

Tangible Interfaces

Design Workshop

09/21/16

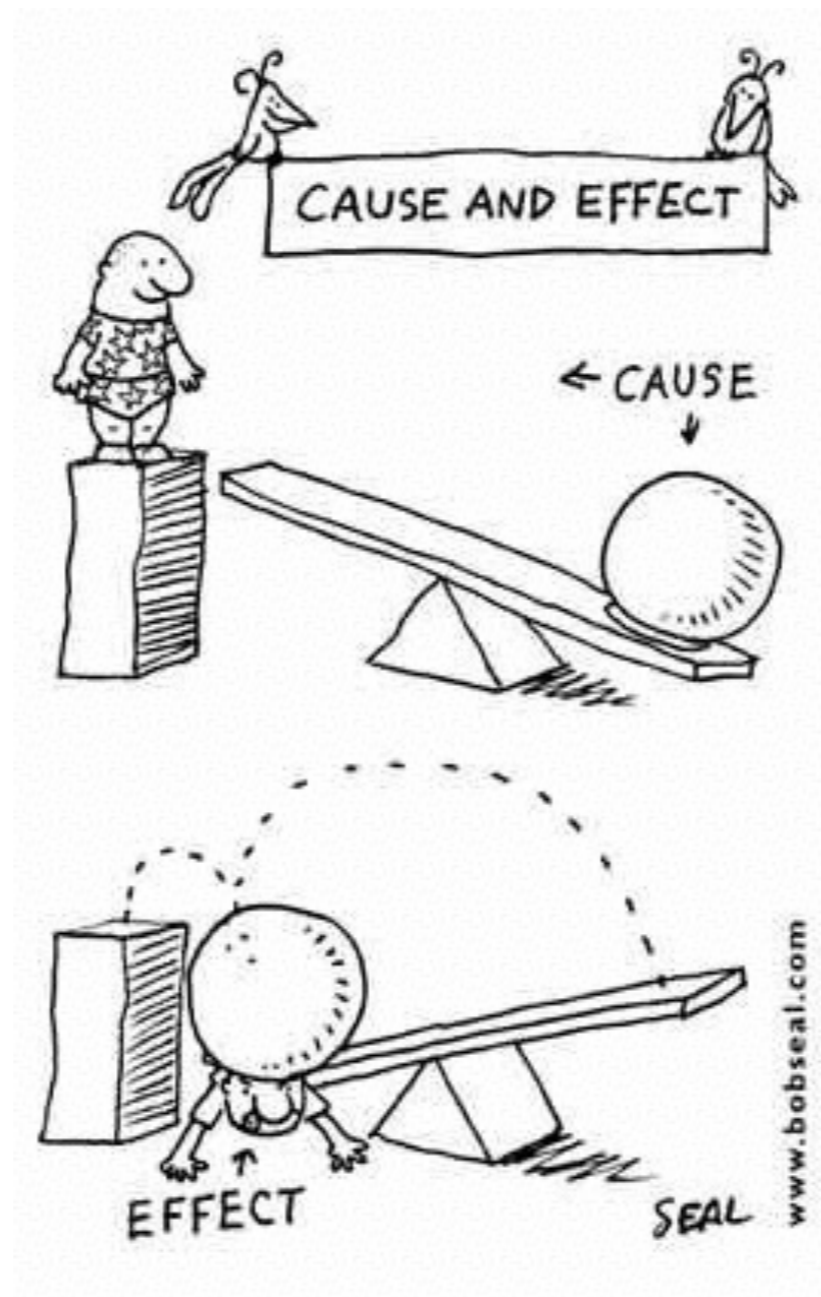
Thinking about Interaction Design

- Tangible User Interfaces
- Extending the senses
- Utilizing physical properties
- Observing behaviors
- Coupling physical objects with digital information



Cause and Effect

Press a button, something happens



Affordance

Action Possibilities



Form follows Function

The way something looks should be determined by its purpose

"Whether it be the sweeping eagle in his flight, or the open apple-blossom, the toiling work-horse, the blithe swan, the branching oak, the winding stream at its base, the drifting clouds, over all the coursing sun, form ever follows function, and this is the law. Where function does not change, form does not change. The granite rocks, the ever-brooding hills, remain for ages; the lightning lives, comes into shape, and dies, in a twinkling."

