

Human-Computer Interaction

CPSC 481 - Winter 2019

Sketching

Adapted from Tony Tang

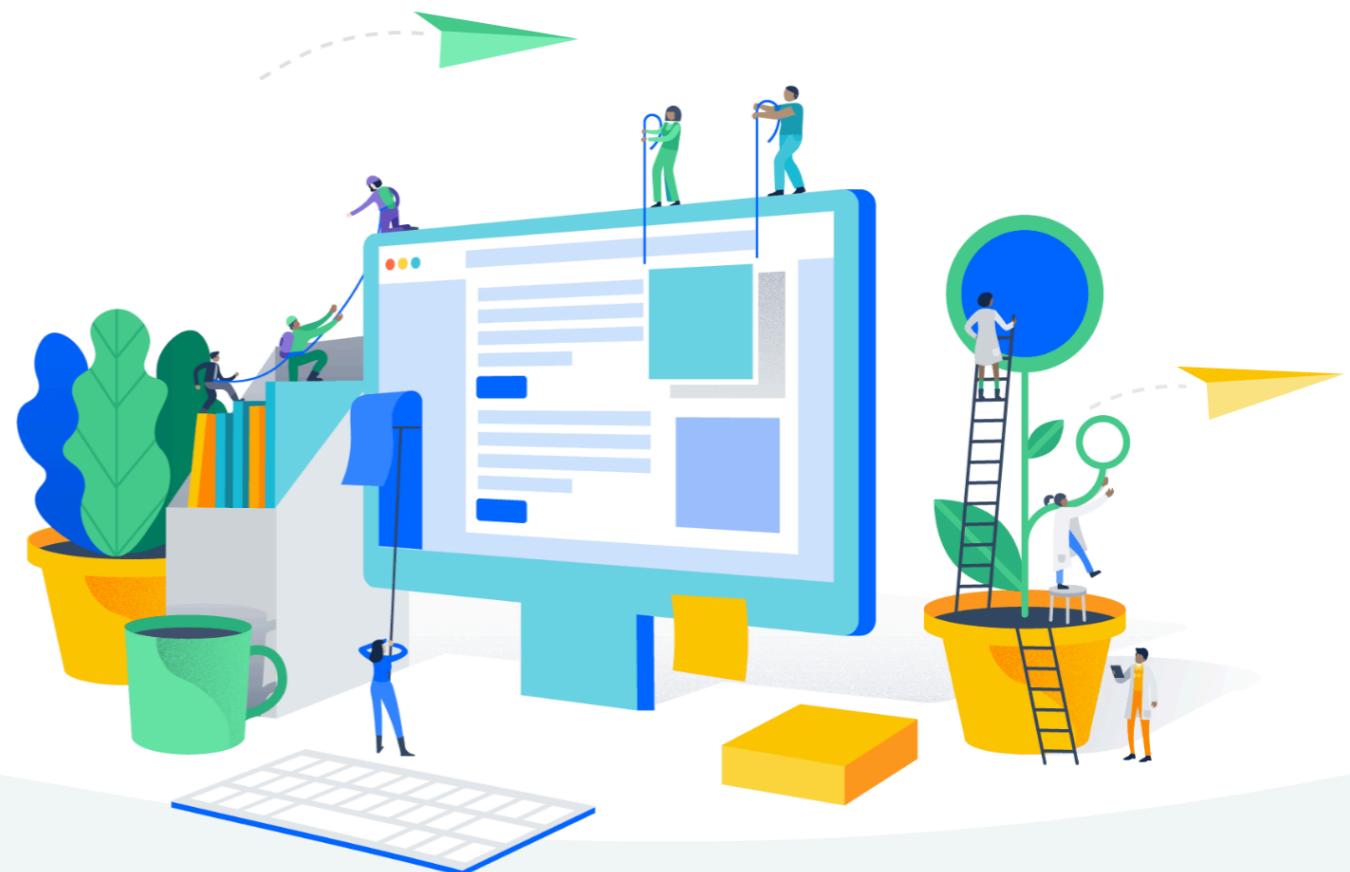
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The screenshot shows the Atlassian Jira interface with the title "Product Team Board". The top navigation bar includes links for Dashboards, Projects, Issues, Agile, Create Issue, Quick Search, and user profile. Below the header is a "Product Team Board" section with a "To Do" column (30 items), an "In Progress" column (13 items), a "Waiting" column (22 items), and a "Done" column (25 items). Each column displays a list of tasks with their status icons and brief descriptions. For example, the "To Do" column has two items: PMM-6304 (Enterprise 2.2 UX) and PMM-6224 (Suggestions Highlight).

To Do	In Progress	Waiting	Done
PMM-6304 Enterprise 2.2 UX	PMM-6304 Analyze purchase flow traffic	PMM-6304 Refresh email drip	PMM-6304 Update new features deck
PMM-6224 Suggestions Highlight	PMM-6224 Customer Interview Template		PMM-6224 Update footer with latest releases

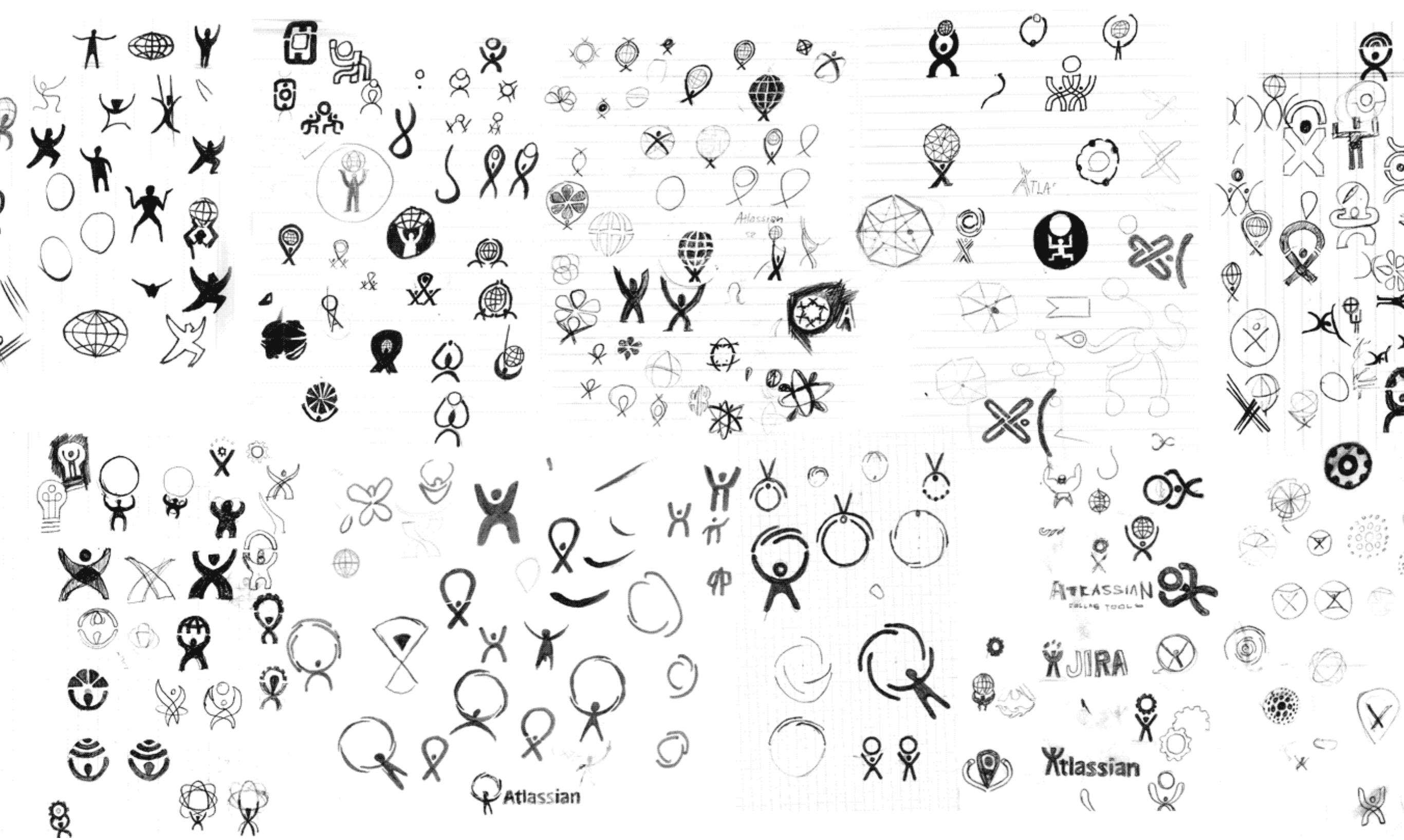


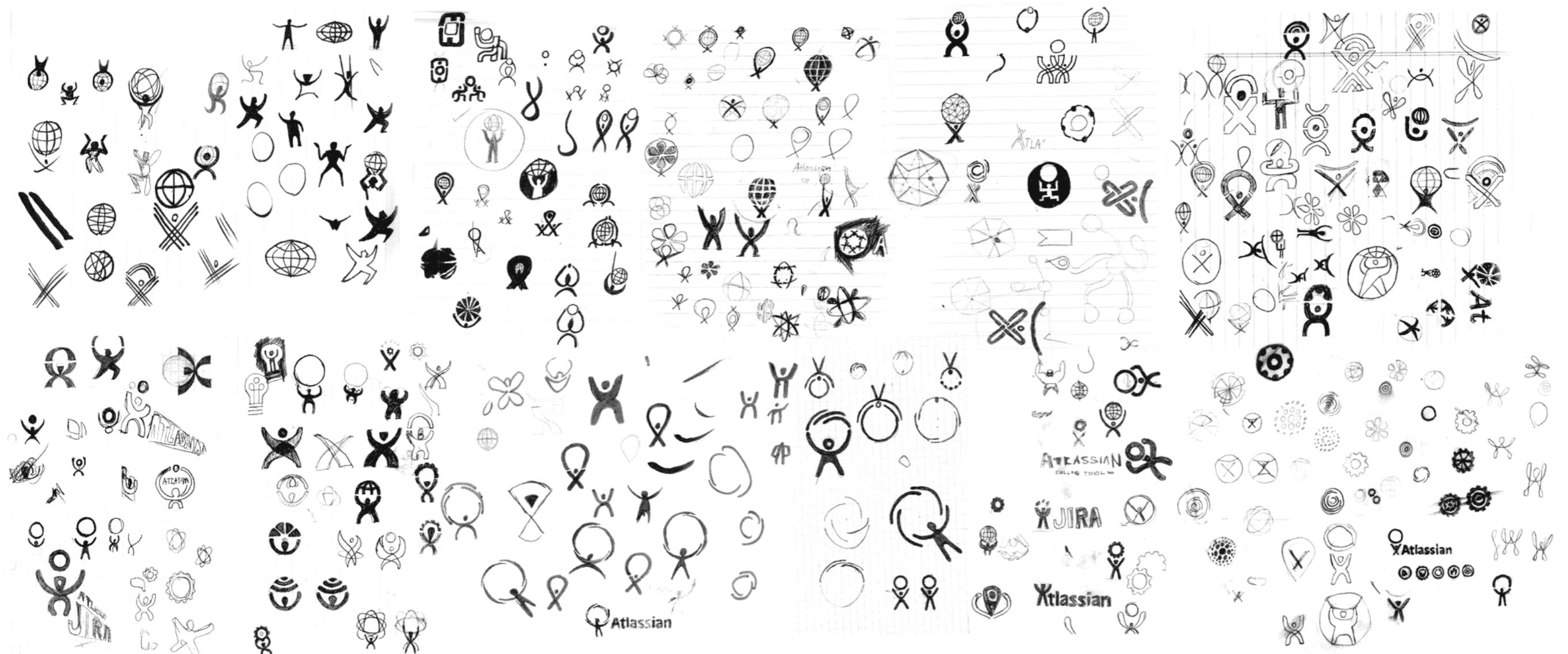
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Collaboration Tools

