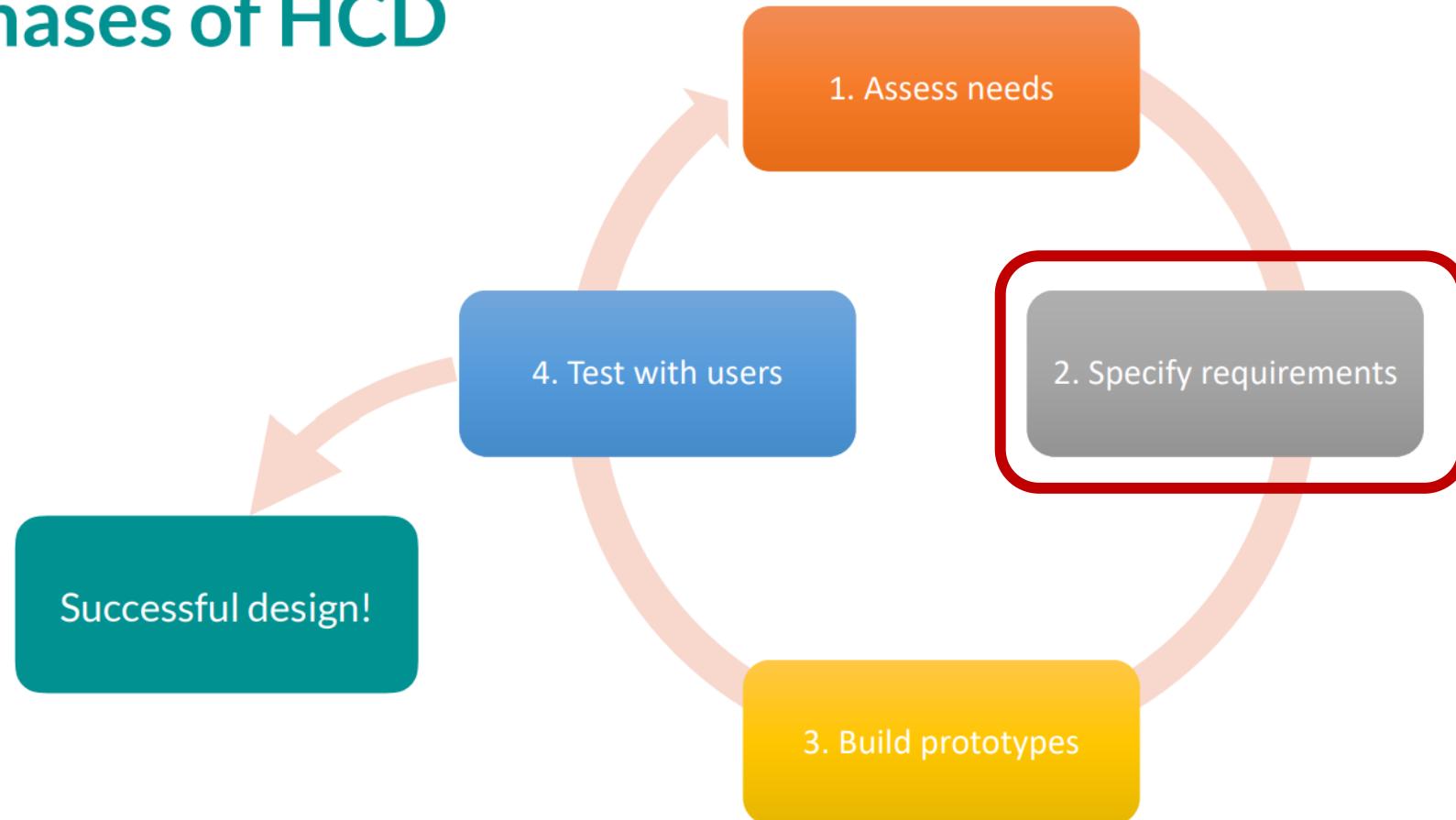


CSE 4451: HUMAN-COMPUTER INTERACTION

Class 11: Sketching and Critique

Phases of HCD

Phases of HCD

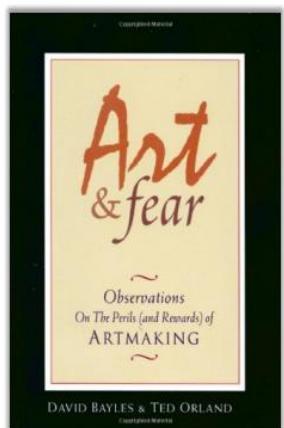


Sketching

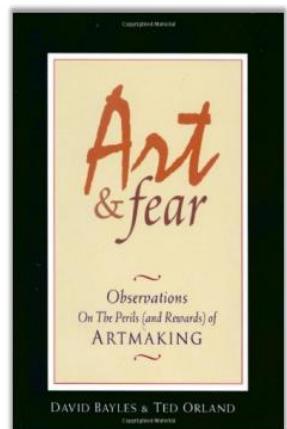
- Sketching is a **very efficient way of communicating design** while allowing designers to **try out a multitude of ideas and iterate** on them before settling on one
- The main purpose of sketches is to help **you think more clearly, find better solutions, and save time.**

Quality vs Quantity

- Two pottery classes
- One is told that they would be graded on quality and others on quantity



Quality vs Quantity



- Who would produce better pots?