- Louis Sullivan



Form follows imagination and function follows form



Daily Tous les Jours
Mesa Musical Shadows

<https://vimeo.com/163596013>



Random International
Rain Room

2012



Yuri Suzuki
Colour Chaser

<https://vimeo.com/14563912>



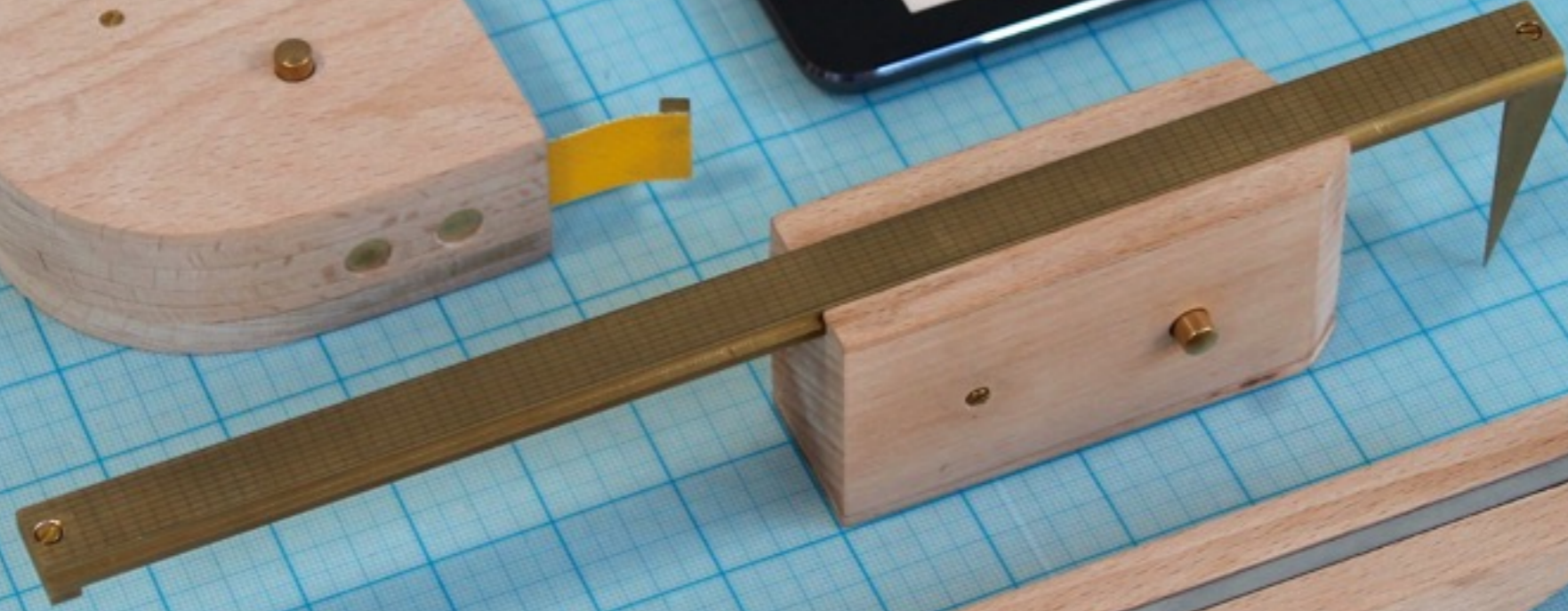
Chris Wuebken & Kenichi Okada
Animal Superpowers

2008



↑ What if we would record special moments with a weather camera?