JIRA

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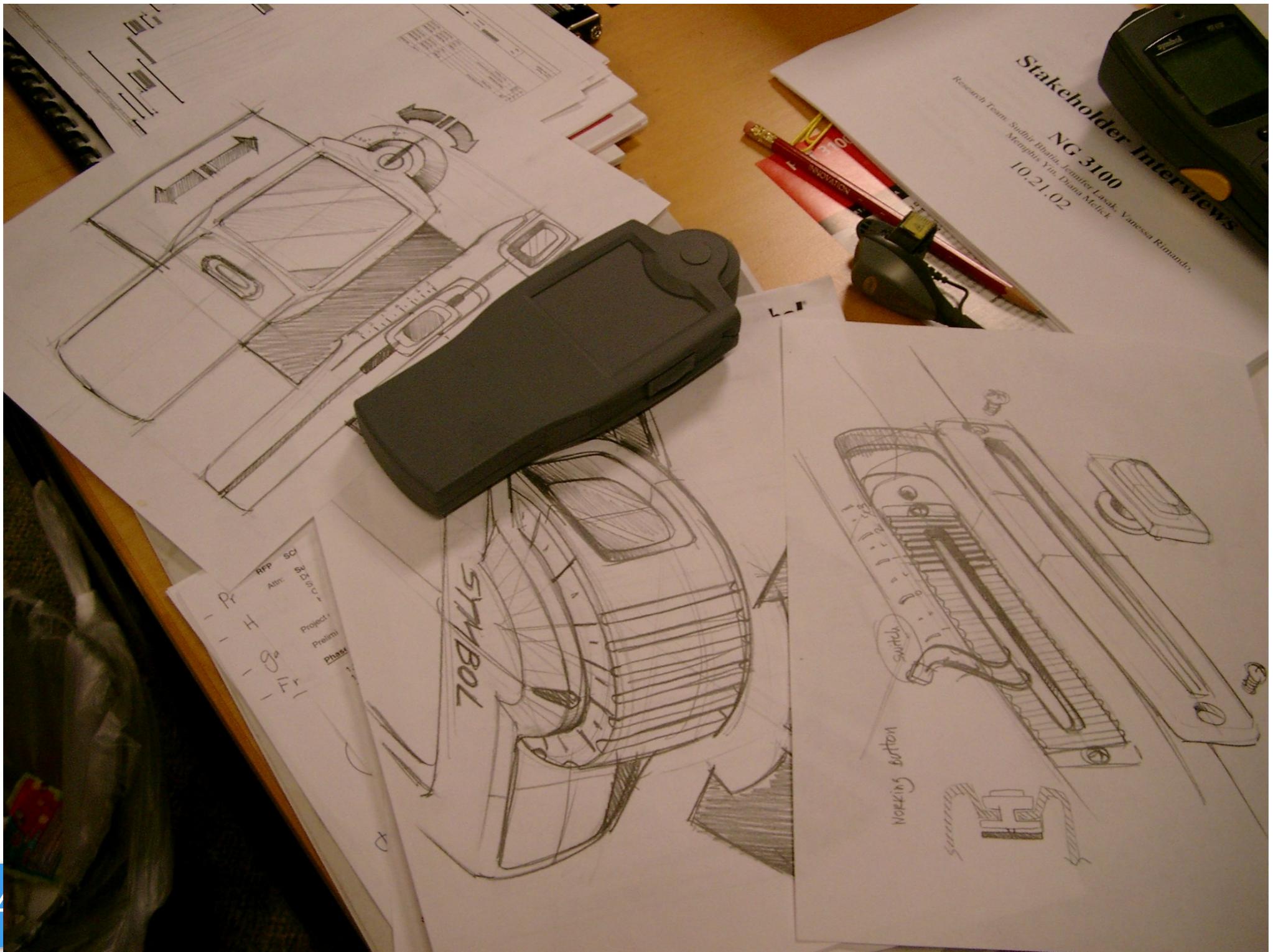




Sketching

- Why should we sketch?
- Getting the design right vs. Getting the right design
- What is a sketching?
- Properties of sketches
- What is and what is not a sketch
- Sketching vs. Prototyping

Sketching is about Design



Why sketch?

- Create
- Record
- Reflect, share, critique, decide

Why sketch?

- Create
 - Early ideation
 - Think openly about ideas
 - Force you to visualize how things come together
 - Brainstorming: generate abundant ideas without worrying about quality

Why sketch?

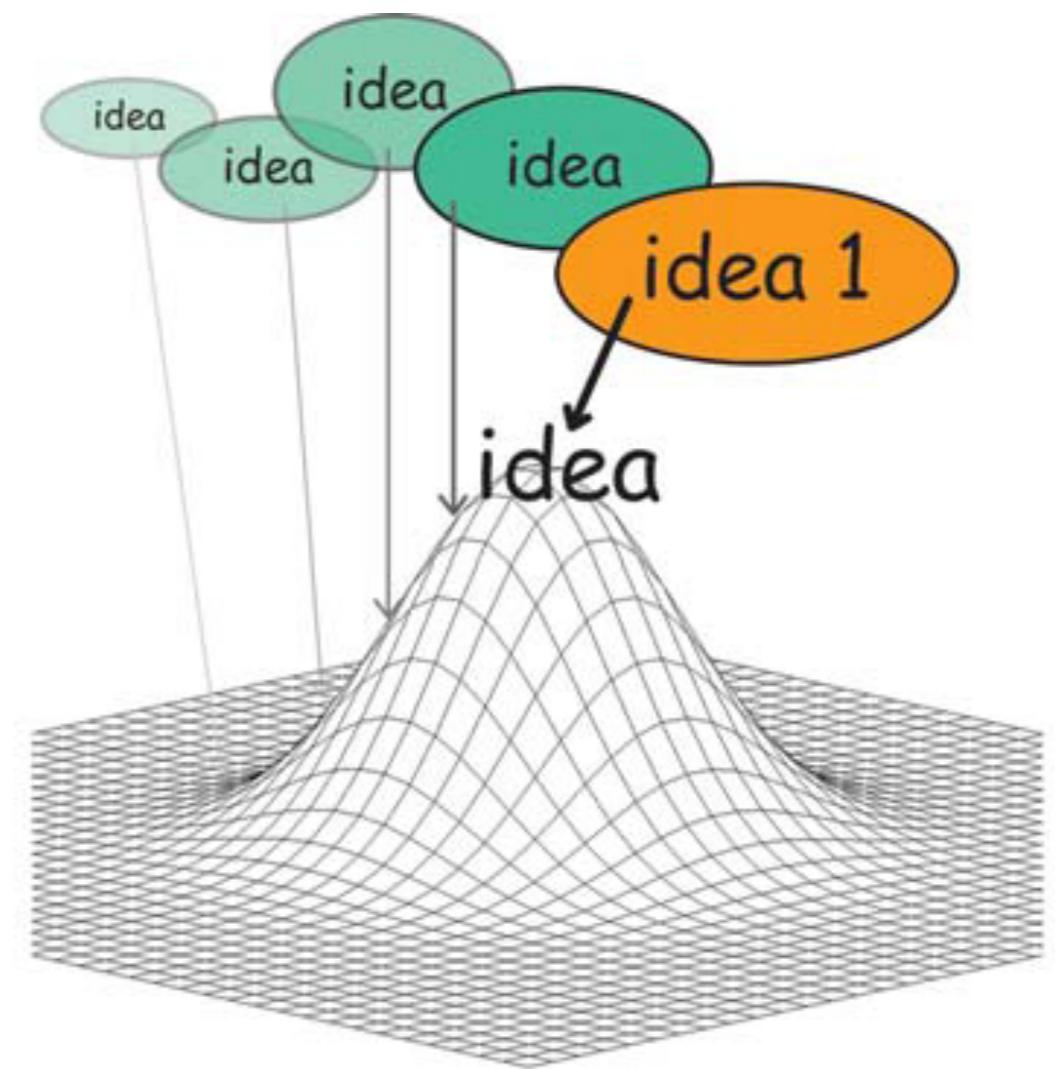
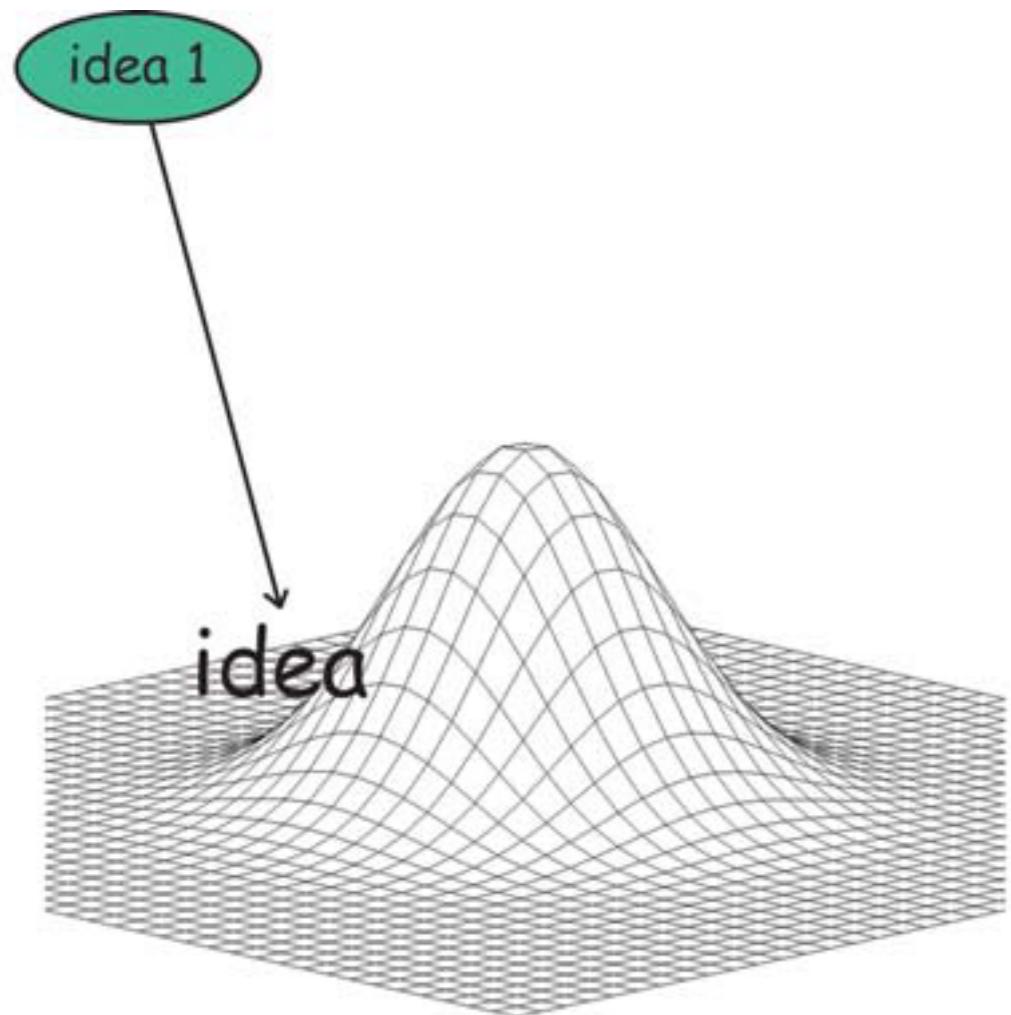
- Record
 - Ideas you develop
 - Ideas that you come across
 - Archive ideas for later reflection

Why sketch?