Quality vs Quantity

- “While the quantity group was busy **churning out piles of work—and learning from their mistakes**—the quality group had sat **theorizing about perfection, and in the end had little more to show** for their efforts than grandiose theories and a pile of dead clay.”

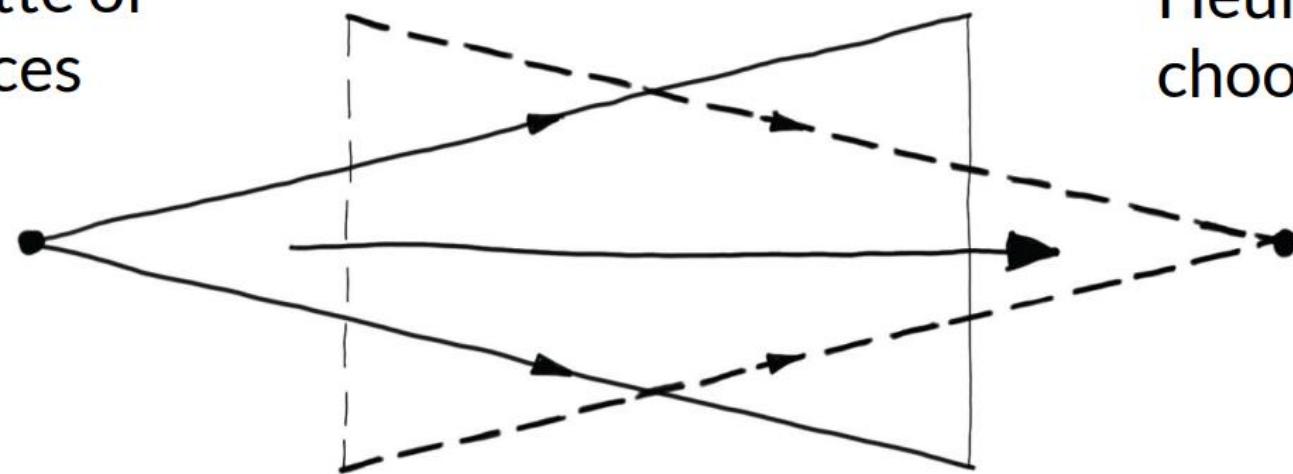
Design as a choice

Elaboration

