

# VIDEOPROTOTYPING

Representing complex relationships, new behaviours and attitudes are an integral part of interaction design. These can be represented through many means including sketching and making physical prototypes. However, capturing a journey over time requires a linear medium like video.

# Why Prototype ?

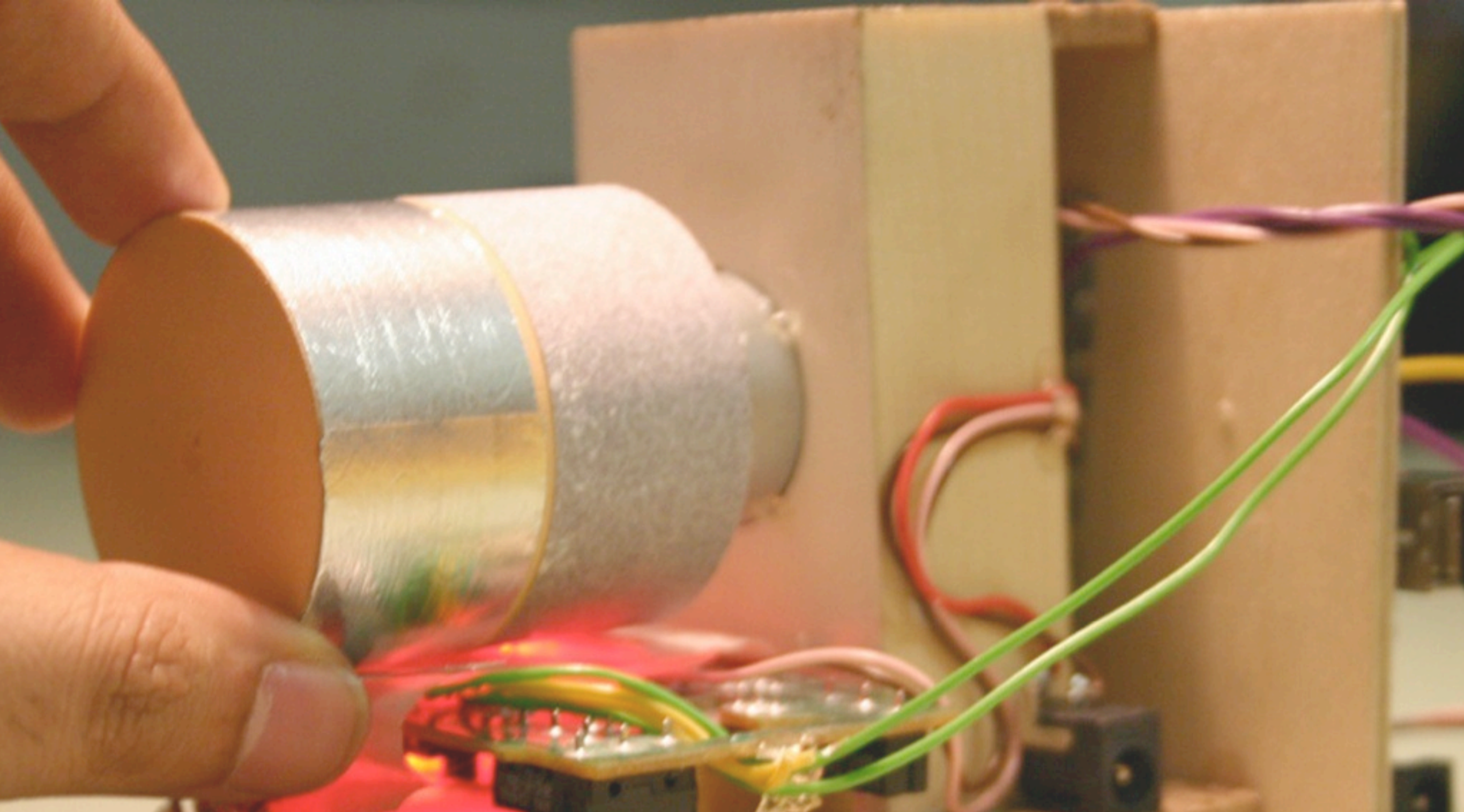
Prototypes help to validate the value of new ideas and test initial assumptions. Prototypes can also help to convince others and yourself.

## Benefits:

Low resource and time investment

Faster feedback and a participatory approach

Early Validation in the development life-cycle



## Prototyping as proof of concept

Prototypes help convincing others and yourself. It establishes a degree of feasibility and resolves design details which helps other make an accurate judgment.