- Reflect, share, critique, decide
 - Communicate ideas to others
 - Invite responses, criticisms, and alternatives
 - Choose ideas worth pursuing

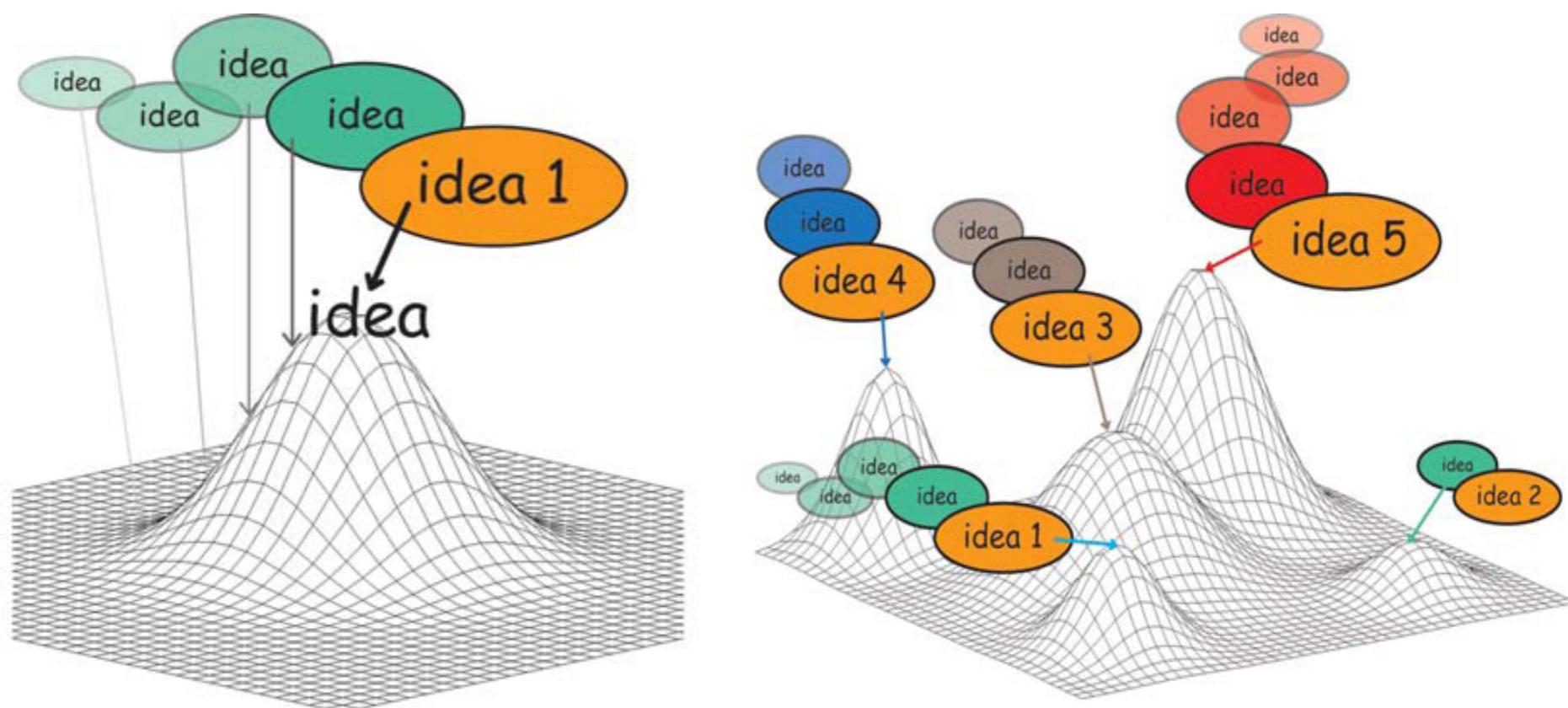
Getting the design right

- Generate an idea
- Iterate on the idea

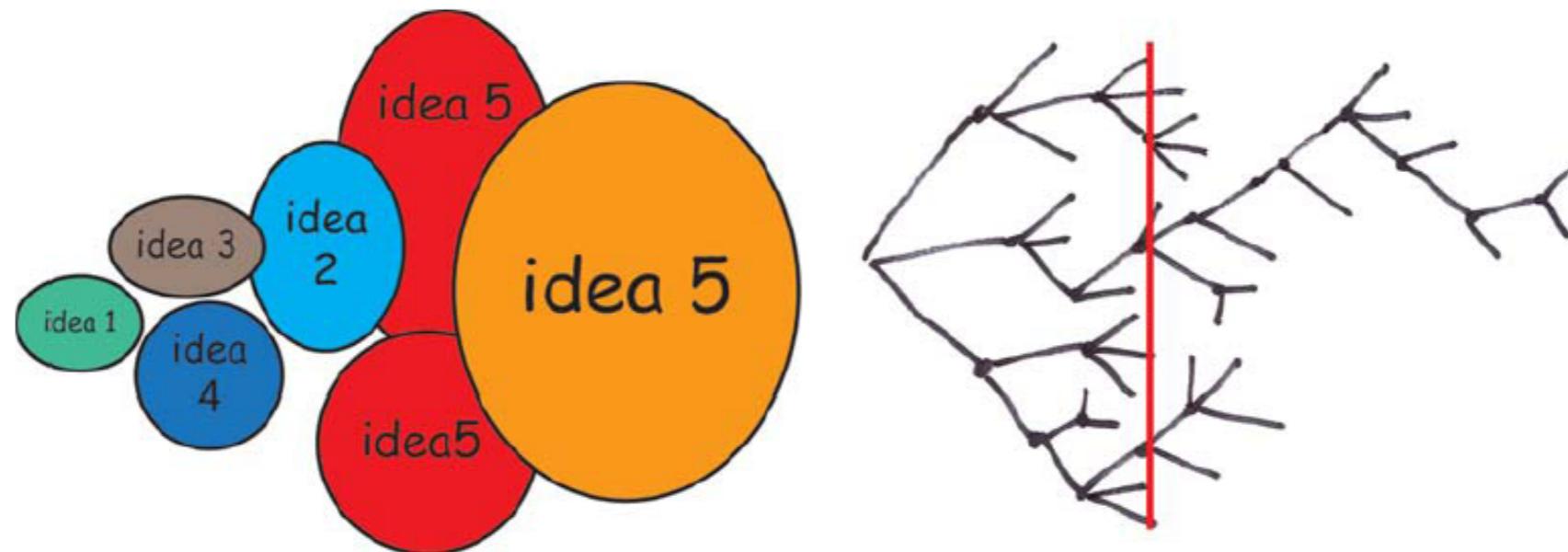


Problem

- Is it the best idea? Issue: we often fixate on the first idea.
Local maximum: hill climbing issue.

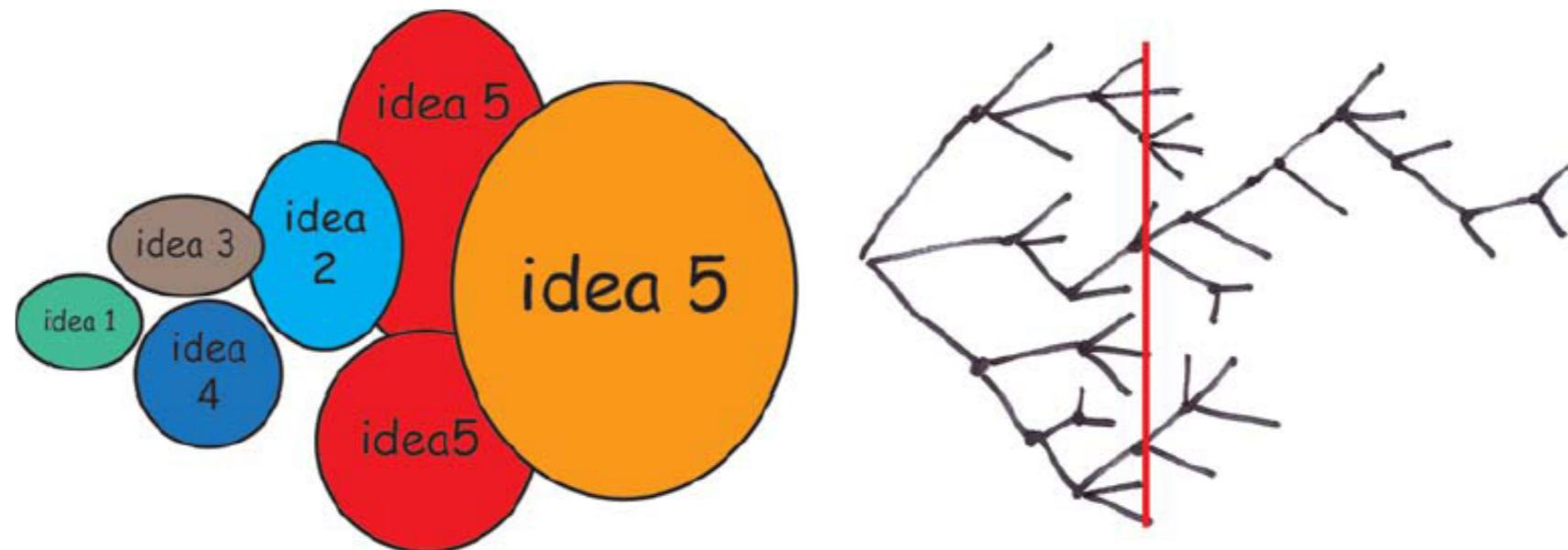


Getting the right design



- Generate many ideas and variations
- Reflect on all ideas
- Choose the ones that look most promising
- Develop them in parallel
- Add new ideas as they come up
- Then iterate your final choice