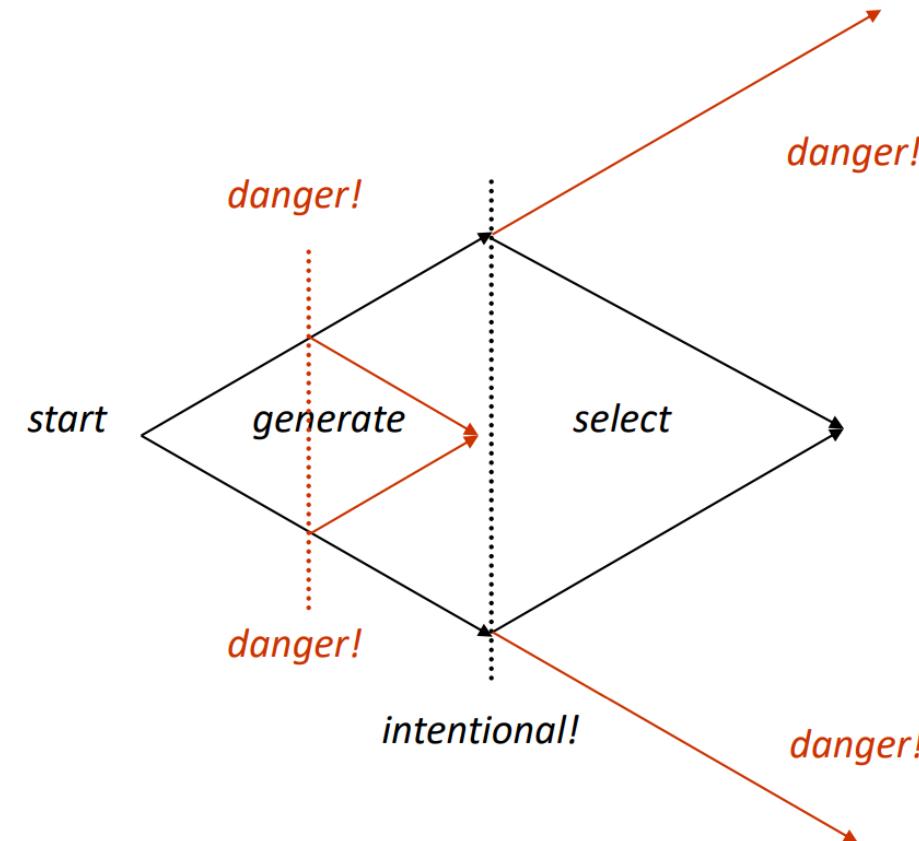
Palette of choices

Reduction

Heuristics to choose



THE DESIGN DIAMOND

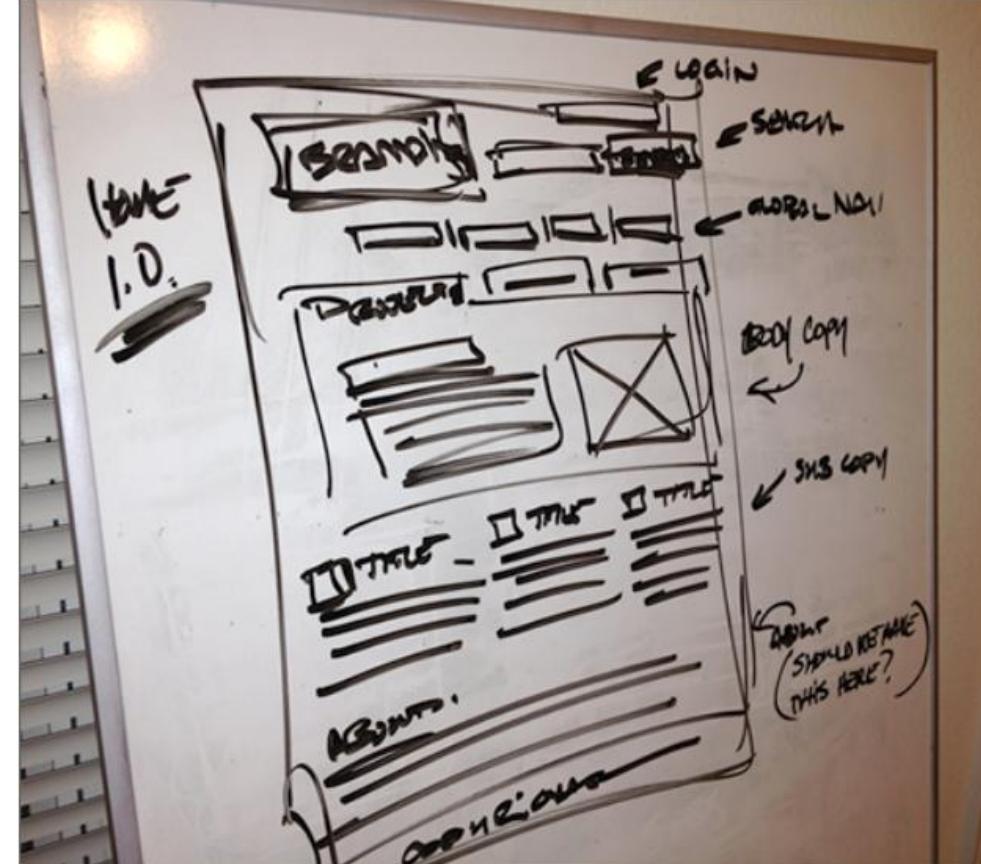


Sketches are

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

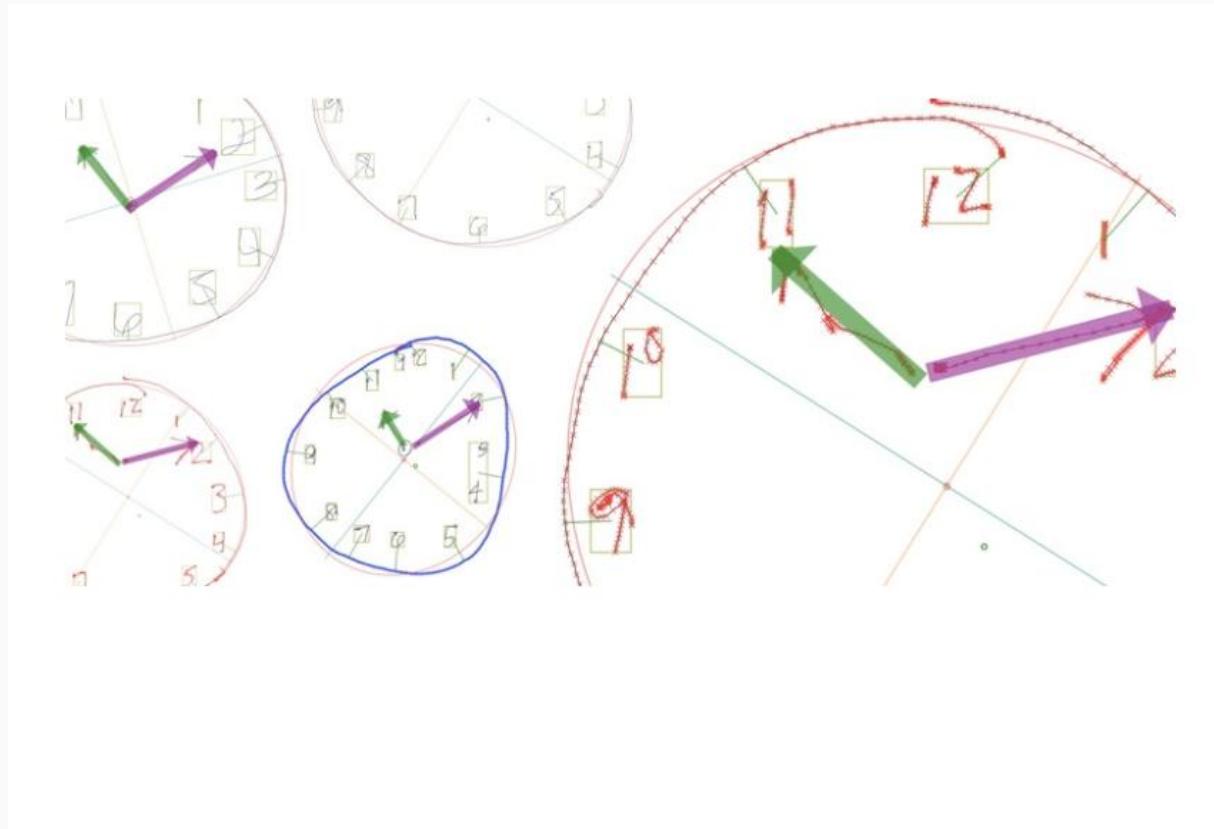
Sketches are

- Quick: A sketch is quick to make, or gives that impression



Sketches are