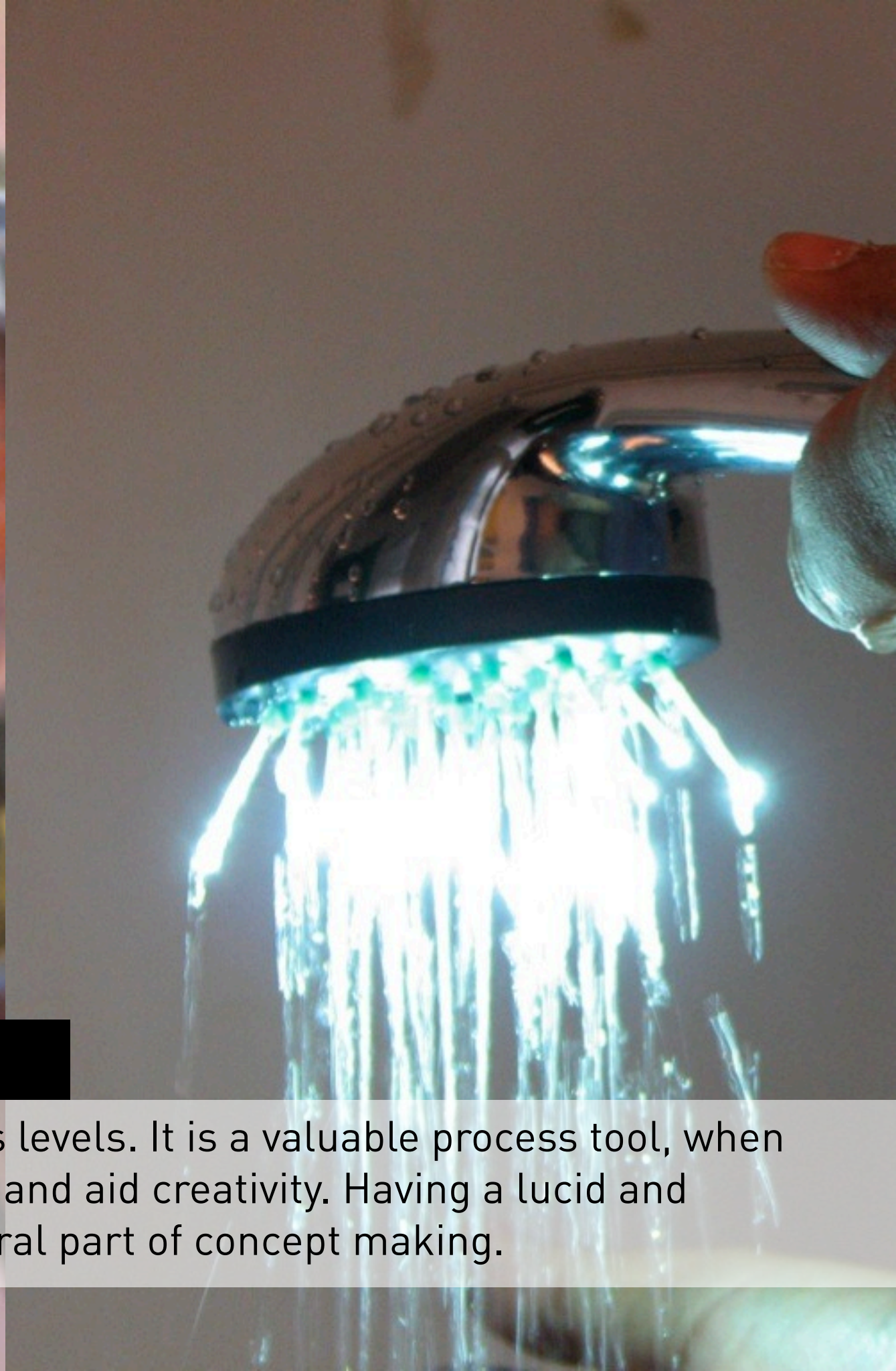
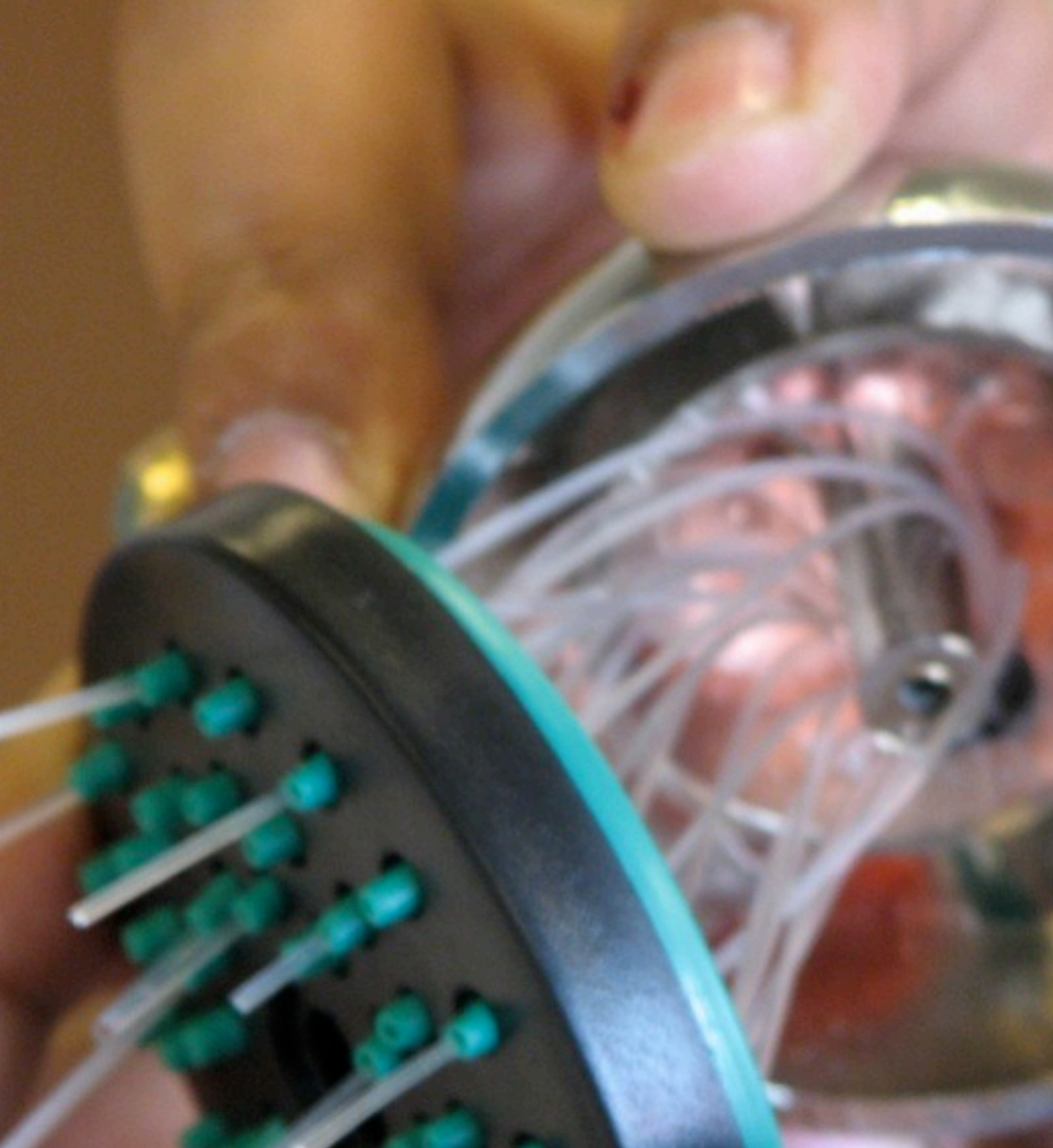




## Prototyping as a communication tool

Prototypes gives ground to discussions and focus to resolving solutions. The right level of fidelity and resolution, evokes the right type of communication.





## Prototyping as a design process

Prototypes help validate assumptions at various levels. It is a valuable process tool, when used in appropriate levels can inform decisions and aid creativity. Having a lucid and flexible approach to prototypes makes it an integral part of concept making.