Getting the right design

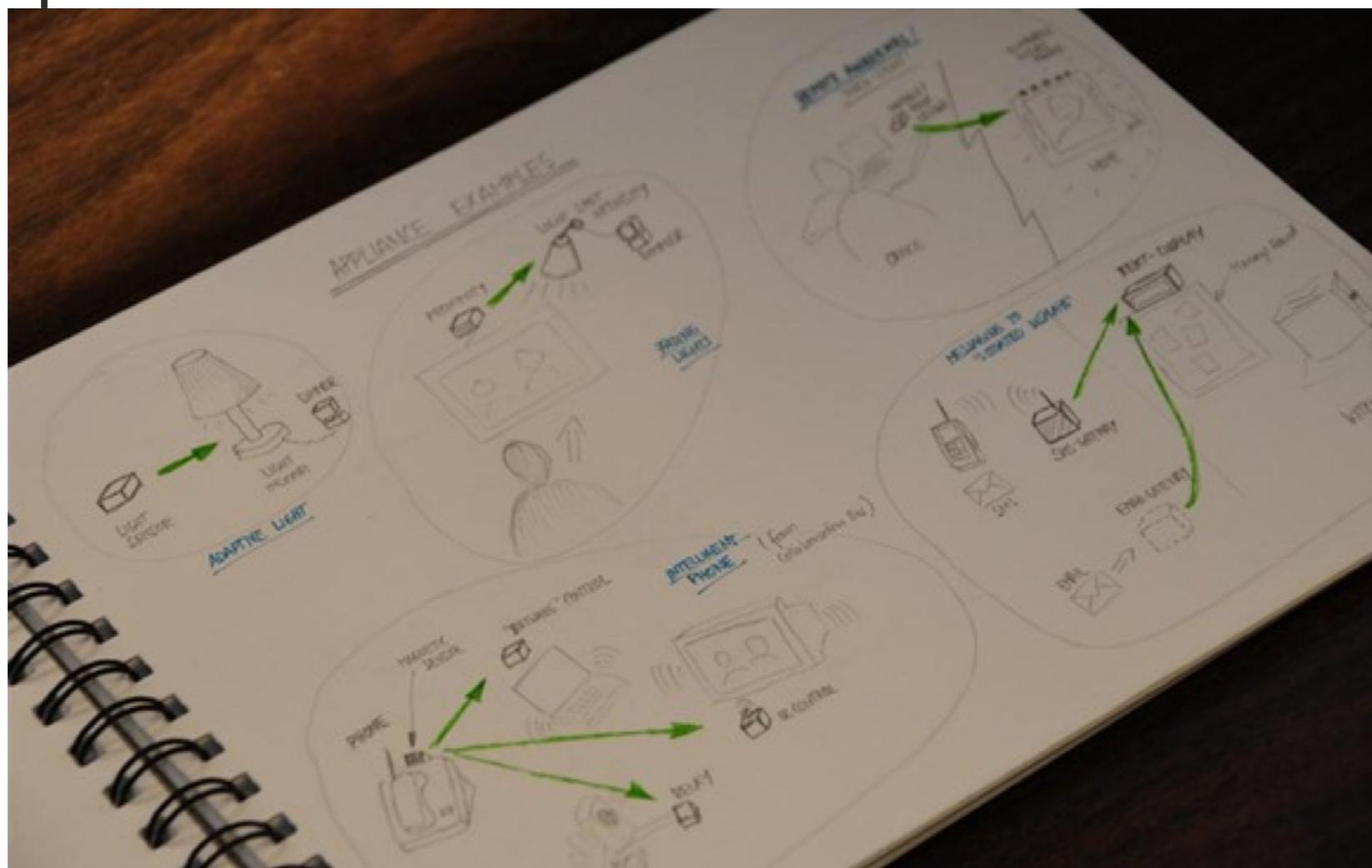


“...a designer that pitched three ideas would probably be fired. I’d say 5 is an entry point for an early formal review (distilled from 100s) ... if you are pushing one you will be found out, and also fired ... it is about open mindedness, humility, discovery, and learning. If you aren’t authentically dedicated to that approach you are just doing it wrong!”

–Alistair Hamilton (VP Design at Symbol Technologies)

Sketching

- A process that enables you to think through ideas and variations, and convey design ideas to others early in the design phase.



Why Sketching?

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- Early ideation that allows risk-taking and explorations of variations

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Why Sketching?

- Early ideation that allows risk-taking and explorations of variations
- Allows you to think through ideas
- Active form of brainstorming

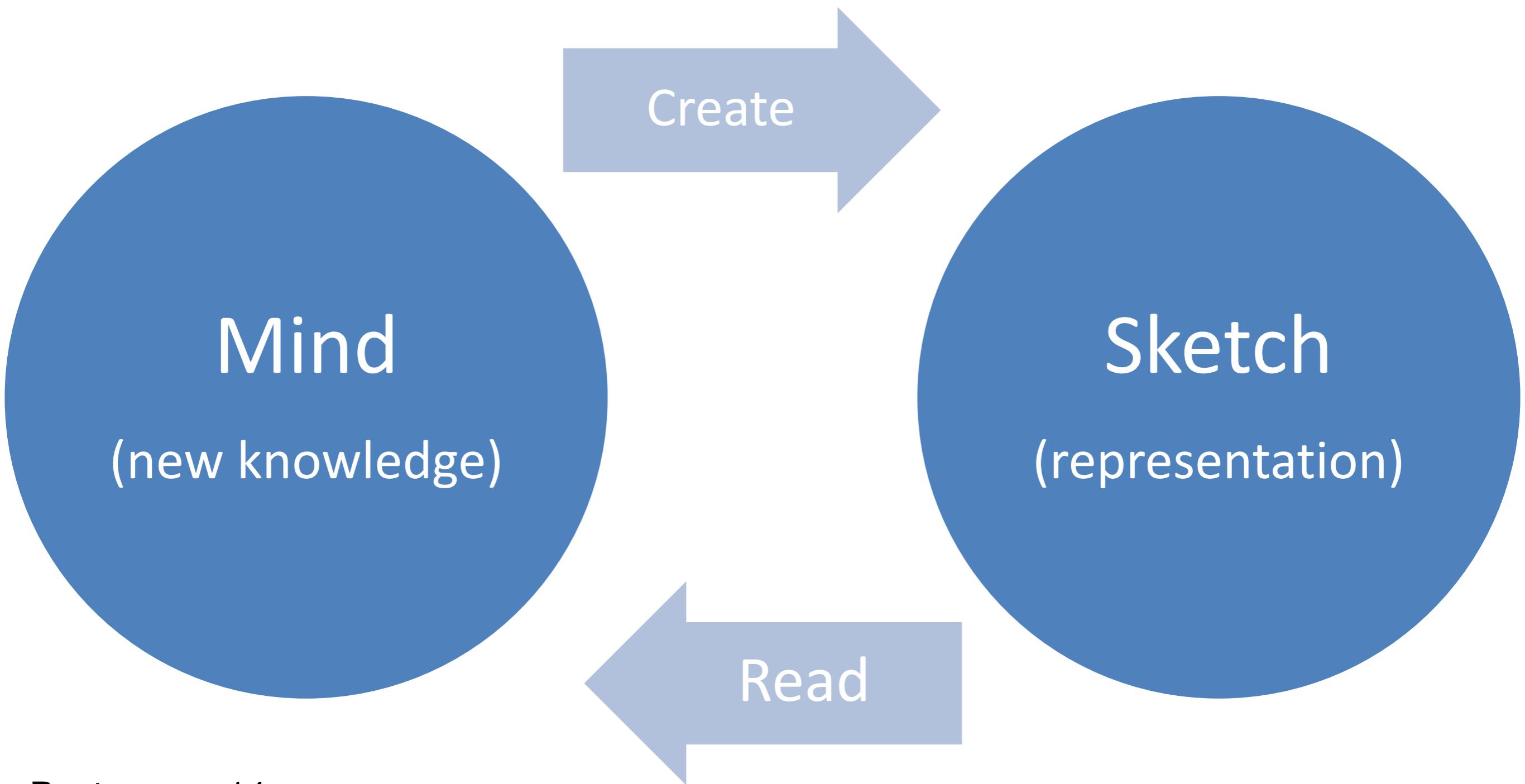
Why Sketching?

- Forces you to visualize how things come together

Why Sketching?

- Forces you to visualise how things come together
- Communicates ideas to others (and oneself) to inspire new designs

Sketching as a dialog



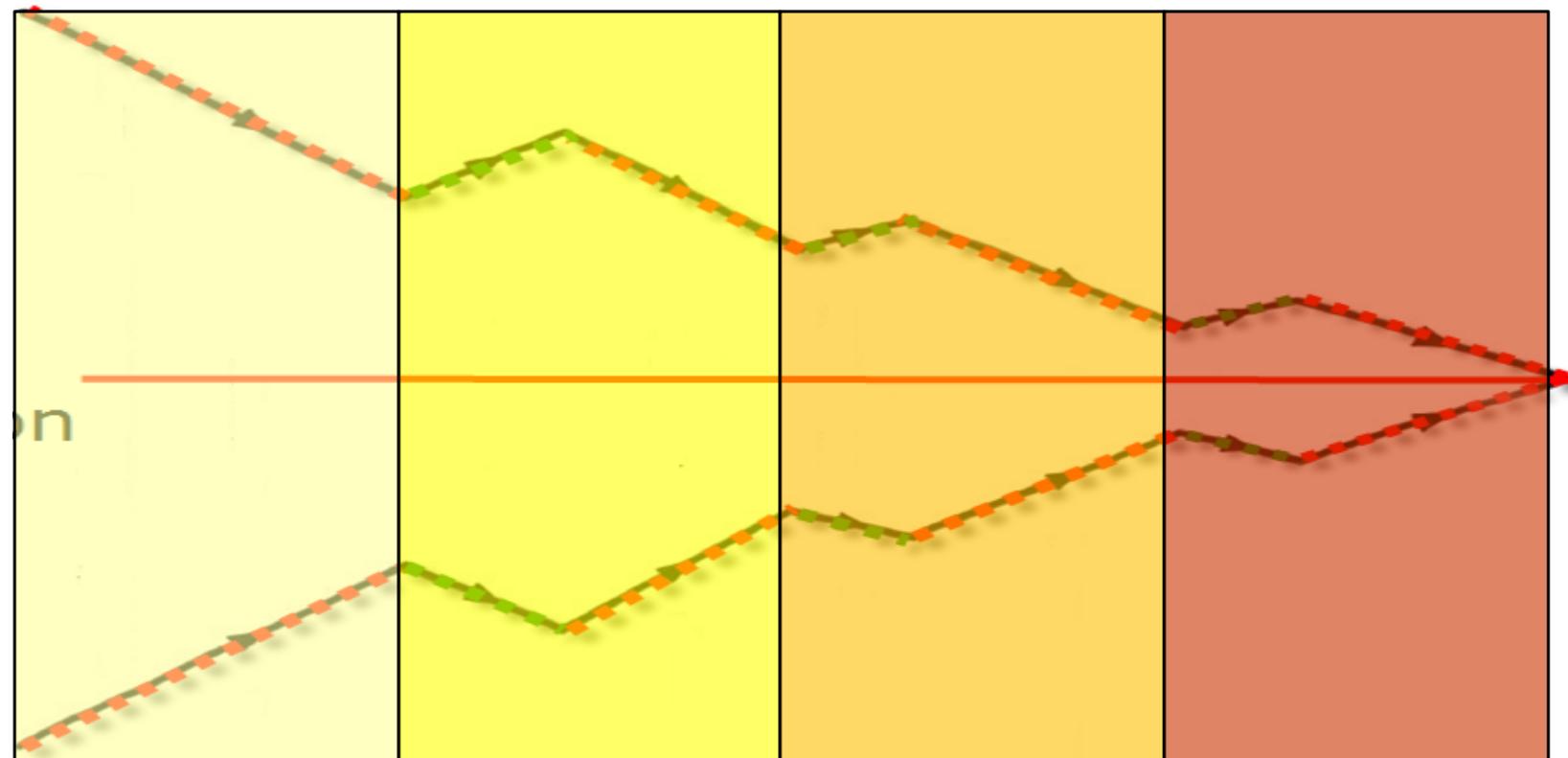
Buxton, pp. 14

Elaboration and Reduction

- **Elaborate** - generate solutions. There are the opportunities.
- **Reduce** - decide on the ones worth pursuing.
- **Repeat** - elaborate and reduce again on those solutions.

