computational sensation
ACTUATORS

a list
DC Motor
Vibration Motor
Notifications
Servo Motor
Linear Slider
Electromagnet
Electromagnet
Solenoid
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
sensory homunculus
GUI homunculus
The Human Loops
The Human Loops

- first touch

![Diagram of human arm with first touch highlighted]
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...

...do?

handle

button
3 Questions of Interaction Design
by Bill Verplank

How do you...

...feel?

...do?

handle

button
3 Questions of Interaction Design
by Bill Verplank

How do you...
...feel?
...know?
...do?
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