- Timely: A sketch can be improved when needed



Sketches are

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



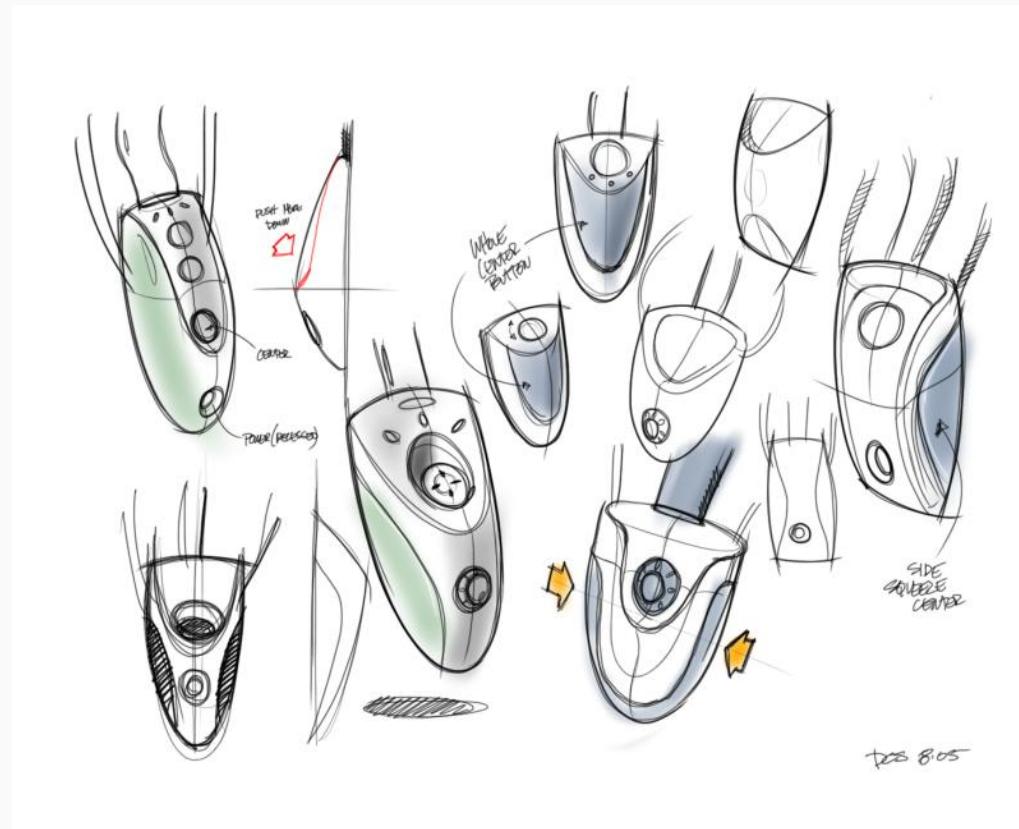
Sketches are



- Disposable:
 - If you cannot afford to throw it away (time, physical materials), it is not a sketch
 - Investment is in the process, not the physical sketch
 - But they are not worthless