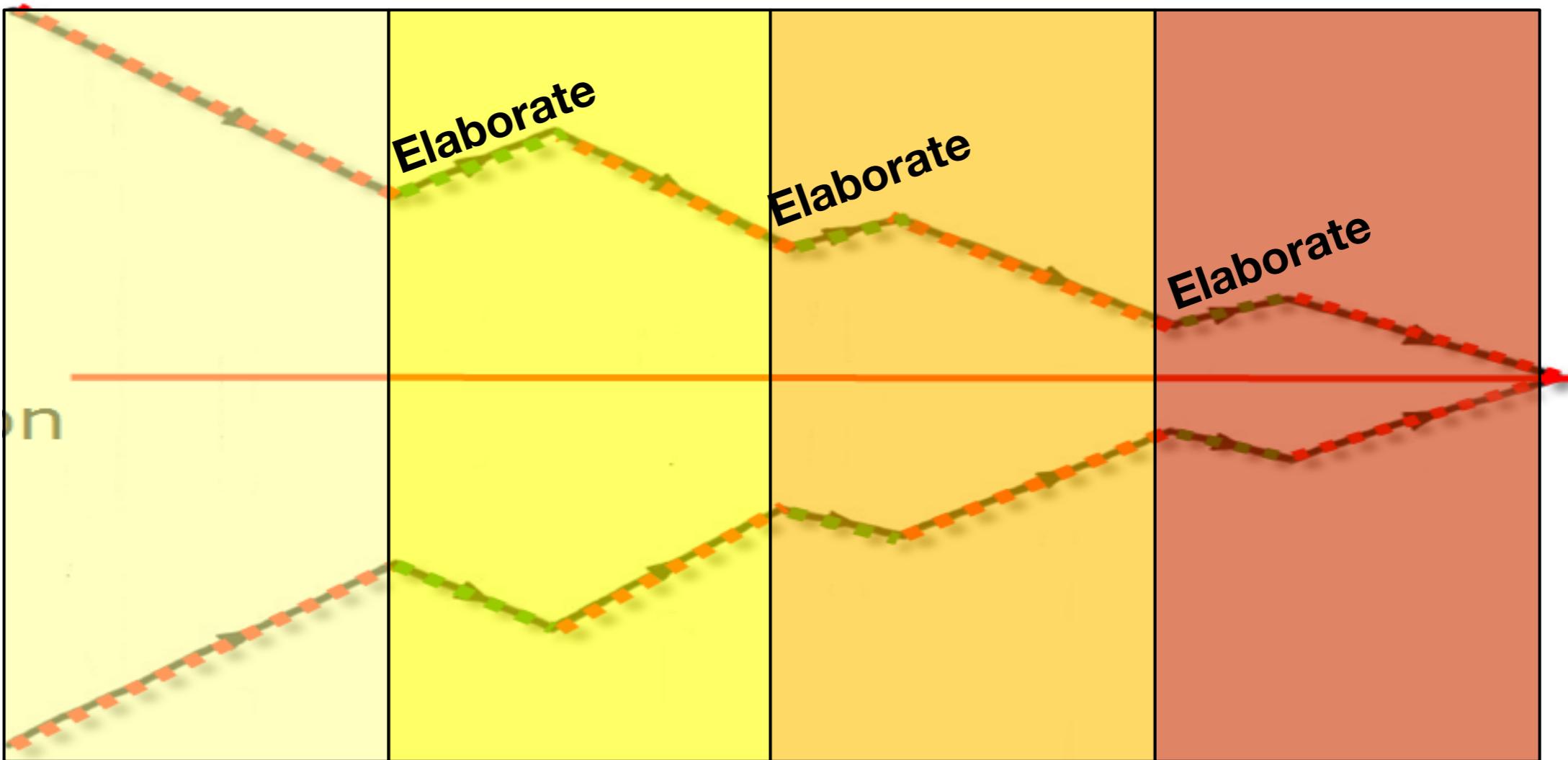
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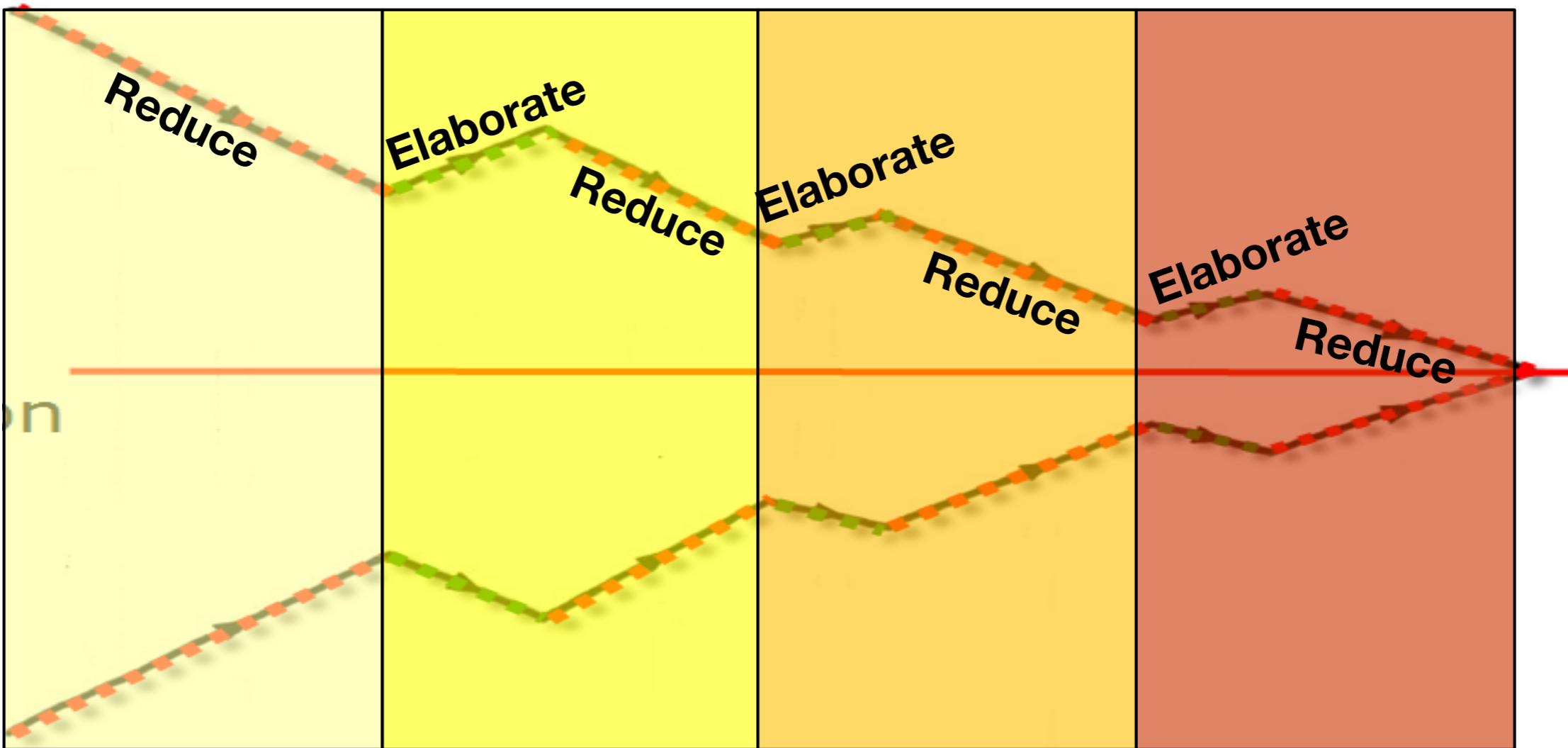
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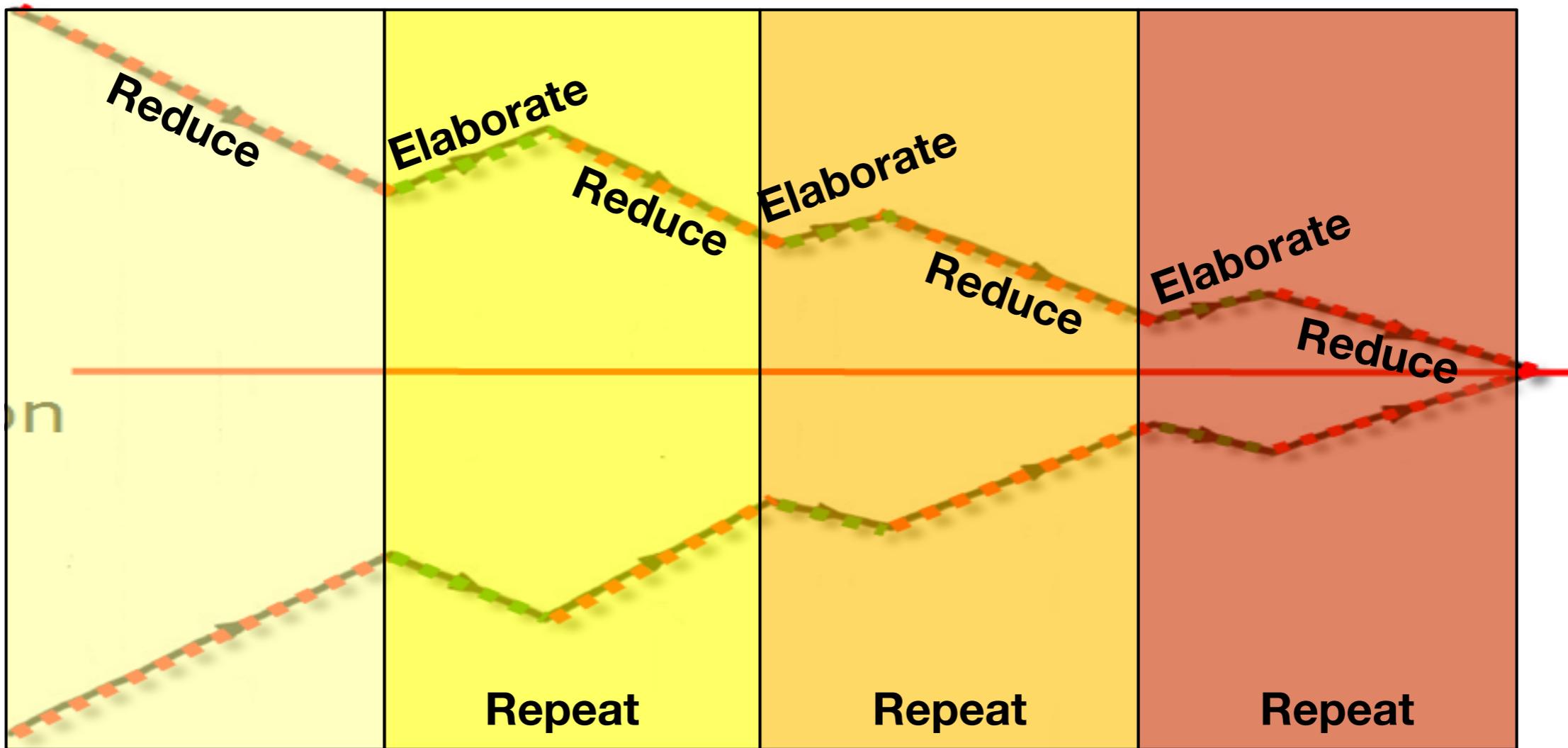
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Elaboration and Reduction

