

ENG 004 Lecture 2, Oct 2, 2012

Announcements

- Studios start Thursday
- Bring Sketchbooks to studio!
- Lecture HW #1 due October 9
- Some wait listed students will be added
- Note taker needed

Topics

Design Models: Concurrent, ETC, ARC, Ram's Principles, Design Thinking

Visual Culture/Thinking: Seeing, Imagining, Drawing/Sketching, Diagramming, Environment, Culture

Graphics in Design: Visualization, Communication, Documentation

Design Process

Design is **not** a linear process.

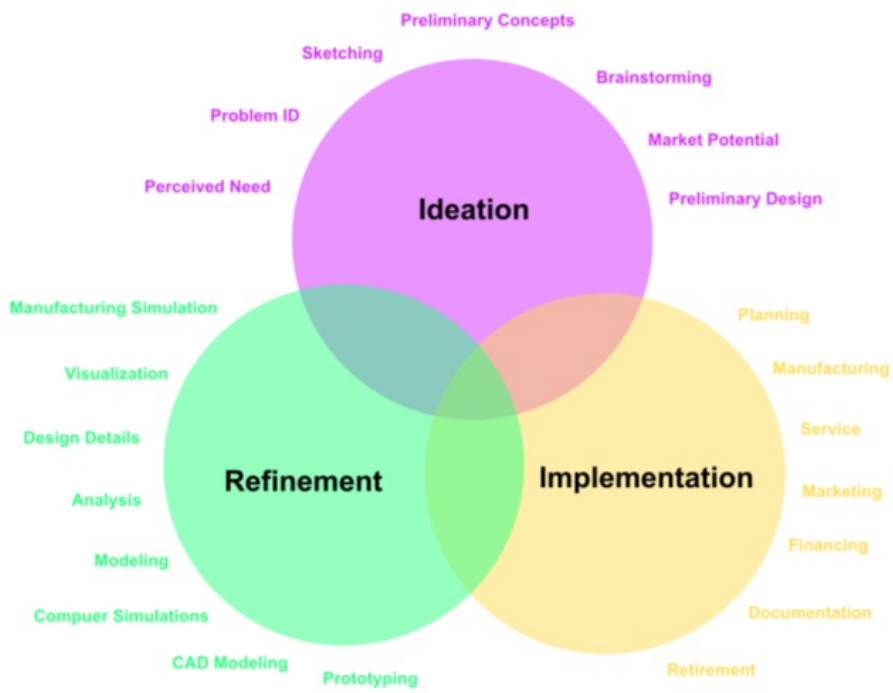
It can and usually involves many iterations

Past models of design had a linear sequence of steps with "feedback" to previous steps to modify the design based on some constraints or specifications.

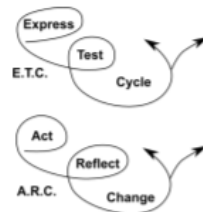
All designs start from:

- Perceived need
- Idea
- Problem

Concurrent Design Processes



Concurrent Design Processes



Express/Act Phase

- Idea or problem expressed and visualized
- Creative proposals to satisfy the need of solve the problem

Test/Reflect Phase

- Discussion with others
- Analysis/Testing to satisfy specs
- Initially feedback is pronounced
- Goal is to improve design
- Identify strengths and weaknesses
- Incorporate ideas from others

Cycle/Change Phase

- Revisit the previous phases if the solutions or strategies fail.

Design Thinking

Combines:

- **empathy** for context of problem
- **creativity** in generation of insights and solutions
- **rationality** to analyze and fit solution to the context

Solution Based Thinking

- Creative method to gain improved future results of problem or issues
- Different than the scientific method
- Scientific method: question, hypothesis, prediction, test, analyze
- Scientific method starts at the problem (defines the problems parameters)
- Solution based method starts at the solution
- Designs should look holistically for solutions that fit the problem.

Thinking

Divergent thinking: ability to offer different and unique ideas based around on a theme.

Convergent thinking: ability to find "correct" solutions to the given problem

Dieter Rams's 10 Principles of Good Design

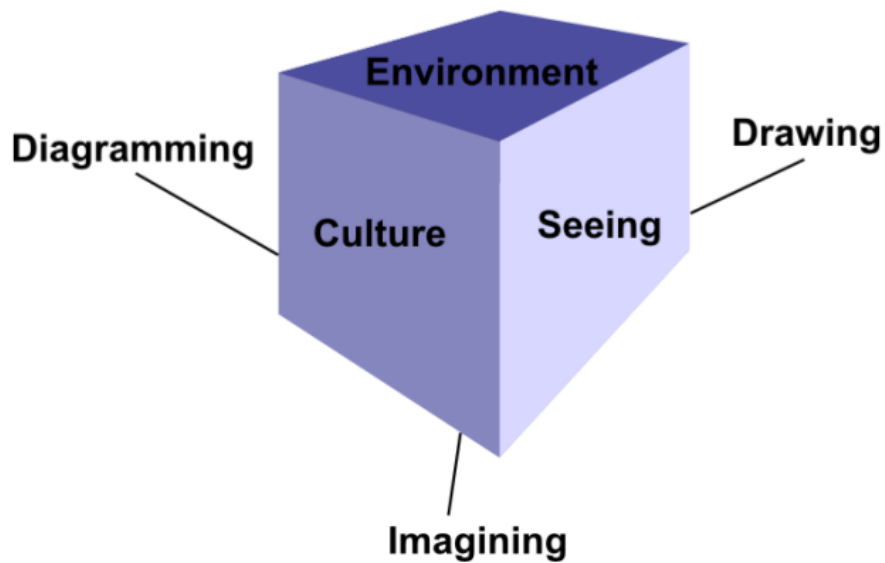
www.vitsoe.com/us/about/good-design

Good design...

- is innovative
- makes a product useful
- is aesthetic
- makes a design product understandable
- is unobtrusive
- is honest
- is long lasting
- is thorough down to the last detail
- is environmentally friendly
- is as little design as possible

Visual Thinking

- Right Side of the Brain: emotional and creative side
- Organizes thoughts intuitively and simultaneously
- no words, no movement, no numbers, no sound



Seeing



http://en.wikipedia.org/wiki/File:My_Wife_and_My_Mother-In-Law_%28Hill%29.svg

Seeing



http://en.wikipedia.org/wiki/Rubin_vase