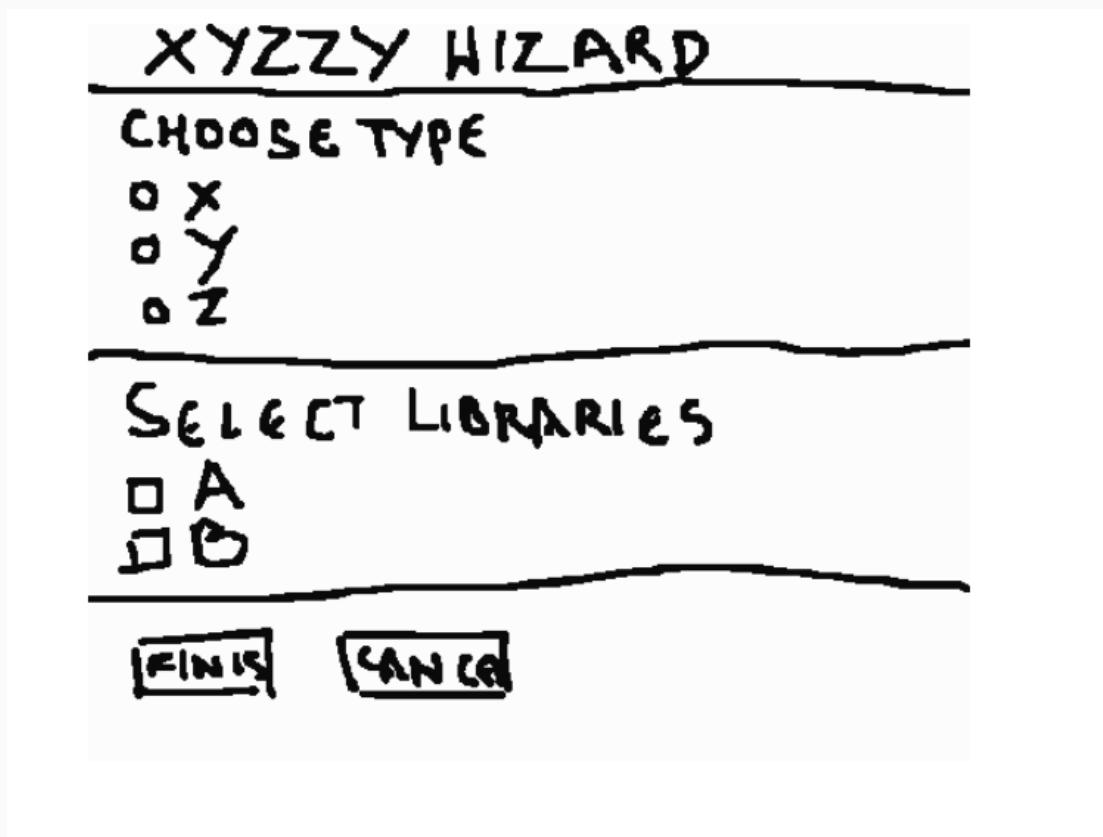
Sketches are

- Plentiful: Sketches do not exist in isolation. Meaning and relevance are in the context of a collection or series

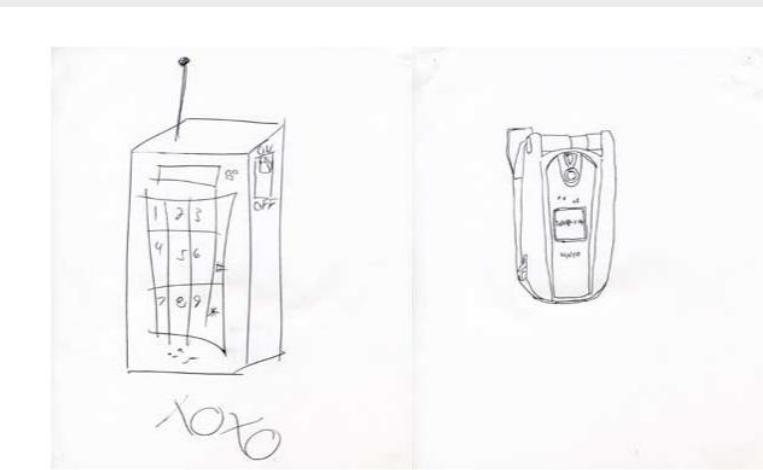


Sketches are

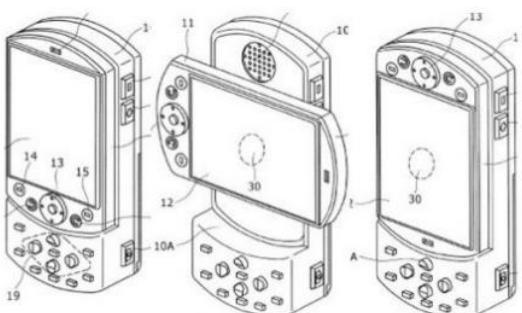
- Clear vocabulary: The way it is rendered makes it distinctive that it is a sketch (style, form, signals)



Sketches are



vs.



- Distinct gesture:
 - Fluidity of gestures give them a sense of openness and freedom
 - Opposite of engineering, which is tight and precise

Sketches are



Create JSP for this page

Name:

Number:

Category: Clothing

Price Range: 0.00 to 9,999.99

- Minimal detail: Include only what is required to render the intended purpose of the concept

Sketches are

- Appropriate degree of refinement:
 - Make the sketch as refined as the idea
 - If you have a solid idea, make the sketch more defined
 - If you have a hazy idea, make the sketch look rougher or less defined

Sketches are



- Suggest and explore rather than confirm:
Sketch should act as a catalyst to the desired and appropriate behaviors, conversations, and interactions