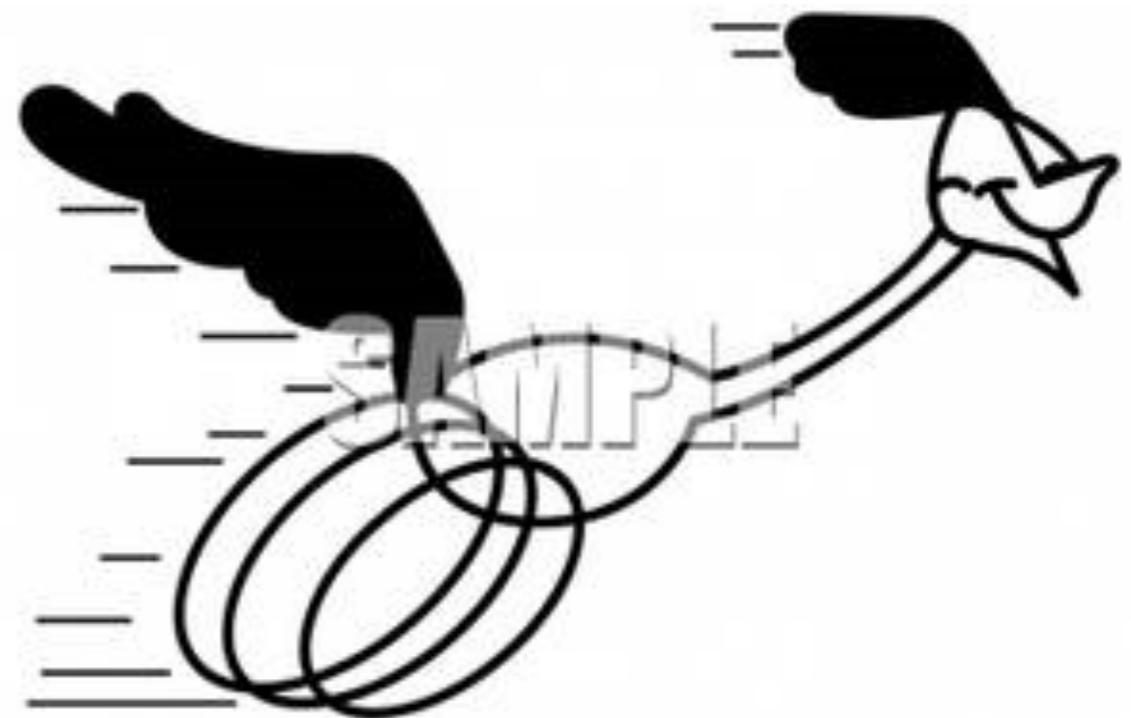
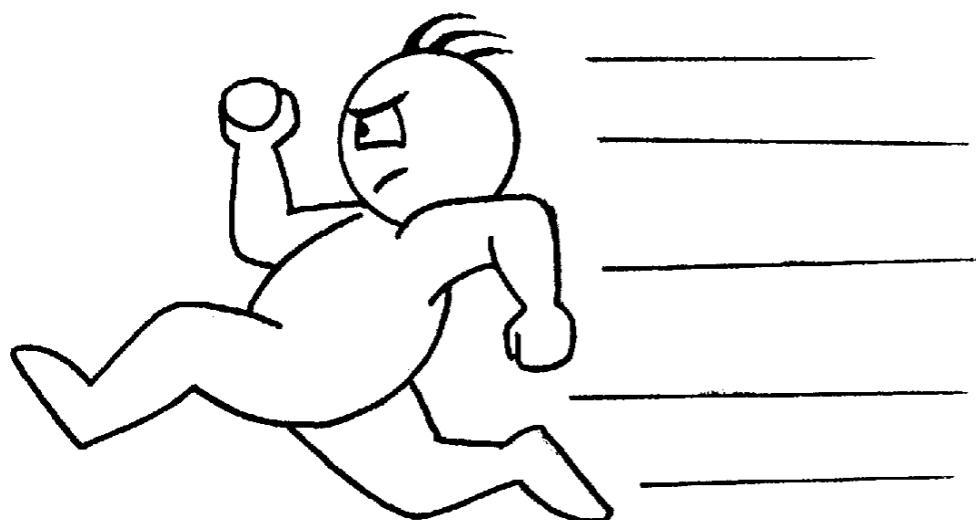
- Design is choice.
- There are two places where there is room for creativity:
 1. Creativity you bring to enumerating meaningfully distinct options from which to choose
 2. Creativity you bring to defining the criteria, or heuristics, according to which you make your choices

Buxton's properties of Sketches

- Quick
- Timely
- Inexpensive
- Disposable
- Plentiful
- Clear vocabulary
- Distinct gesture
- Minimal detail
- Appropriate degree of refinement
- Suggest and explore vs. confirm
- Ambiguity

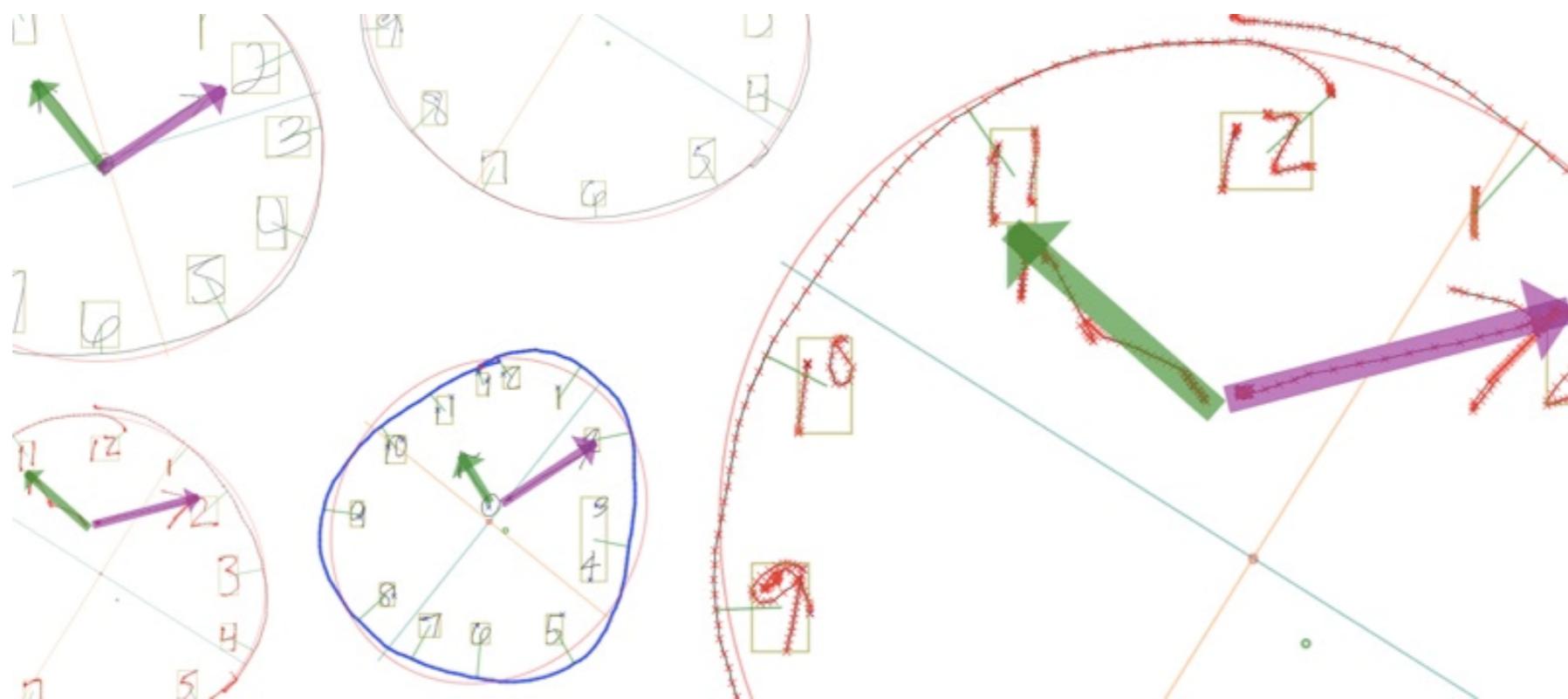
Quick

- A sketch is quick to make, or at least gives that impression



Timely

- A sketch can be provided when needed



Inexpensive

- Cost must not inhibit the ability to explore a concept, especially early in design



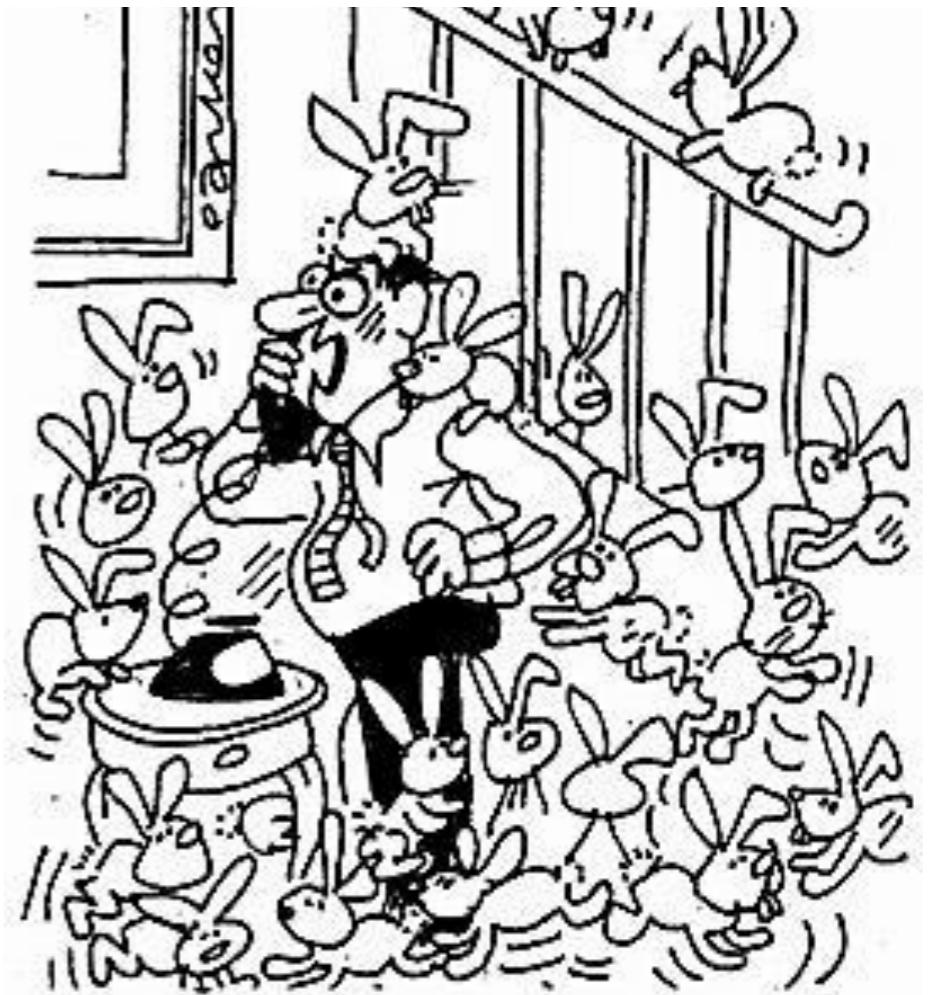
Disposable

- If you can't afford to throw it away, it's not a sketch
- Investment is in the process, not the physical sketch
- However, sketches are not “worthless”

