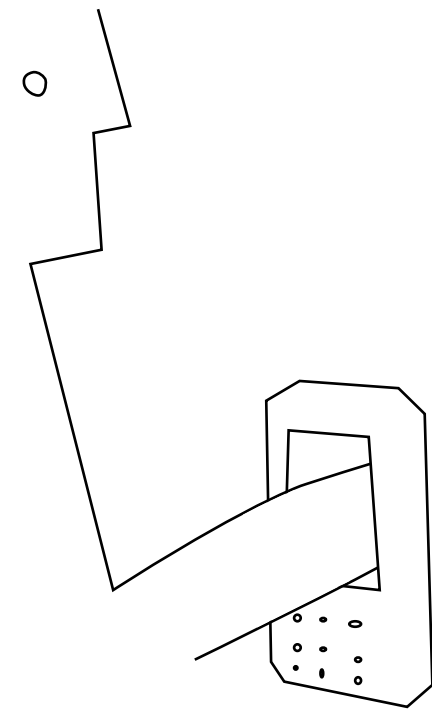
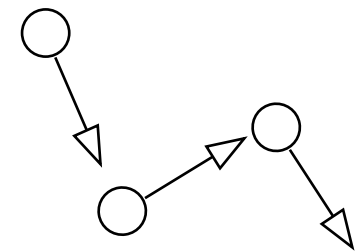
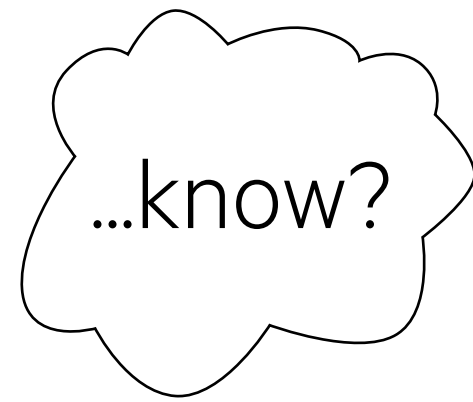
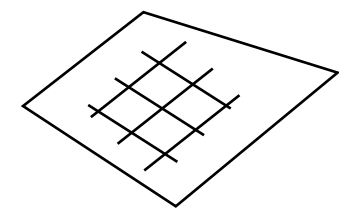
...do?

handle

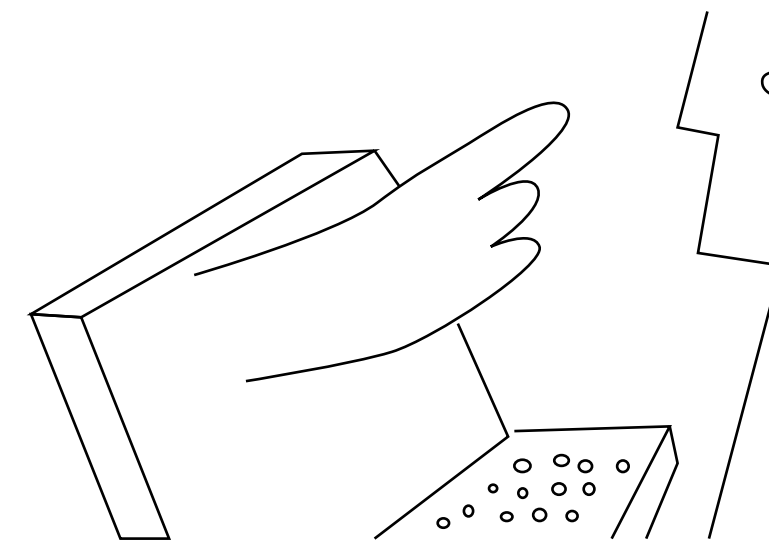
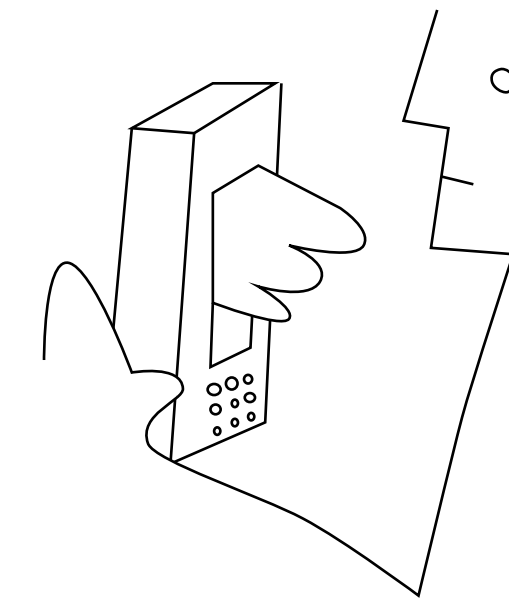
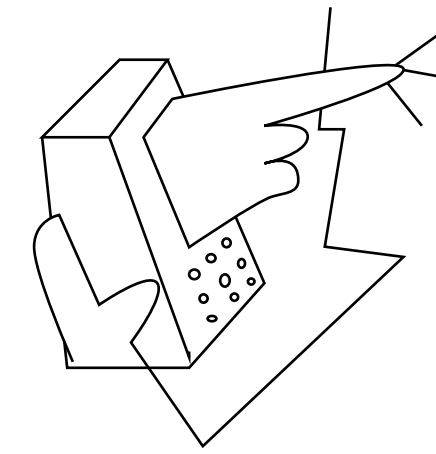
button

3 Questions of Interaction Design

by Bill Verplank



I am not really using my device
I am using your devices.





Connected Tangibles

today

Sit together in your groups.

3:20pm : short presentations of what you want to do

Get feedback

???

profit