Sketches are

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

Sketch vs Prototype

Sketch

Invite

Suggest

Explore

Question

Propose

Provoke

Tentative, non-committal

Prototype

Attend

Describe

Refine

Answer

Test

Resolve

Specific description

Sketch vs Paper Prototype

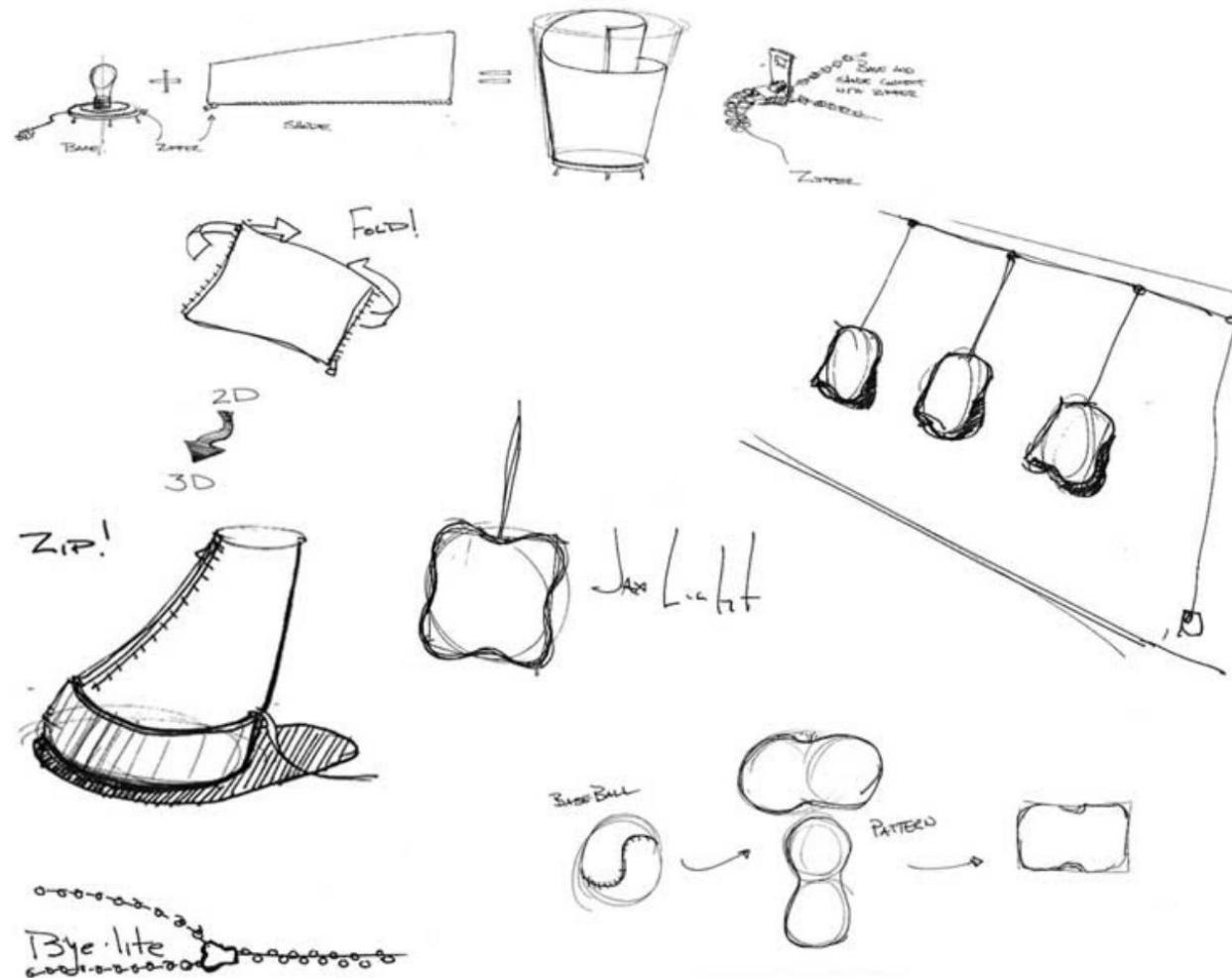
Sketch to explore design ideas, paper prototype to refine them

Both early-stage designs; both still somewhat non-committal

Sketches are

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

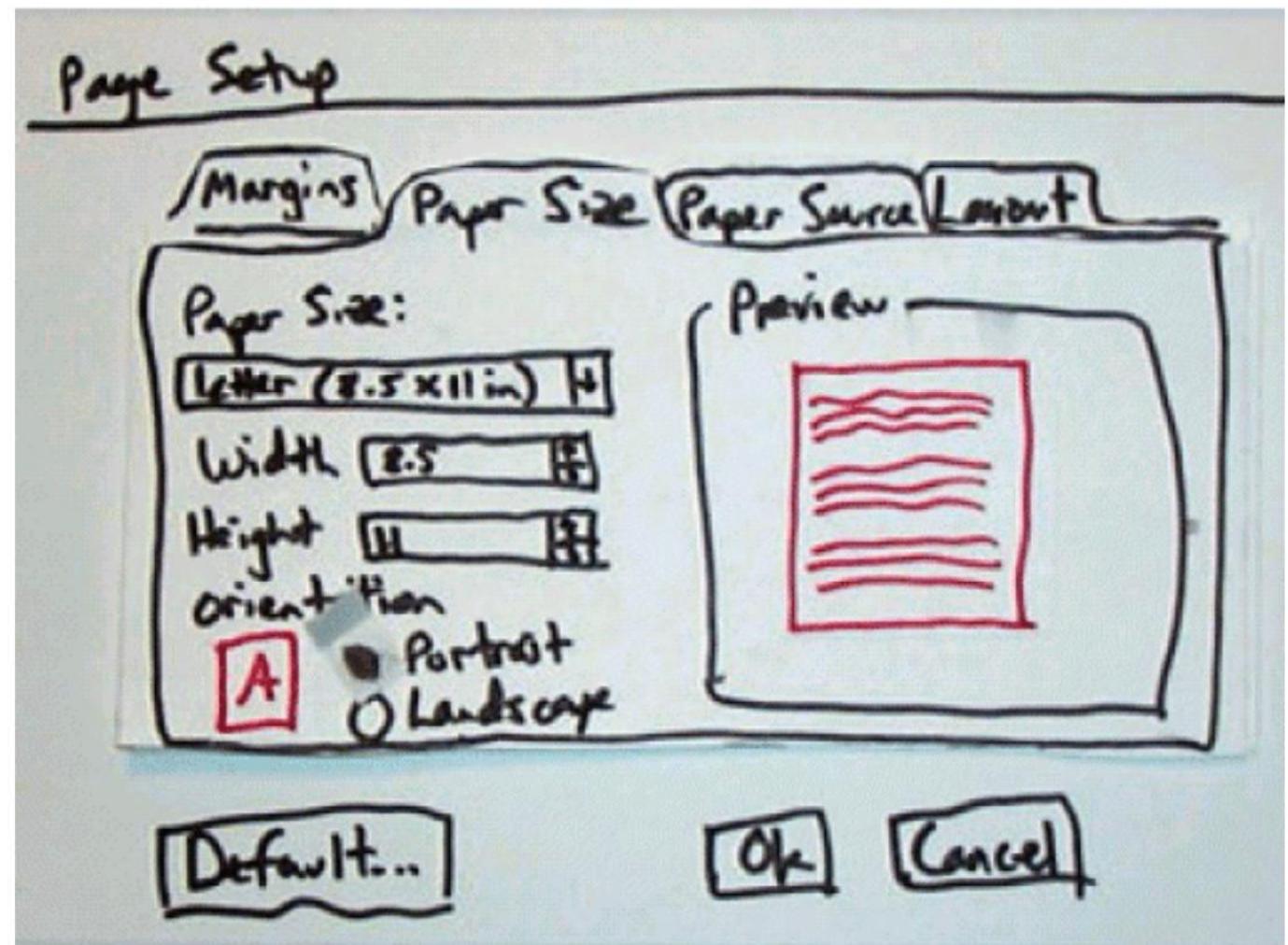
Sketch or not?