**For the Designer:**

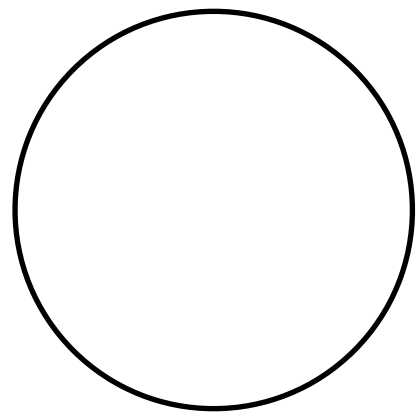
Exploration  
Visualization  
Feasibly  
Inspiration  
Collaboration

**For the End User:**

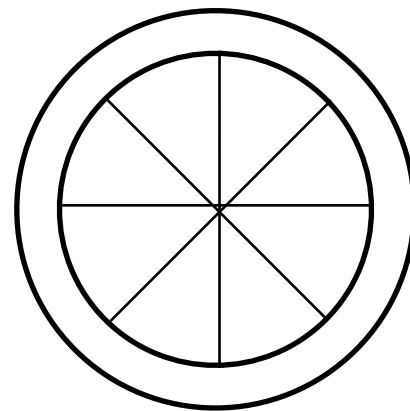
Effectiveness / Usefulness  
A change of viewpoint  
Usability  
Desirability



# Fidelity v. Resolution



low resolution  
low fidelity



low resolution  
high fidelity



high resolution  
high fidelity



Low Fidelity

High Fidelity



Open Discussion

Sharp Opinions

Prompting Required

Self Explanatory

Quick and Dirty

Deliberate and Refined

Early Validation

Concrete Ideas

Low Resolution

High Resolution



Less Details

More Details

Focus on core interactions

Focus on the whole

Quick and Dirty

Deliberate and Refined

Early Validation

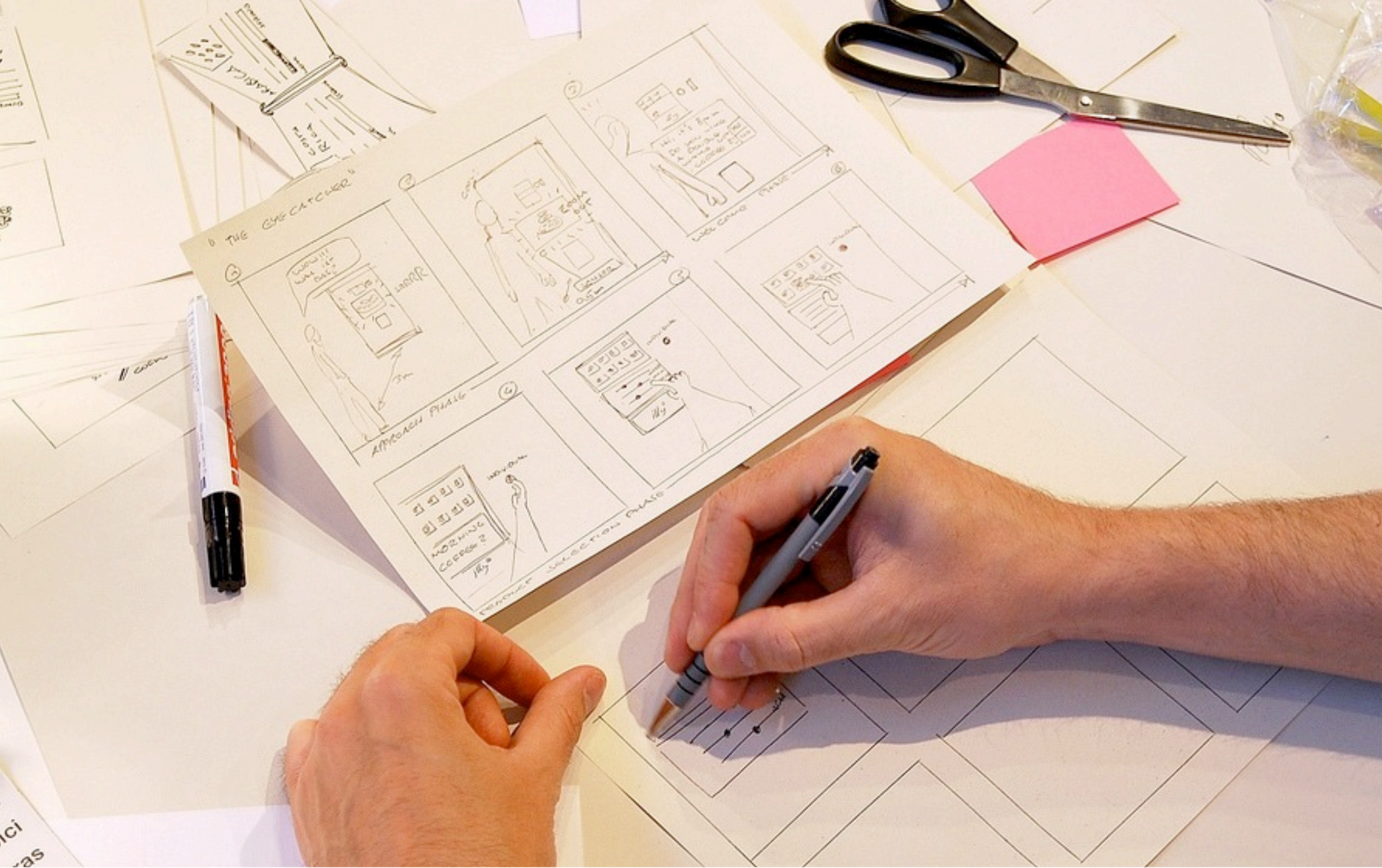
Concrete Ideas



## Scenarios as Prototypes

Creating scenarios as a video is an interesting way to prototype intangible experiences or services. It works as both a process tool and a communication medium.

