

What is design?

Designing a street rubbish bin



- Must be big
 - To take all the rubbish
- Must be small
 - To avoid blocking the pavement
- Must be light
 - So it can be lifted and emptied easily
- Must be heavy
 - So it doesn't blow over in a strong wind
- Must be open on top
 - So easy to put rubbish in
- Must have a lid
 - So rubbish doesn't blow away

Design is

- A tradeoff between often conflicting requirements
- Aesthetic as well as functional
- Time-consuming
- Hard to get right
- Easy to overlook

Definitions

- “*process of creative and critical thinking that allows information and ideas to be organized, decisions to be made, situations to be improved, and knowledge to be gained*”
- Design involves finding solutions that fit the user, task, and context of use.

Design is.....

- A *discipline* that explores the dialogue between products, people, and contexts
- A *process* that defines a solution to help people achieve their goals
- An *artifact* produced as the result of solution definition

Design is.....

- the iterative decision-making process employed in the creation of a product or system
 - or the output of such a process
- it is an object with a sensory or emotional appeal beyond its usefulness

Design as.....

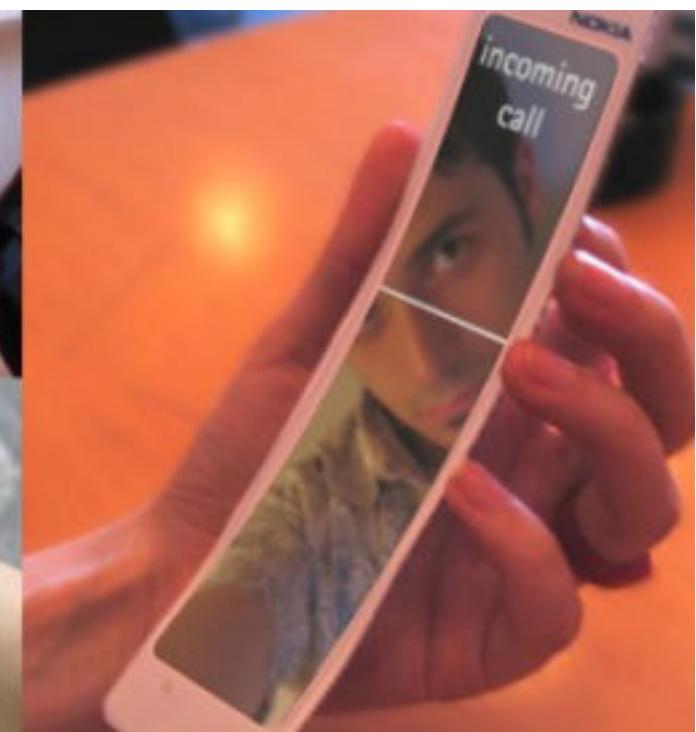
- Styling
 - The impoverished notion
 - But if so easy, why is so much poorly styled?
- Idea
 - The grander concept
 - And do we see it?

Everywhere

- Design is everywhere
- Practically everything you see, touch, pick up, sit on, use, hear and feel has been designed
- Outcome of conscious thought processes and decisions