Kjen Wilkens
Sensor Poetics



Penny Webb & Unfold
Of Instruments and Archetypes

2014



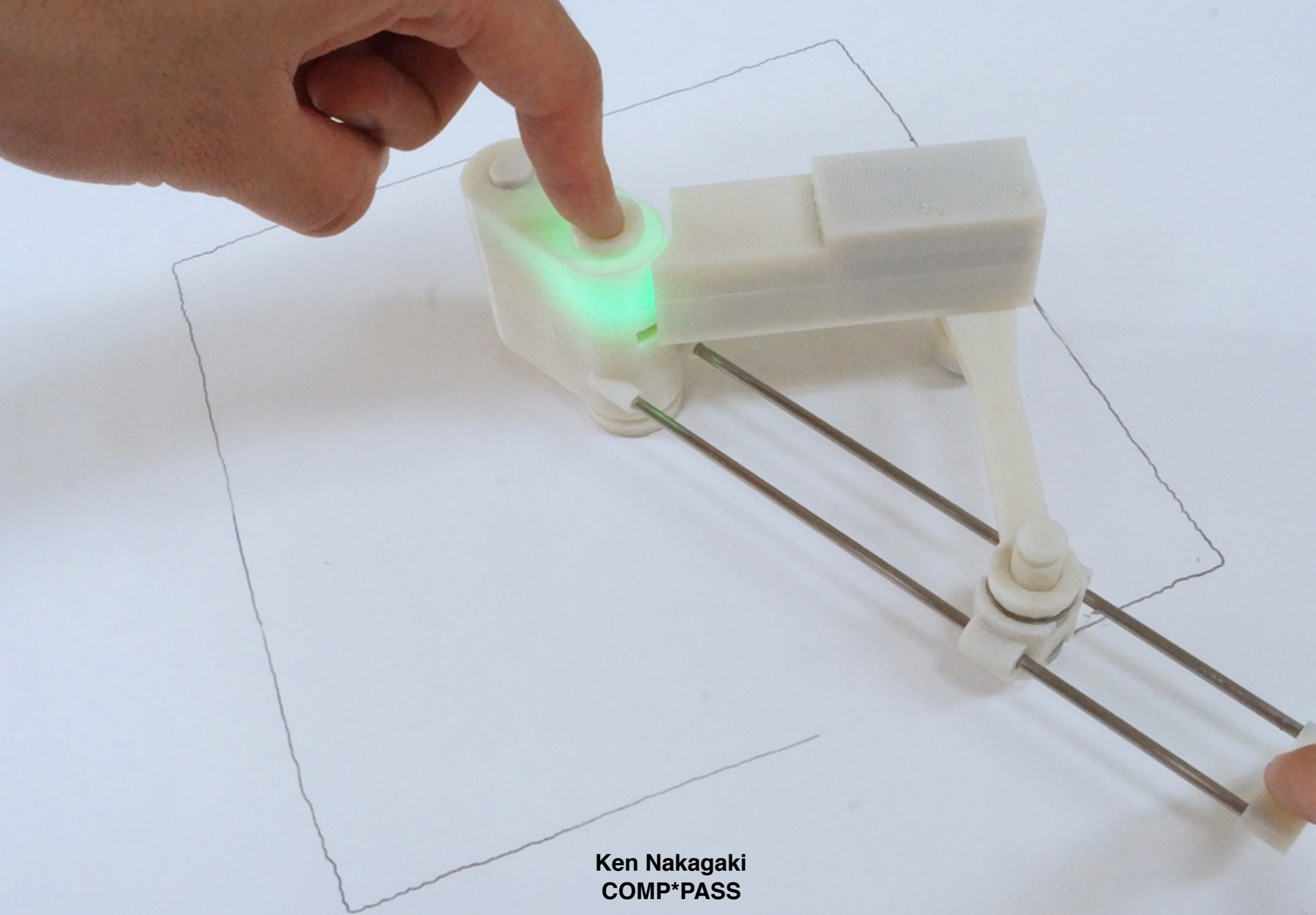
Breaded Escalope
Shadowplay

2015



Unfold
L'Artisan Electronique

2010



Ken Nakagaki
COMP*PASS

<https://www.youtube.com/watch?v=s72JhOnhSag>

Early IOT

Popular Science, May, 1939

Radio-Newspaper Receiver for Home Use

DESIGNED to fit the top of a commercial table receiver which it matches in cabinet style, a complete radio-newspaper receiver for home use has just been placed on the market. All necessary apparatus for receiving and printing news bulletins and pictures transmitted over the air are contained in the unit. The news is automatically printed on a continuous sheet of paper that unwinds from a roll as it is received. The instrument can be used in conjunction with any radio receiver, the manufacturer declares, provided it has an output of at least five watts.



Anyone can now own one of these home-model, radio-newspaper receivers

Design Task Part 1.

Time limit: 30 mins

- Look at your surrounding space (or further), identify one item you interact with, study it, identify its qualities; materials, texture, sound, movement, feedback, etc.

Deliverables:

1 min presentation about the item you chose, why you chose it, and explain everything you observed about it.

Design Task Part 2.

Time limit: 1 hour 30 mins

- Design a method to connect it to digital space, either by augmenting it using a digital attribute, or using it as a handle within digital space.

Deliverables:

5 min presentation about the design you have come up with

IMPORTANT

The design must utilize one or a number of the qualities you observed!!