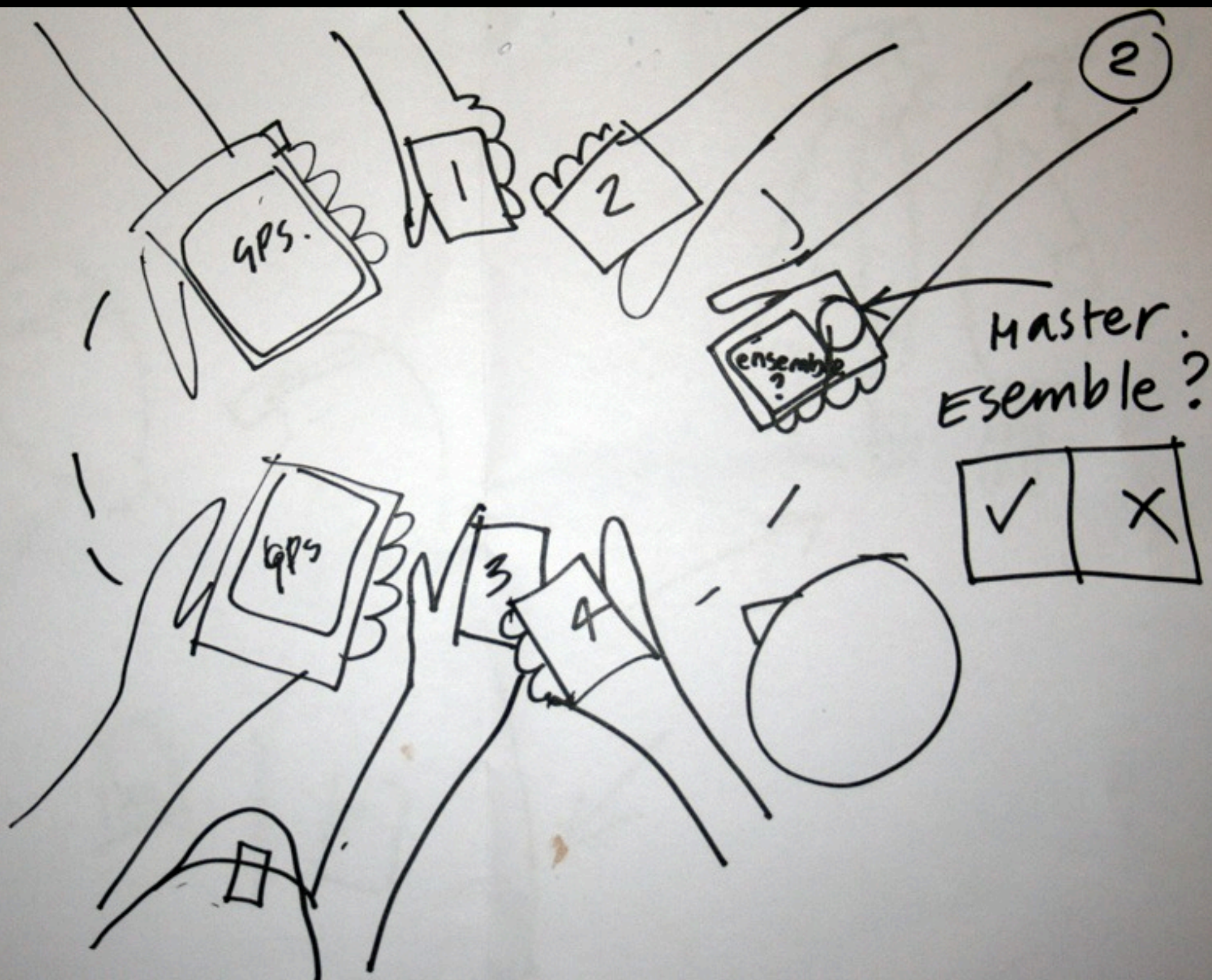




Scenarios as a planning tool



Example: Videoprototype for INTEL  
2008







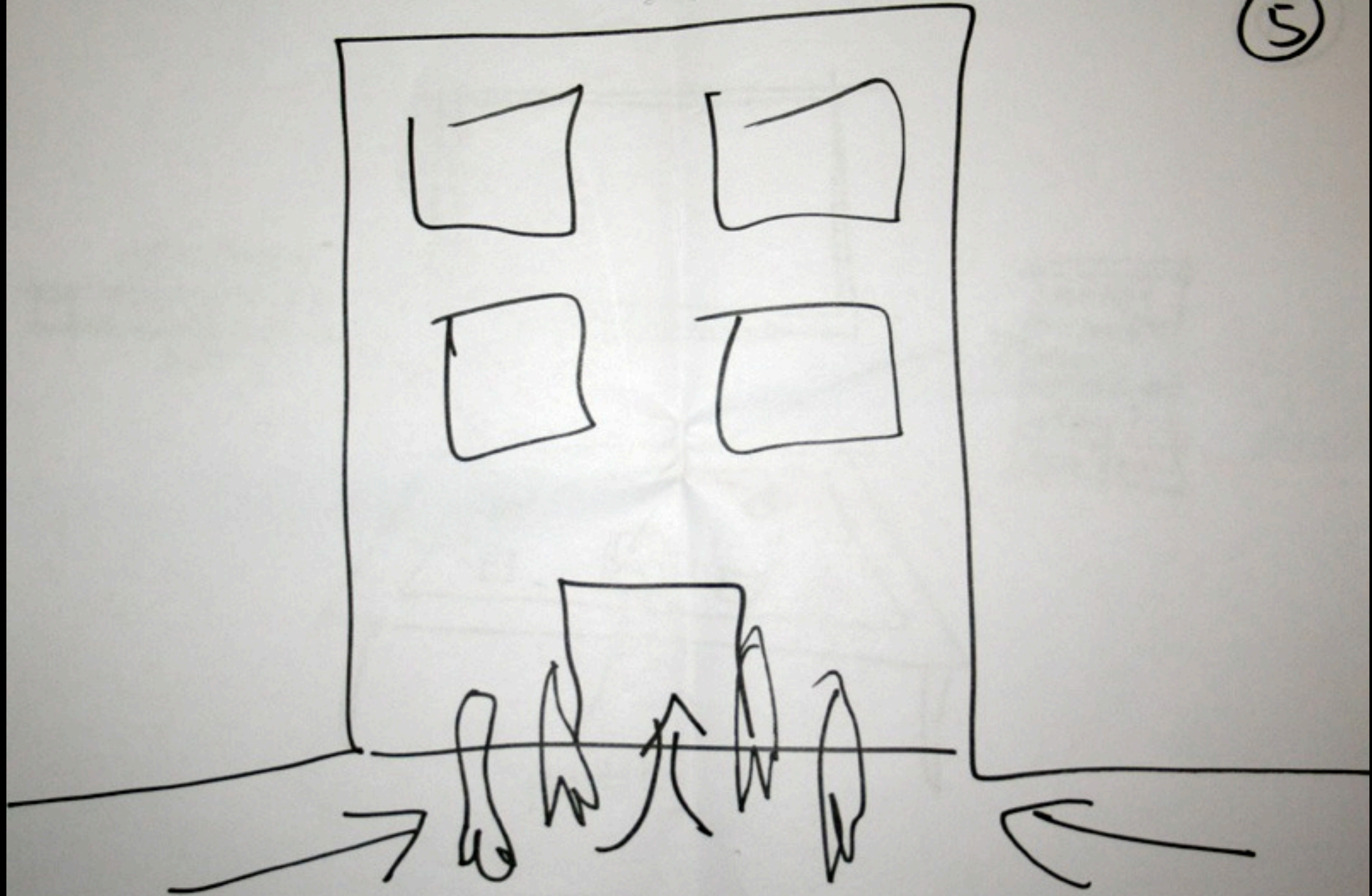


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video of  
parcour