Good design examples



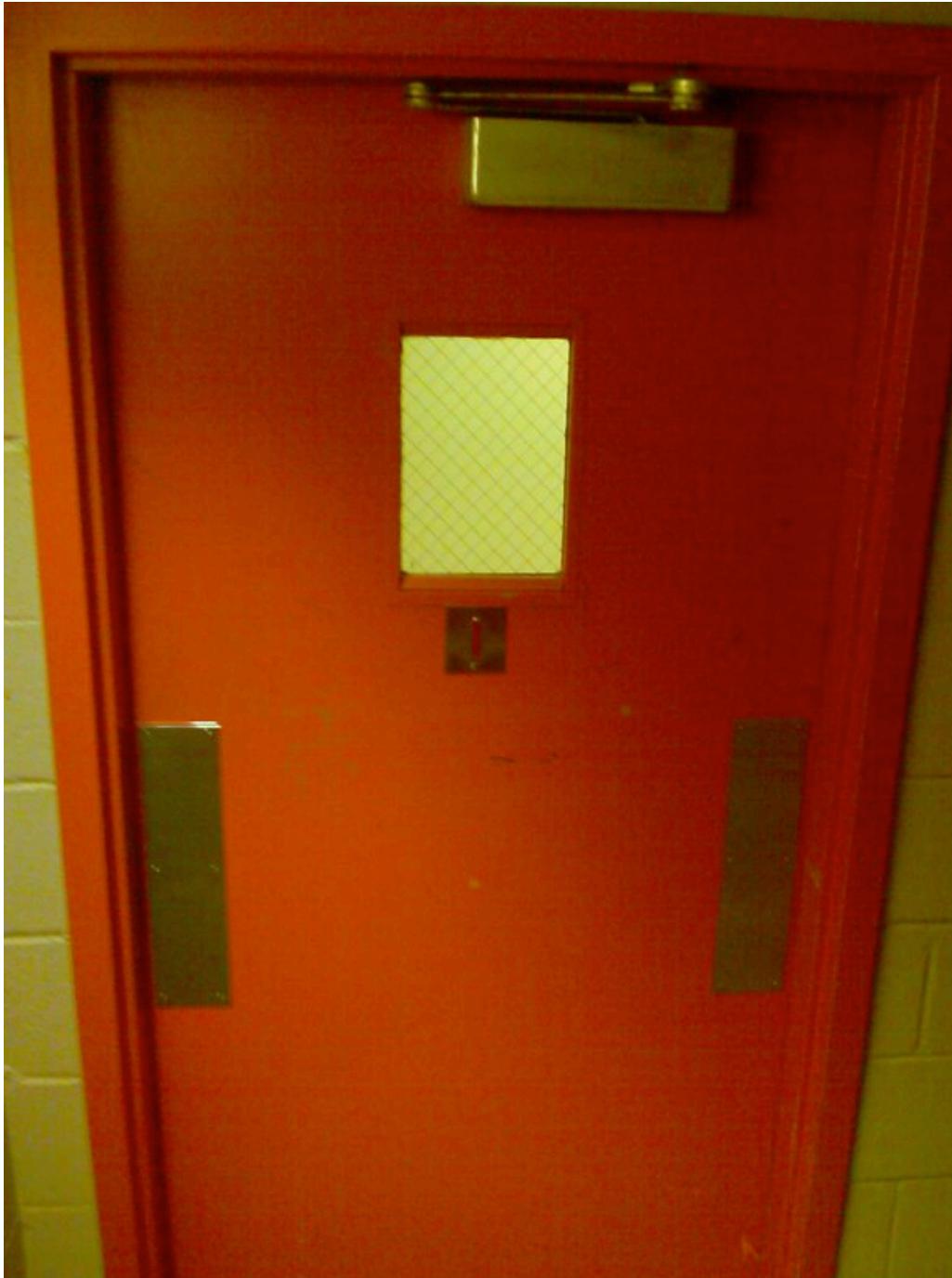




Not all designs are good.....