Sketches are

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

Sketch or not?



Sketches are

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

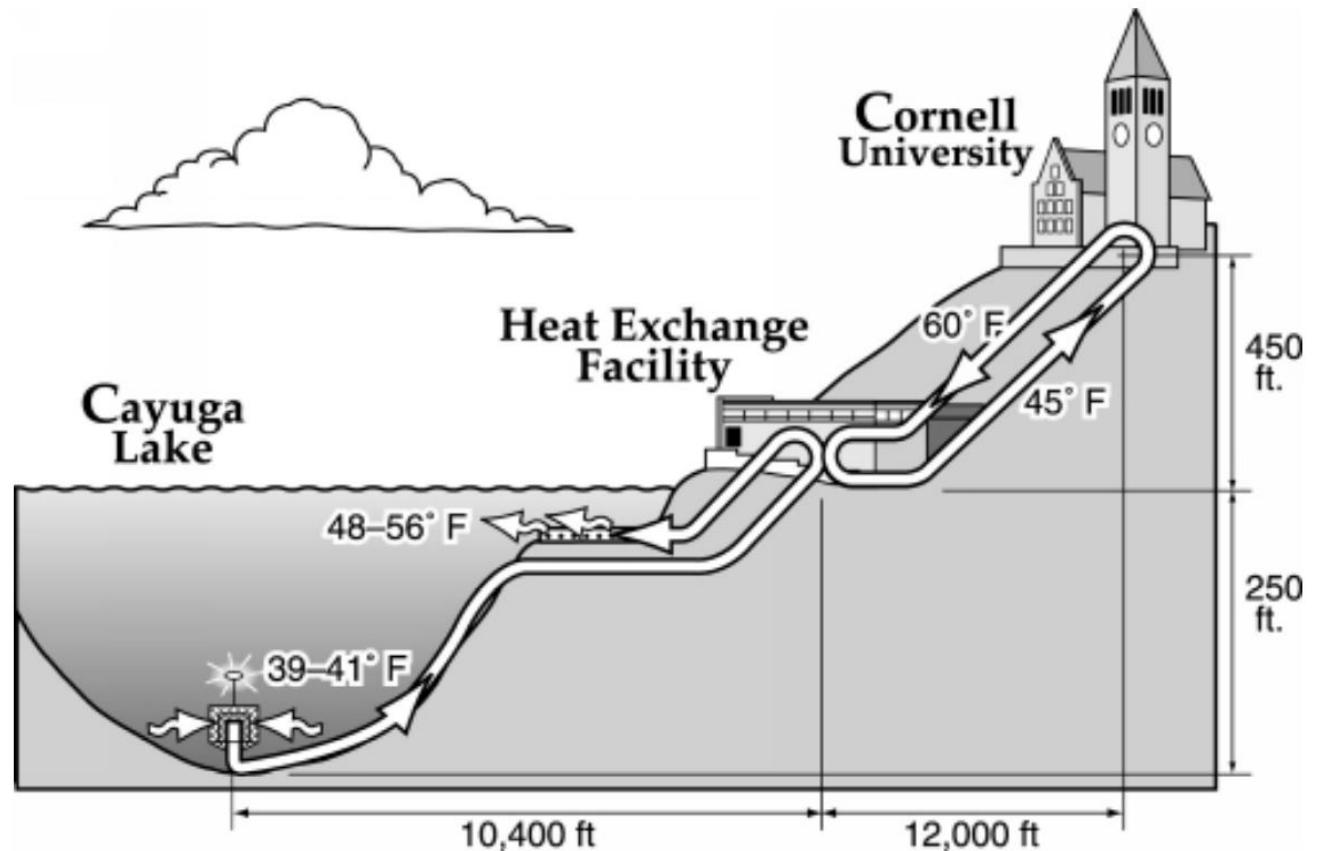
Sketch or not?



Sketches are

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

Sketch or not?



Sketches are

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

Sketch or not?