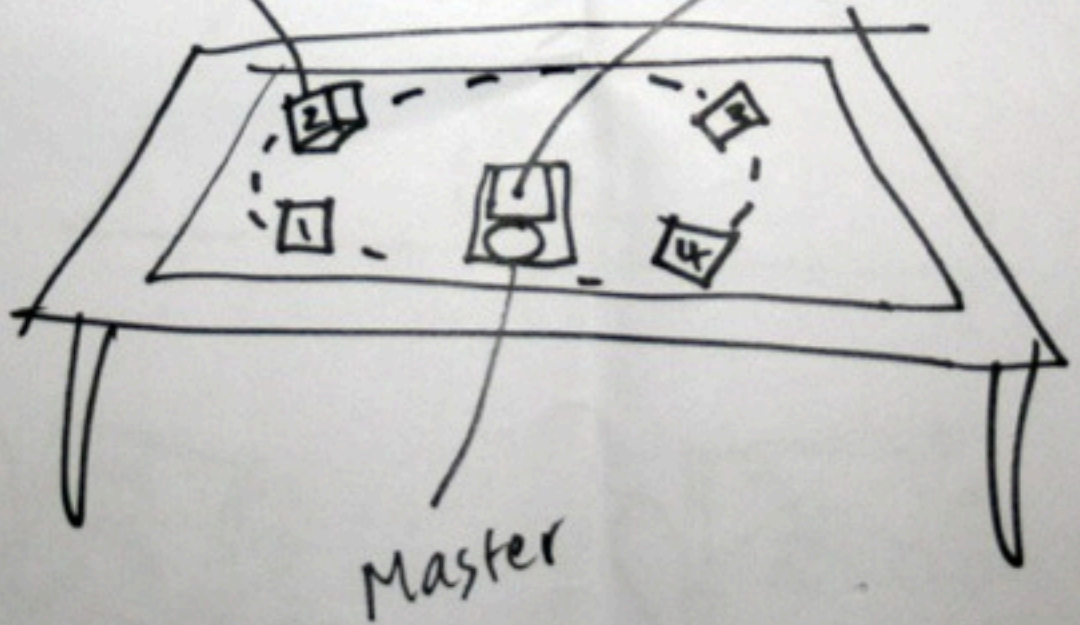
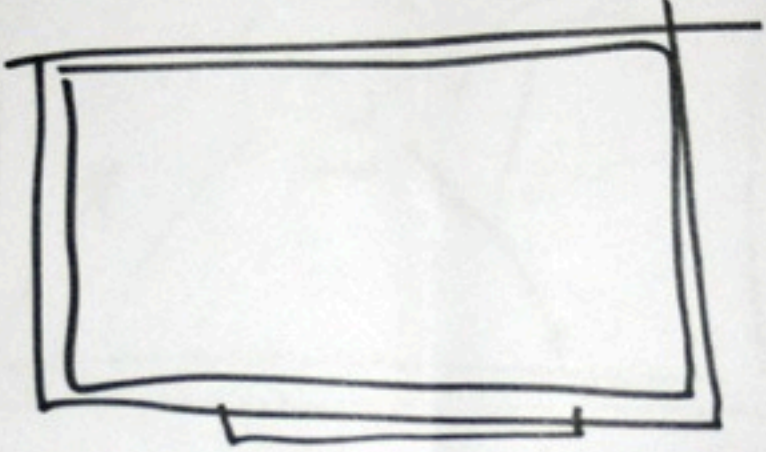
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6.

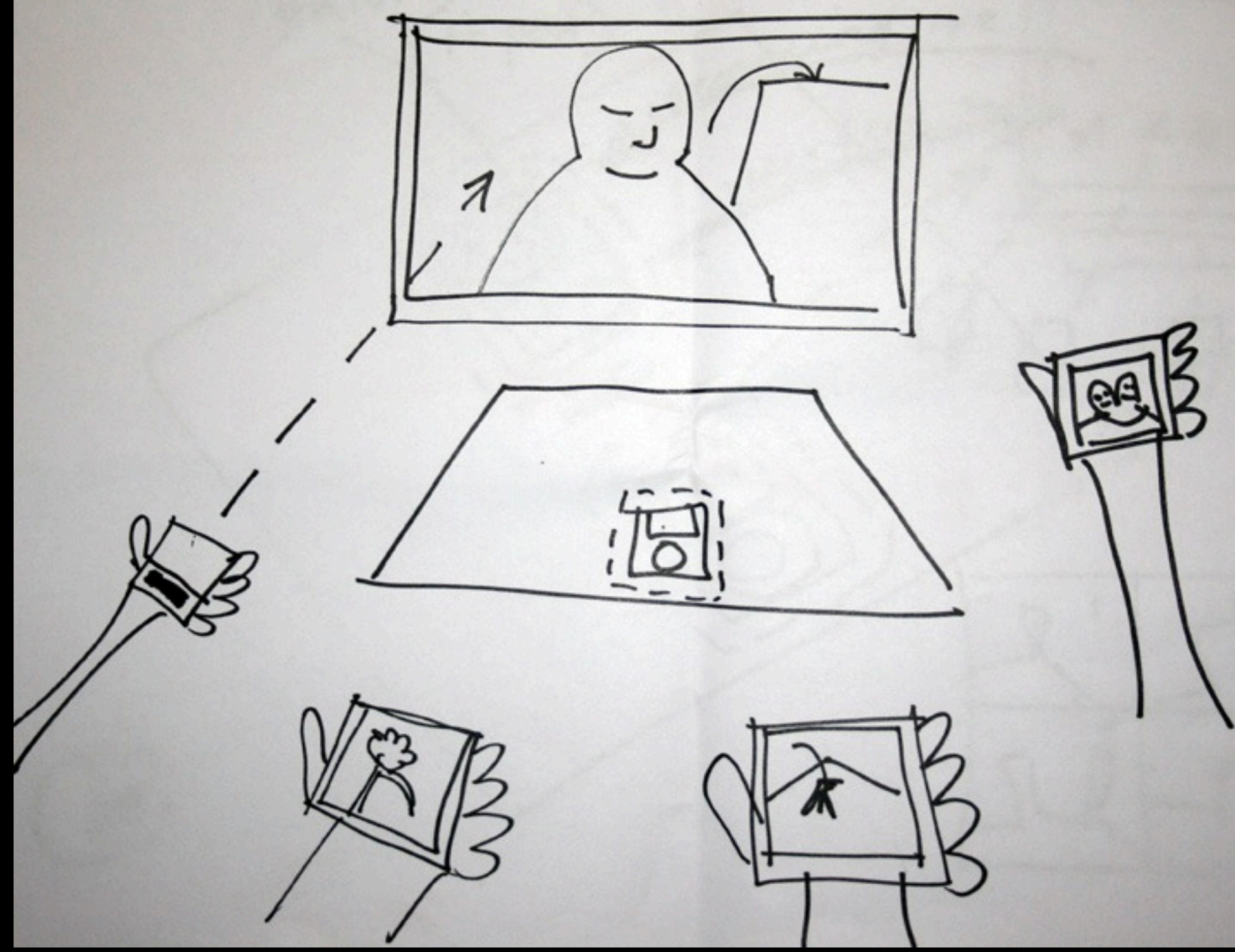
GPS-tagged  
data



change  
ensemble  
from  
record to  
play?  
yes | no.