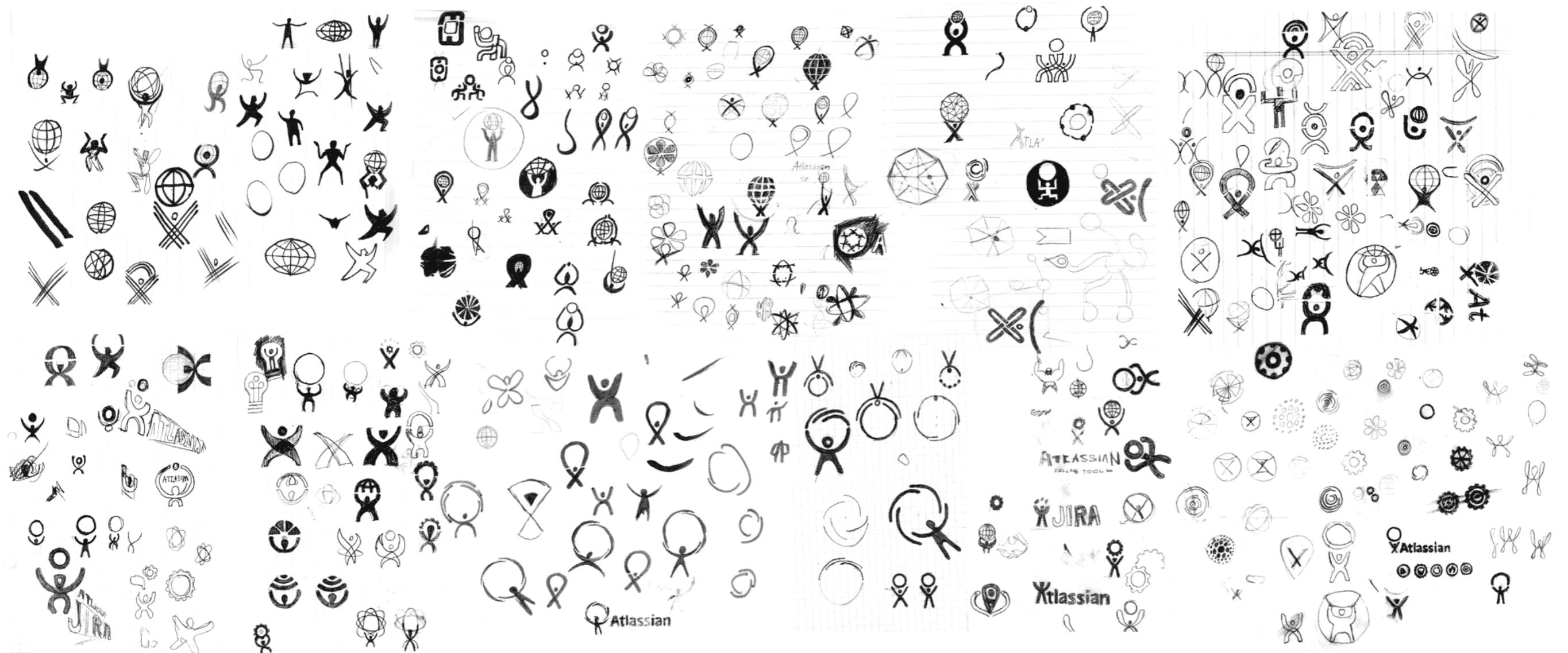


Plentiful

- They don't exist in isolation
- Meaning and relevance is in the context of a collection or series

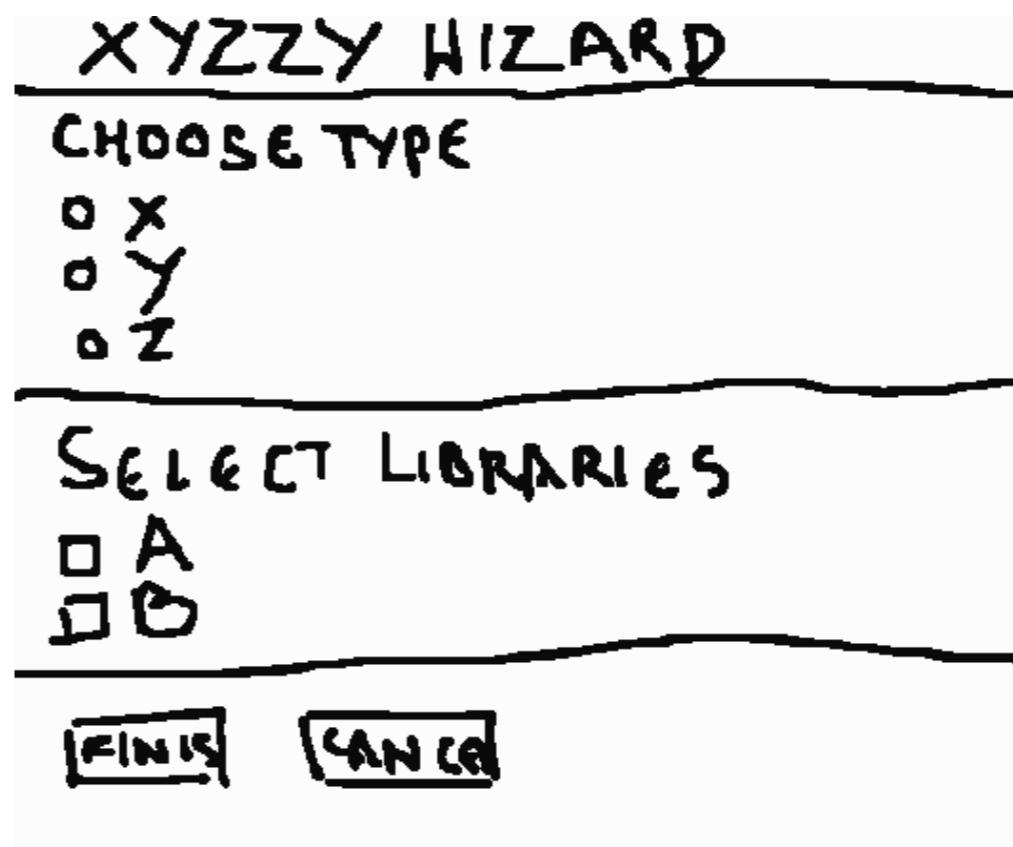


Plentiful



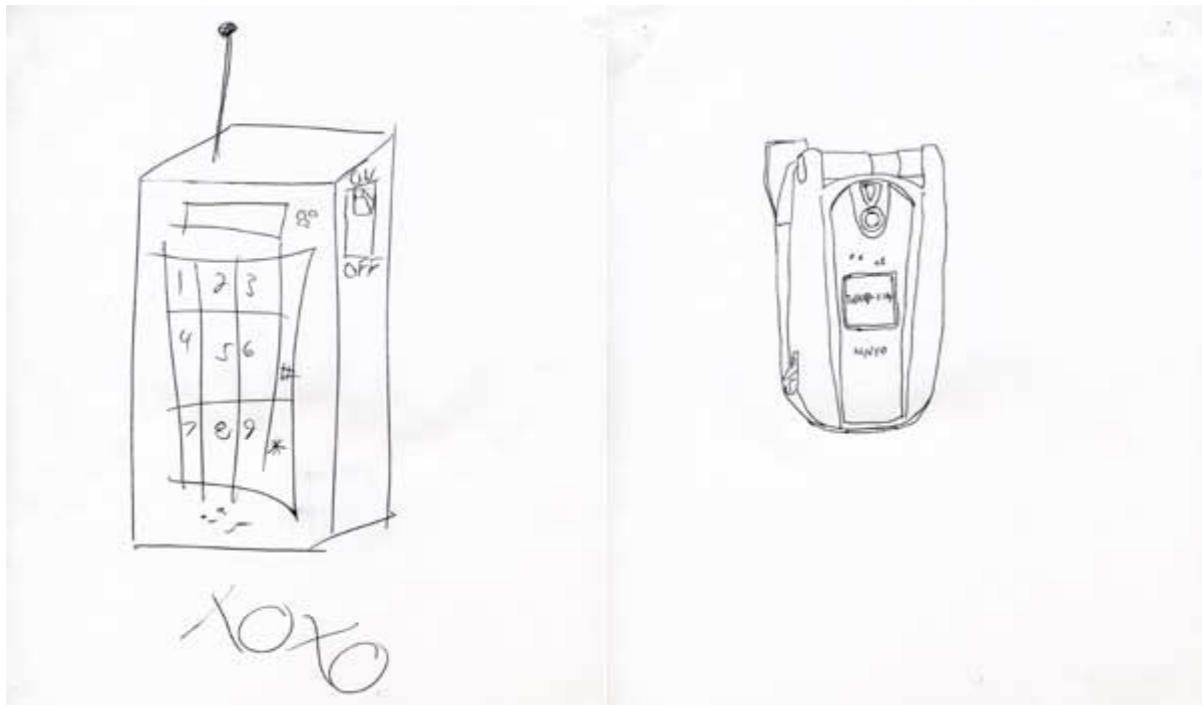
Clear vocabulary

- The way it's rendered (e.g., style, form, signals) makes it distinctive that it is a sketch
 - Could be the way that a line extends through endpoints

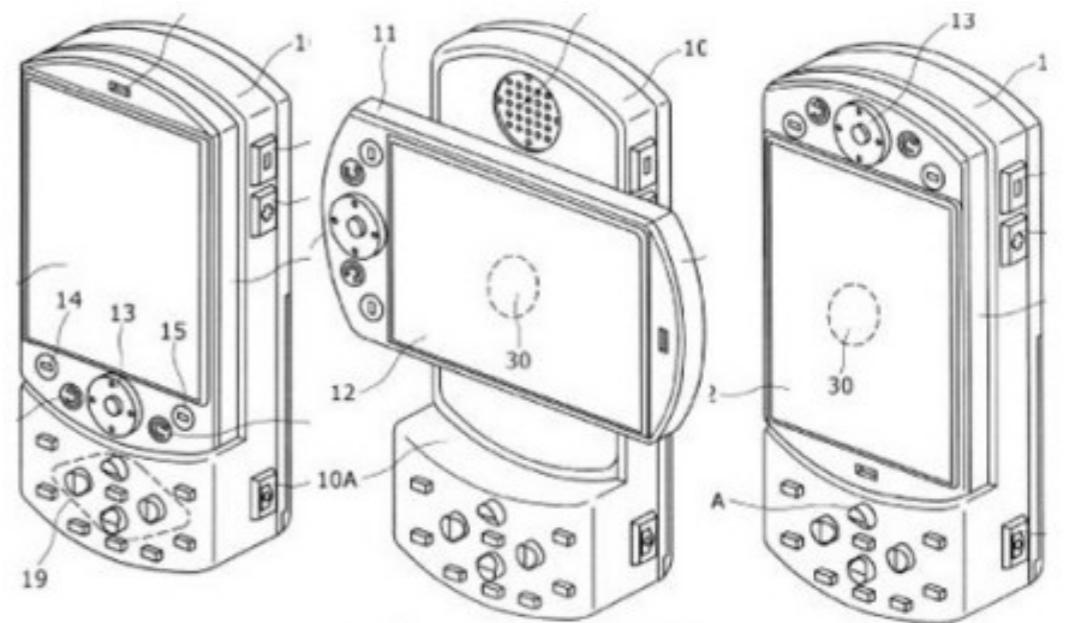


Distinct gesture

- Fluidity of sketches gives them a sense of openness and freedom
- Opposite of engineering drawing, which is tight and precise

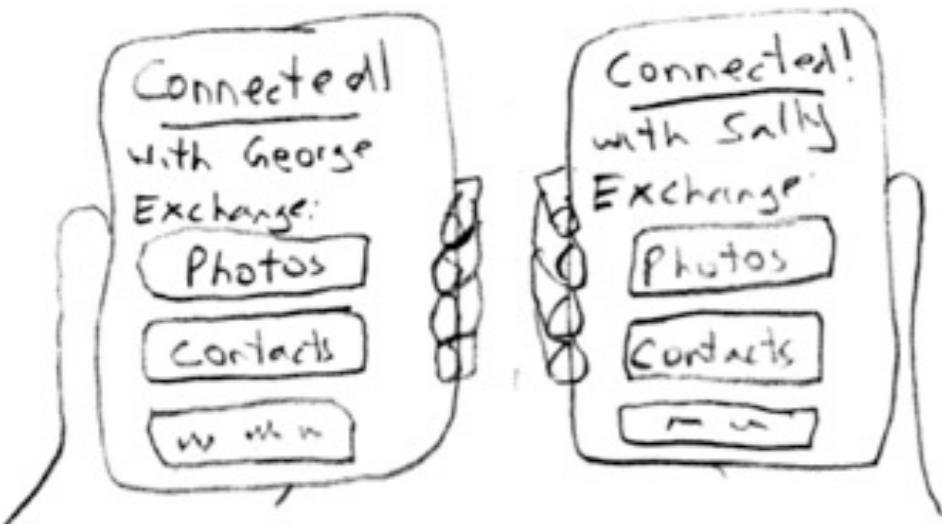


vs.