Sketches are

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

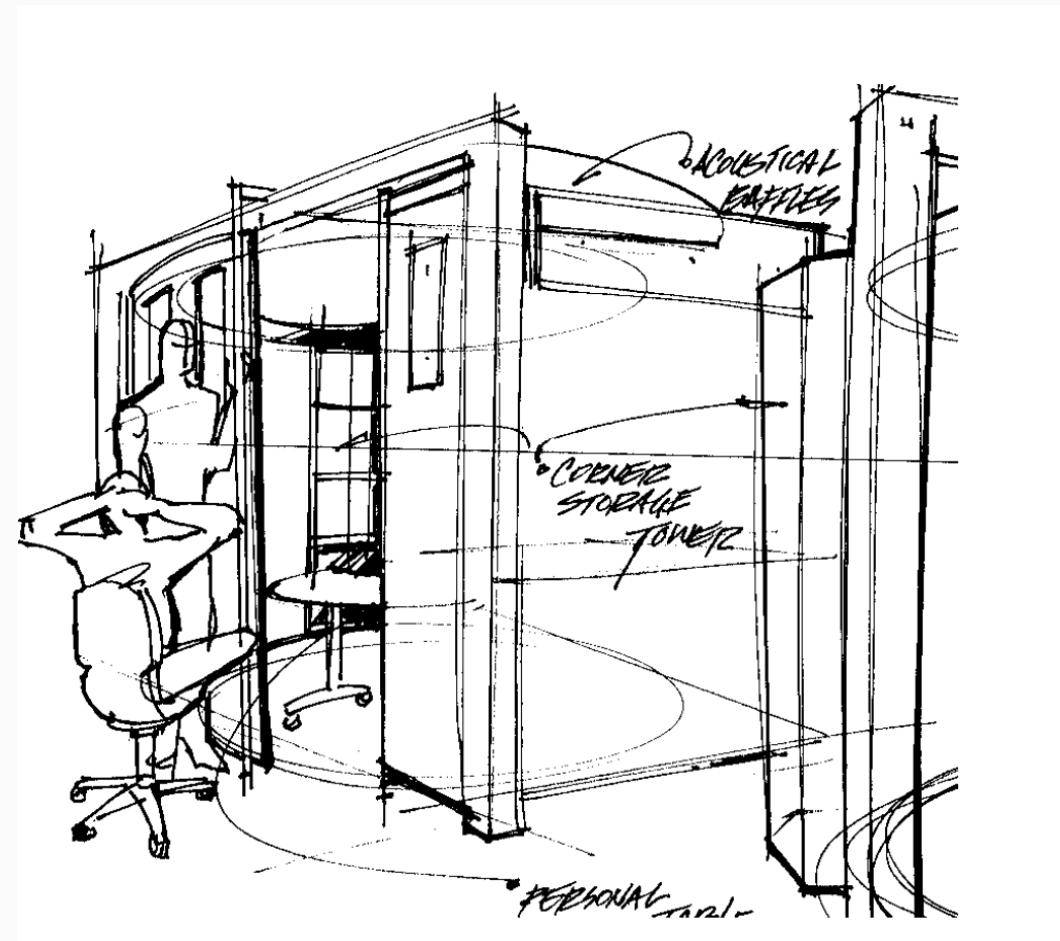
Sketch or not?



Sketches are

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

Sketch or not?



Sketches are

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

Sketch or not?



Critique

- Critique helps evaluate early, often and cheaply
 - Applicable to artifacts of many types
- You are not your own worst critic
 - We collectively know more than any one of us
 - It's hard to see past your own decisions
 - Design requires getting past our own infatuation

Critiquing sketch is most important

- Ideas are both good and bad
 - Both are useful in design
 - By making clear what it a bad design, we can avoid actually implementing it
 - Bad ideas help you justify good ideas
- Feedback can turn a good idea into a great idea
- Sketching generates too many ideas to implement

Critique process

- Presenters sit down with critics
- Quickly explain their artifact (e.g., less than 2 minutes)
- Critics give feedback, ask questions
- Presenters respond, take notes on what is discussed

Critique is neither criticism nor design

- Not just a list of complaints
- Critics offer honest feedback
- Both positive and negative
 - Presenters should be able to learn what works well and what is problematic about their artifact
- It is then the presenter's responsibility to sort through feedback, decide what is important, how to act
 - You must take notes for later review

Tips for the presenter

- Critique can be hard, especially at first
- Try to avoid being defensive
- You are not your work, separate yourself
- Remember the expertise you bring
 - Even if “the room” knows more about design, you know more about your problem/artifact and your rationale for the current design

Tips for the presenter

- Taking advice is not giving authorship
 - You still make the final decisions
 - A half-baked suggestion does not contain all of the details of a finished solution
- Design your critique
 - What you show invites different forms of feedback
 - Verbally indicate what kind of feedback you want, but also provide an artifact of an appropriate form

Tips for the critics

3 approaches

- Hamburger method
- I like, I wish, what if
- Stocratic method

Tips for the critics: Hamburger method

- Bun
 - Something fluffy and nice
- Meat
 - How to improve
- Bun
 - Something fluffy and nice

Tips for the critics: I like, I wish, what if

- I Like
 - Lead with something nice
- I Wish
 - Often leading from what you like
- What If
 - An idea to spark further conversation, better than: “I think you should have…” or “Why don’t you…”
 - Gives the presenter the benefit of the doubt if they did already think of your idea, can present rationale

Tips for the critics: Socratic method (asking and answering)

- Identify an aspect of the design and ask, “Why?”
 - Can be good if unsure what else to say
 - Forces the presenter to give, or develop, explanations for design decisions, which can help build up the design rationale
 - Not fundamentally negative, hard to get defensive