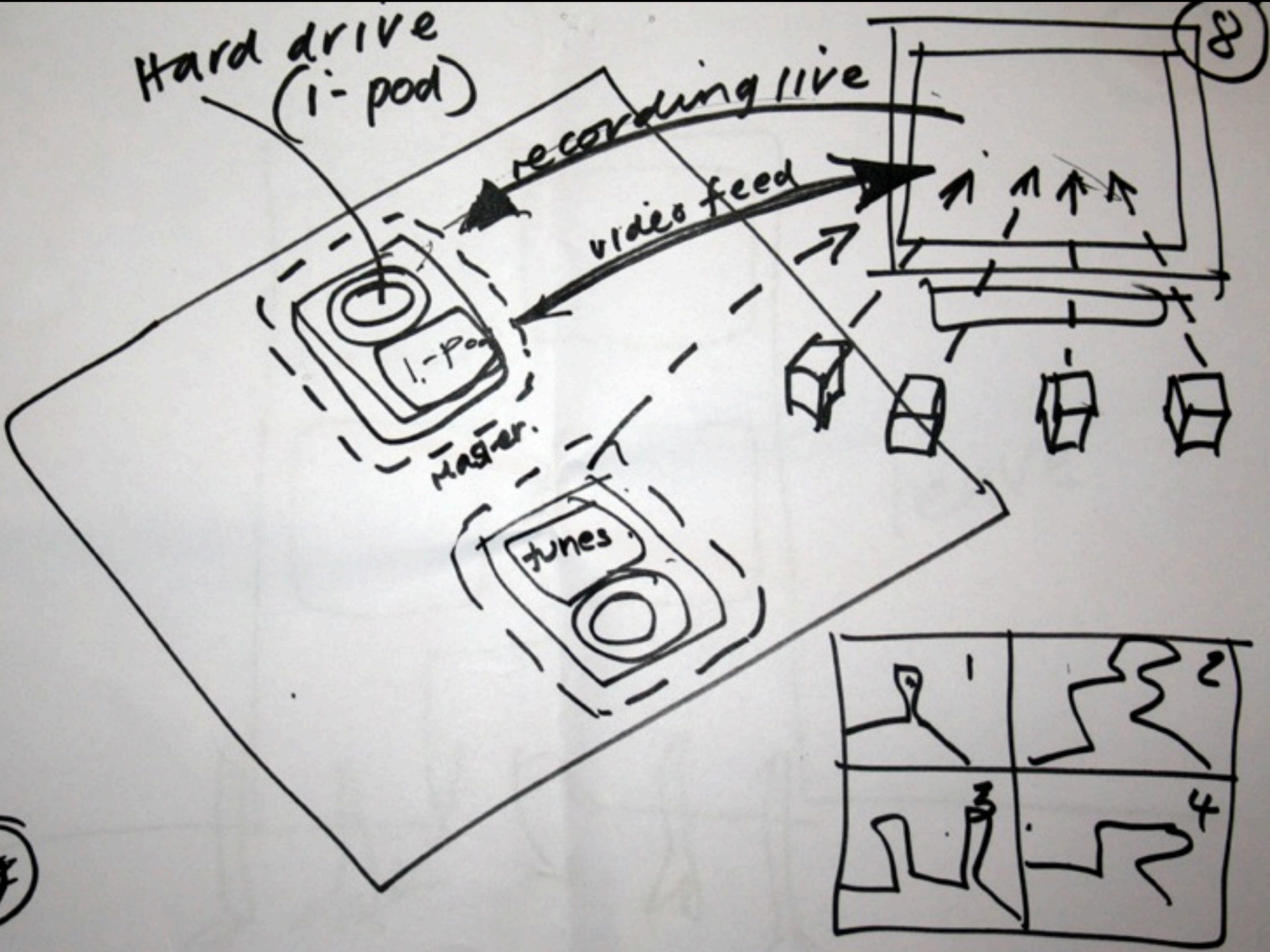


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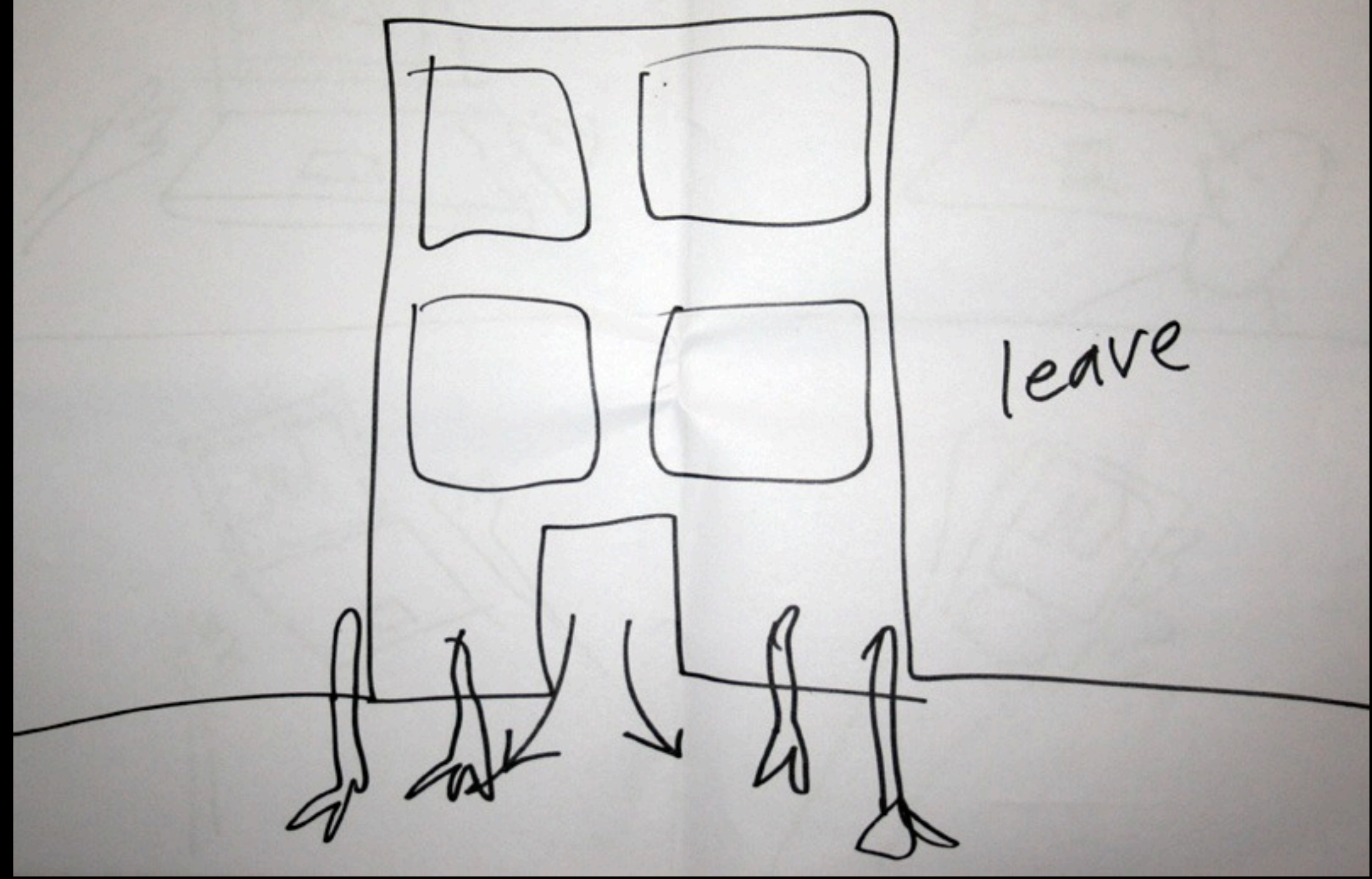