Minimal detail

- Include only what is required to render the intended purpose or concept



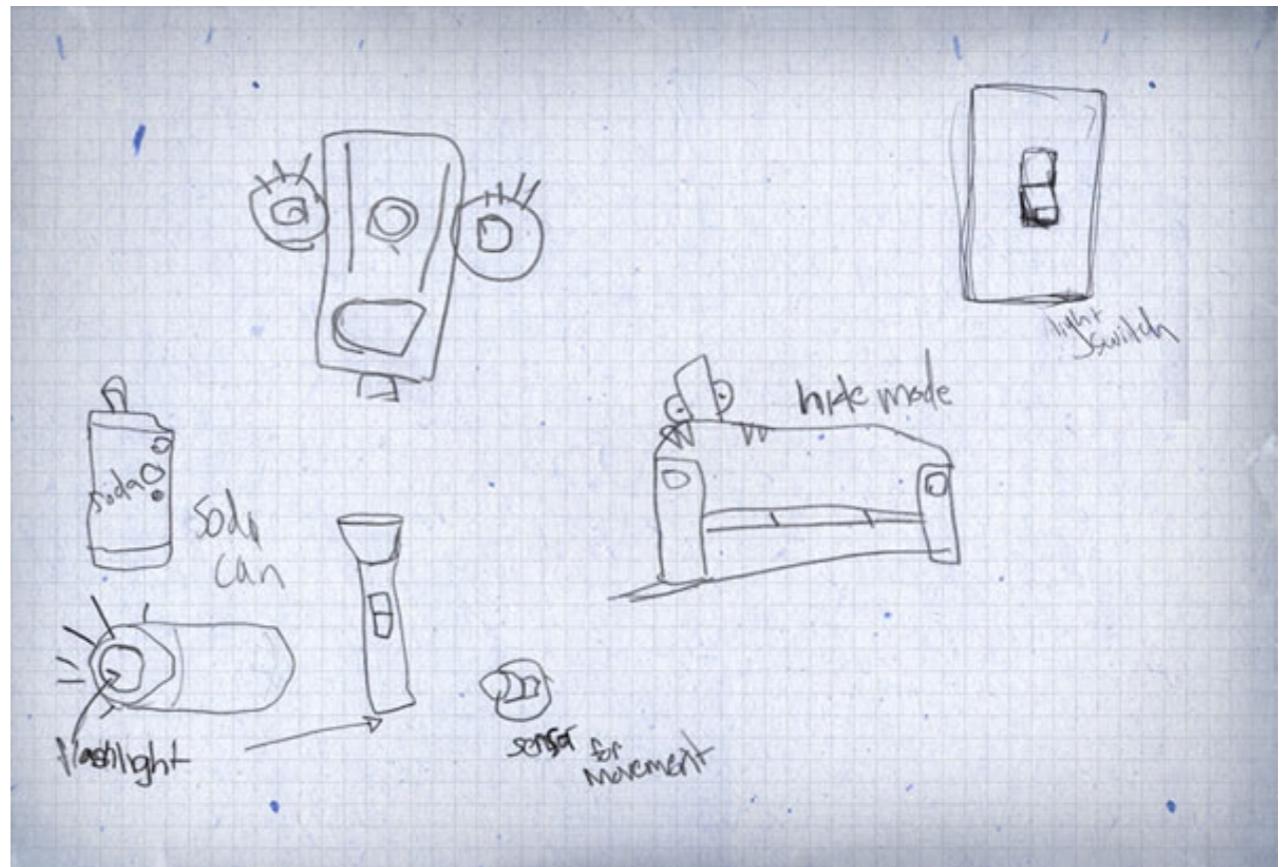
Once connected,
people can
then exchange
various
things on
their phone



Appropriate degree of refinement

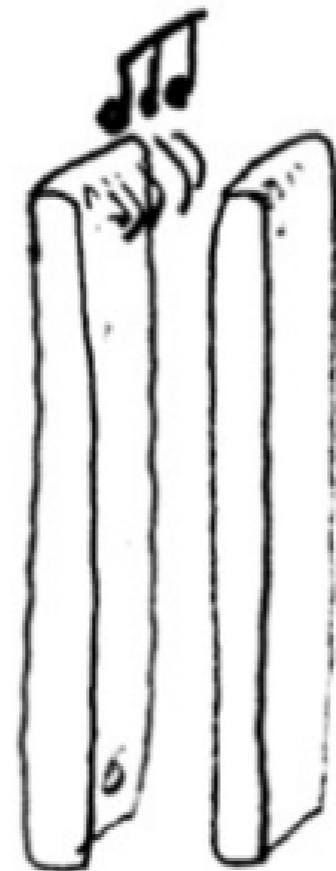
- Make the sketch be as refined as the idea

- If you have a **solid idea**, make the sketch look **more defined**
- If you have a **hazy idea**, the sketch will look much **rougher and less defined**



Suggest and explore vs. confirm

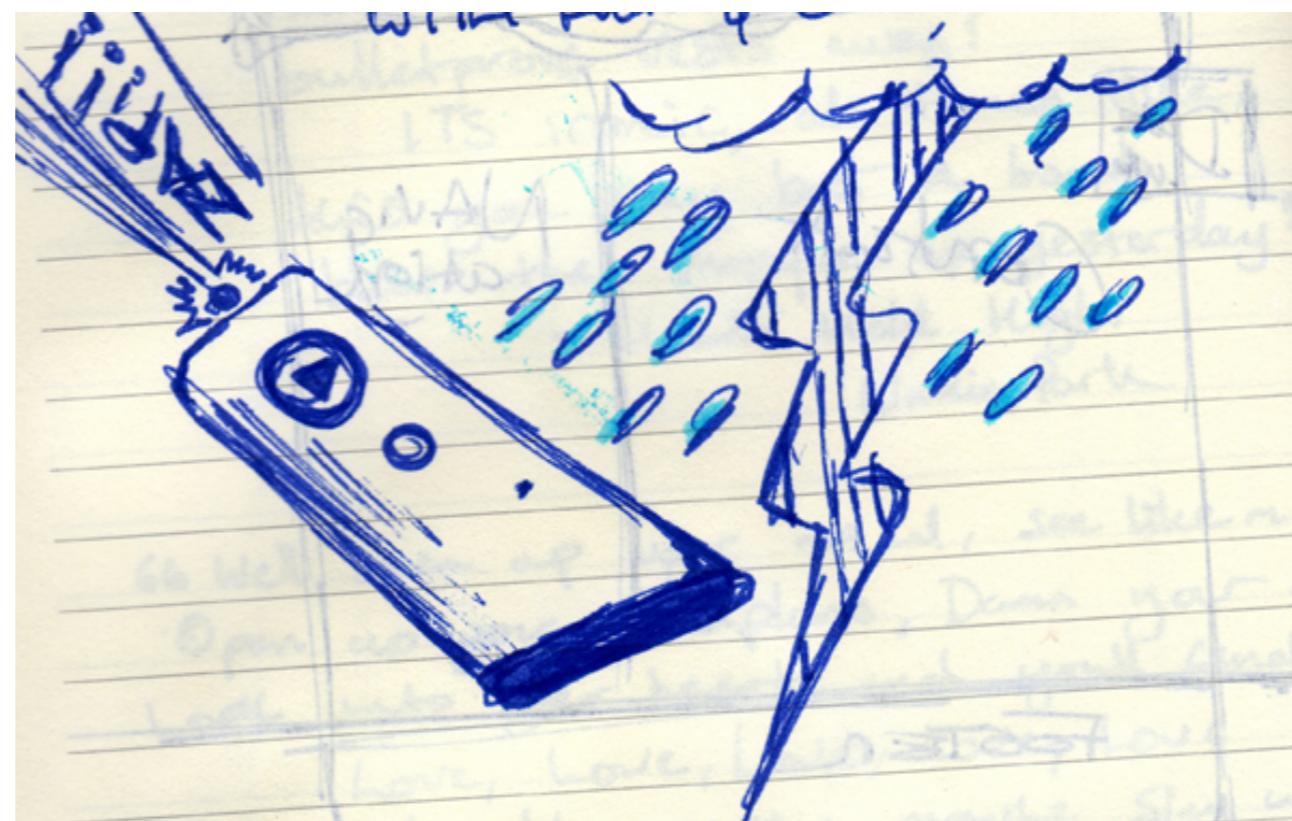
- Sketch should act as a catalyst to the desired and appropriate behaviors, conversations, and interactions



Faint musical
sound played
on one device
picked up by
the other
device

Ambiguity

- Intentionally ambiguous
- Value comes from being able to be interpreted in different ways, even by the person who created them



Forms of Sketching

- Can be pencil/pen drawing on paper
- Something scraped together in Photoshop
- Quick-and-dirty prototyping
- Magazine cut-outs
- Modifications to existing objects

Summary

- Why we need to sketch
 - Getting the design right vs. Getting the right design
- Properties of sketches
 - Quick; Timely; Inexpensive; Disposable; Plentiful; Clear vocabulary; Distinct gesture; Minimal detail; Appropriate degree of refinement; Suggest and explore vs. confirm; Ambiguity

Acknowledgements

- Tony Tang
- Lora Oehlberg
- Ehud Sharlin
- Frank Maurer
- Saul Greenberg

Course information

- Website
 - GitHub Pages <https://silvadasilva.github.io/CPSC481-2019W/en/#!index.md>
- Communications
 - Slack <https://cpsc481-2019w.slack.com/>
- Readings and Slides
 - Posted online at the main website

Question example

Question example

Select the best option: In class, we discussed several reasons why you should use sketching. In relation to this, select the best option:

- (i) Sketching allows you to take risks and explore variations
- (ii) Sketching is an active form of brainstorming
- (iii) You should only sketch once you have a clear idea what to sketch
- (iv) You should only allow your sketches to be influenced by outside sources
- (v) (i) and (ii)
- (vi) (ii) and (iv)
- (vii) (iii) and (iv)

Exercise

- 1 paragraph describing the problem you would like to solve
- One sketch per participant