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VIDEO





# Choosing the right camera

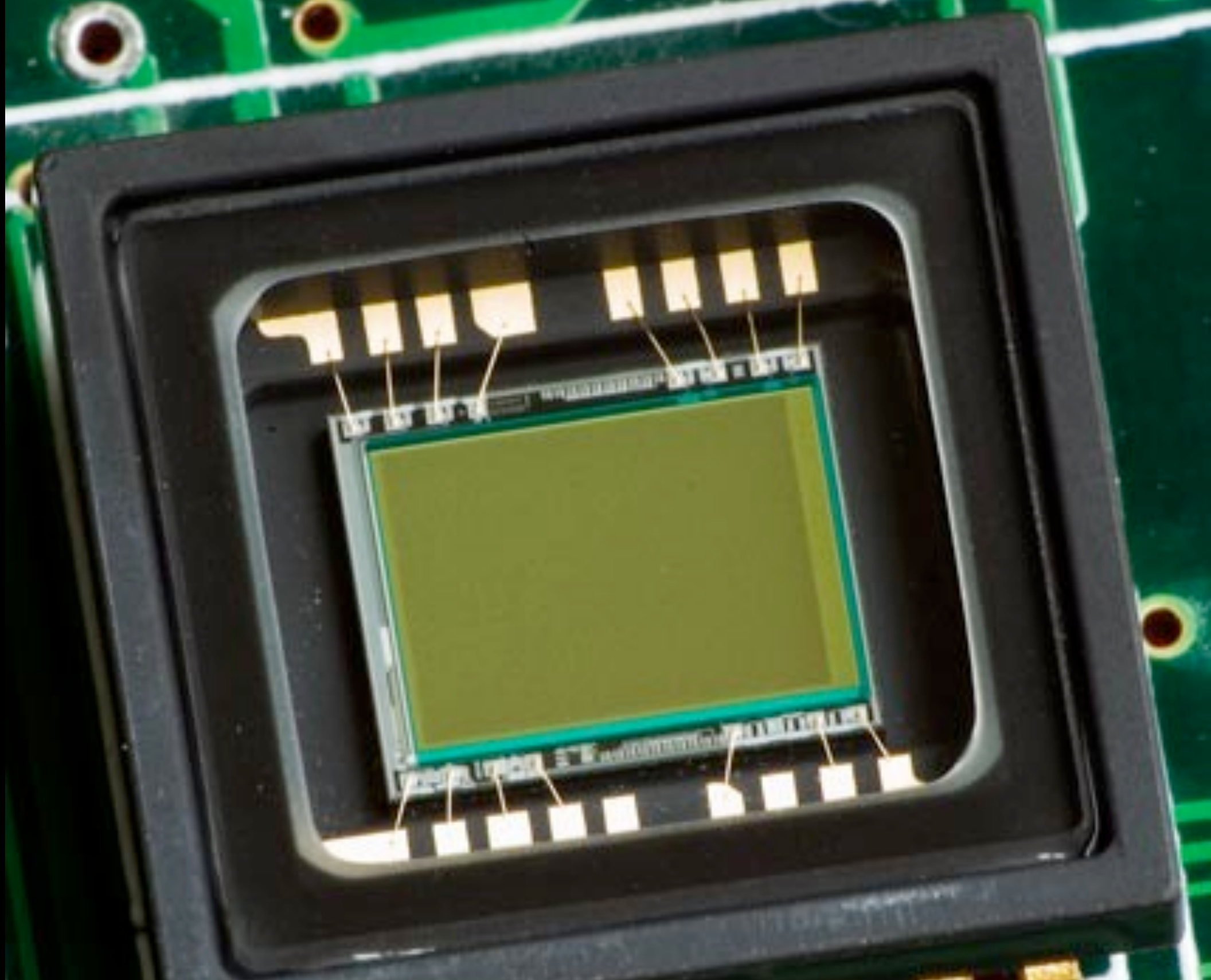


There are three different camera types and it's important to know what each has to offer.

A "one chip" camera which sends all of the colour data through one CCD (charged coupled device).

A "3 CCD" camera which uses a separate chip for red, blue, and green, giving a more "true to life" look to the video.

HD (high definition) camera's have a much higher video quality than both one chip and three chip SD (standard definition camera's)



CCD chip in a camera



# Plan

What's the video about (in one sentence)?

Who's the audience? (YouTube vs. Client)

What are we going to see? (Scenario)

What about audio? (Audio can make or break it)

# Quick and Efficient Tools:

## Movie Maker vs. iMovie



# MAC vs. PC



The choice between Apple's iMovie and PC's Movie Maker can be a tough decision. iMovie is a much more powerful program than Movie Maker, but if you decide on iMovie you are forced to buy an Apple computer. Whereas Movie Maker isn't limited to one computer which for most people is much better because they are used to the format of the PC. Overall iMovie is a much better beginner editing suite as it has way more effects than Movie Maker.

**Movie Tasks**

**1. Capture Video**

- Capture from video device
- Import video
- Import pictures
- Import audio or music

**2. Edit Movie**

- Show collections
- View video effects
- View video transitions
- Make titles or credits
- Make an AutoMovie

**3. Finish Movie**

- Save to my computer
- Save to CD
- Send in e-mail
- Send to the Web
- Send to DV camera

**Movie Making Tips**

**Collection: Frosty the Snowman (edit)**  
Drag a clip and drop it on the storyboard below.

Frosty the Snowman 2    Frosty the Snowman 2 001    Frosty the Snowman 2 002

Frosty the Snowman 2 003    Frosty the Snowman 2 004    Frosty the Snowman 2 005

**Frosty the Snowman 2 042**

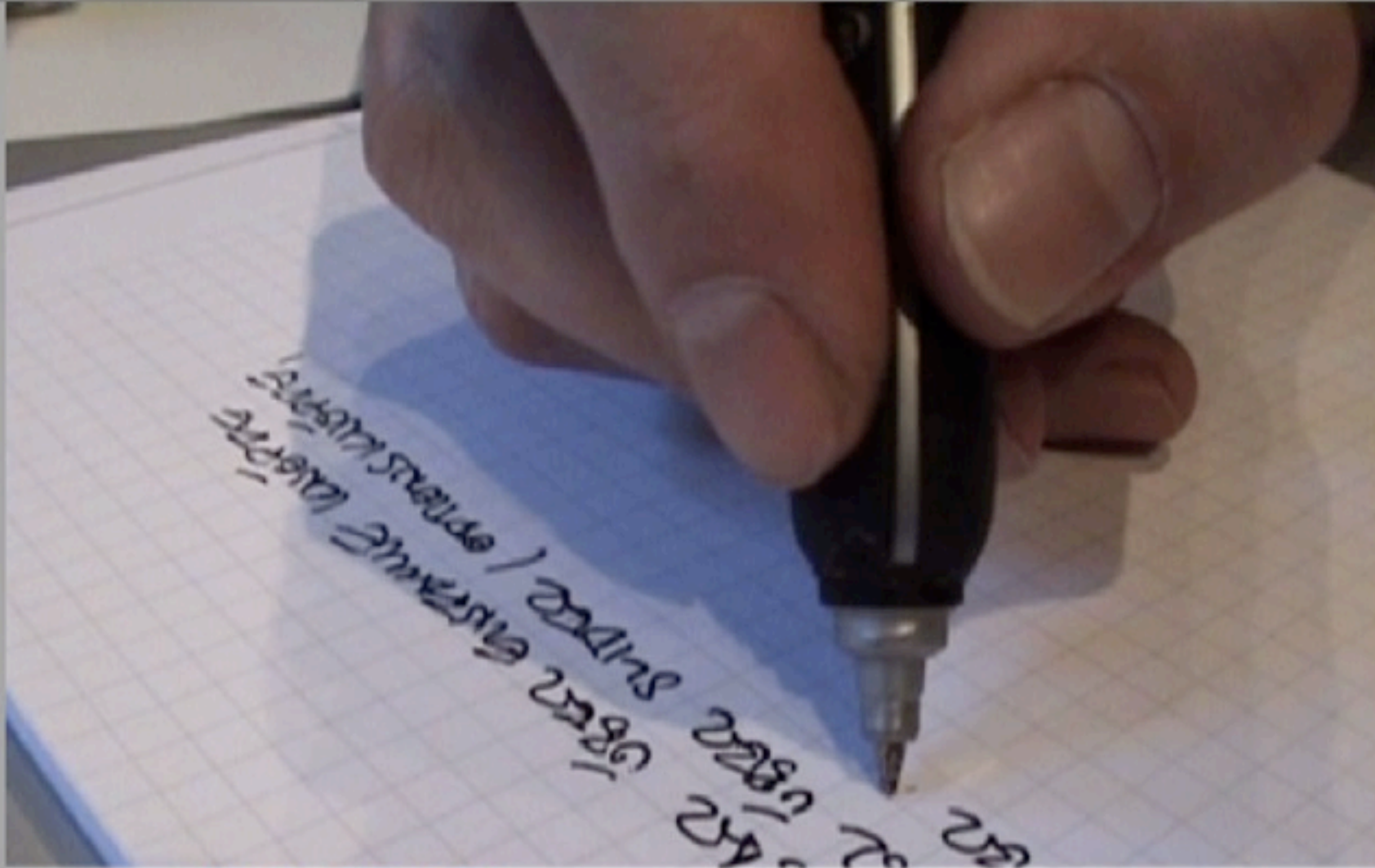
Paused    0:00:00.00 / 0:00:01.77

Play, Stop, Previous, Next, Full Screen, Repeat icons

Show Timeline

Frosty the Snowman 2    Frosty the Snowman 2 001    Frosty the Snowman 2 002    Frosty the Snowman 2 003    Frosty the Snowman 2 004





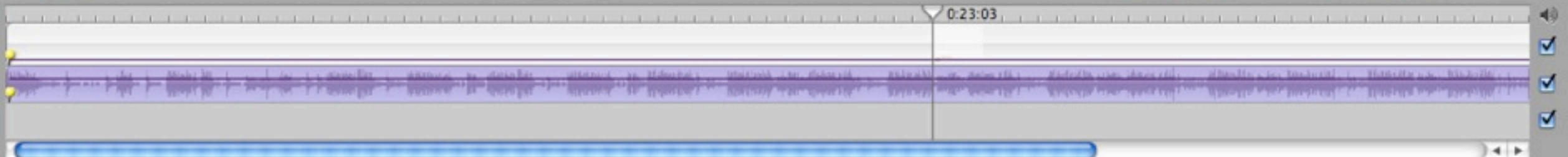
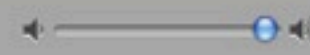
**ULTRATRONIK**

Usability Process: Analysis & Concept

0:23:03

0:51:17

2\_concept



0:23:03

Clip: 100%

"2\_concept - Audio" 0:51:17 of 0:51:17 total

169 GB available 0 KB

# Editing Basics : Montage vs. Continuity



# Example: Continuity

Nike Commercial

VIDEO

NIKE COMMERCIAL - TAKE IT TO THE NEXT LEVEL

Video Source: YouTube





Continuity :

- a logical coherence between shots
- the viewer shouldn't "feel" the cut
- the focus is on the story

# Example: Montage

Alfred Hitchcock





ALFRED HITCHCOCK - INTERVIEW

Video Source: YouTube



Montage :

- new assembly of material to create new meanings
- artistic approach
- the viewer “feels” the effect



# Combining Images and Sound

## through Editing

# Example : Amateur - Lasse Gjertsen

High Resolution, Low Fidelity Video Sketch



VIDEO

■ LASSE GJERTSEN - AMATEUR

Video Source: YouTube

# Example : Star Guitar - Michel Gondry

High Resolution, High Fidelity Video

VIDEO

■ STAR GUITAR - CHEMICAL BROTHERS

Video Source: YouTube





- material was produced and edited to match the audio
- layout of the compete “sound scape”
- objects (oranges) were used to represent “events”

## Editing Rules:

Cut on the beat to match the audio.

Be ruthless about the cut's: judge shots critical to filter out the unimportant material

Rule of thumb : one minute action can be described in max 10 sec

# Example : Eldia - Eldercare GUI Project

High Resolution, High Fidelity Video Prototype



VIDEO

# Rapid Video Prototyping : Enacting



## Quick Kiosk Mock-up

You can mockup real size products and environments which capture a degree of realism and while keeping it open for interpretation or further development.





**Dealership**

**Work place**

**Home**

**Call centre**

## Acting out the Scenario

You can mockup experiences over time also by emulating various processes and touch points by setting a stage and enacting the roles and actions.





■ ROTTERDAM HOSPITAL : CARDBOARD MOCKUP OF NEW CONCEPTS

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# "Just Enough Prototyping"

Understand your audience and choose the right level of resolution and fidelity.

Judge the time and resources available.

Go for the easiest and simplest track, don't overdo you prototype for a given context.