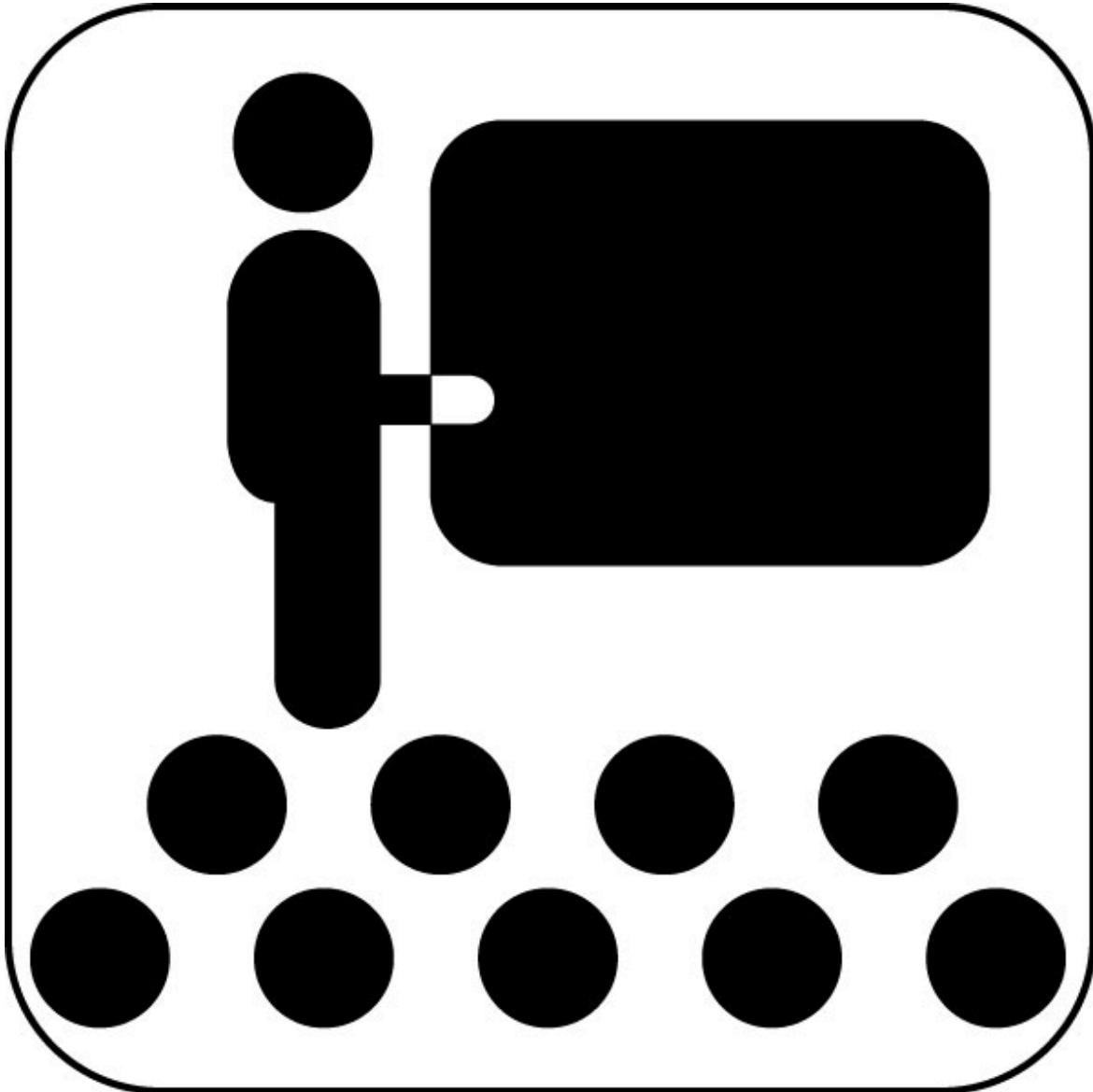








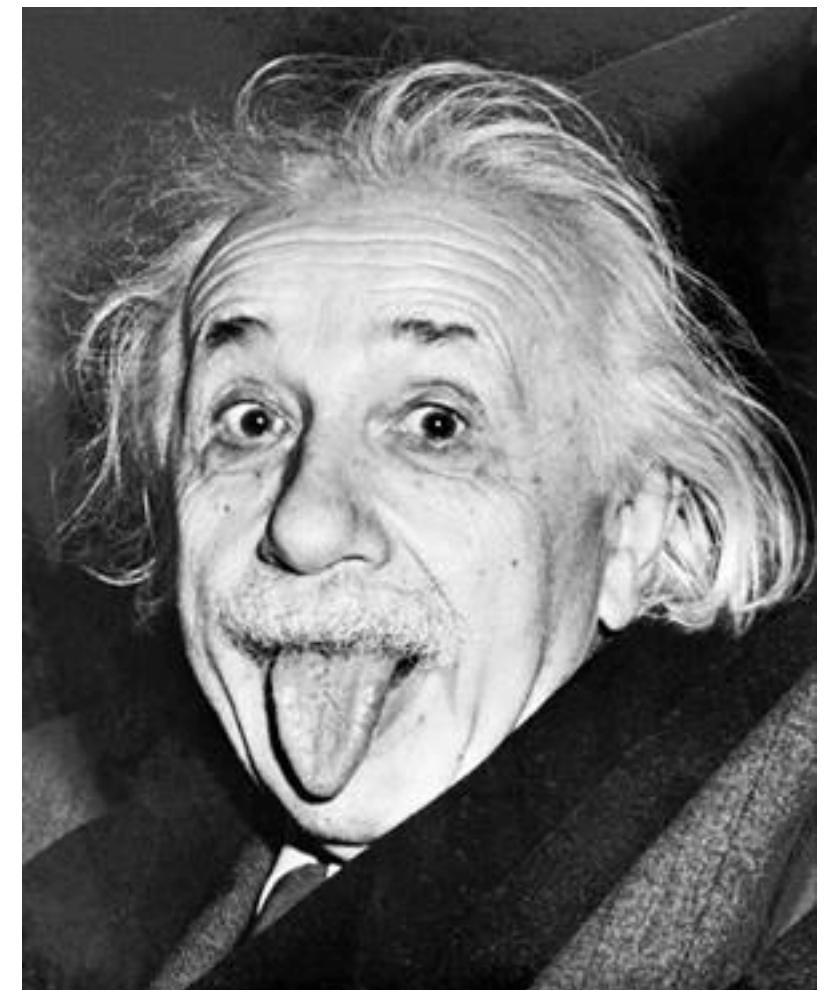






Secrets of design

- "The secret to creativity is knowing how to hide your sources."



Learning from the masters

- Apple's resurgence attributed, in the main, to British designer Jonathan Ive
- Innovative, modern, contemporary, novel product designs
- “simplicity” “honest design”
- But compare to Dieter Rams (1950's, 1960's - Braun)

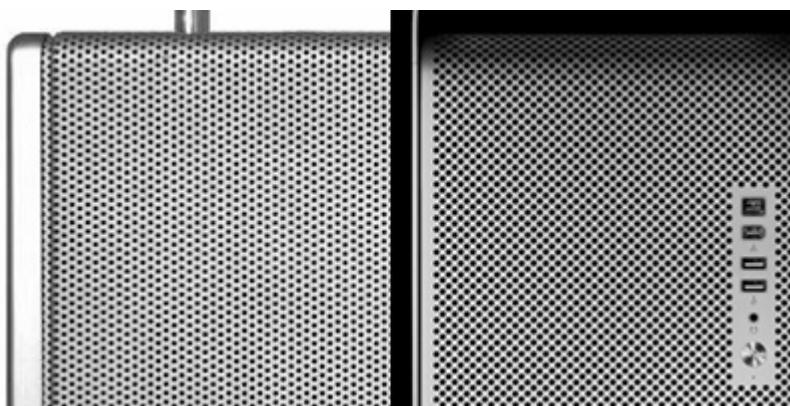
Compare Ives to Deiter Rams



- Braun Atelier TV
and iMac 24



- Braun T1000 radio
and PowerMac G5



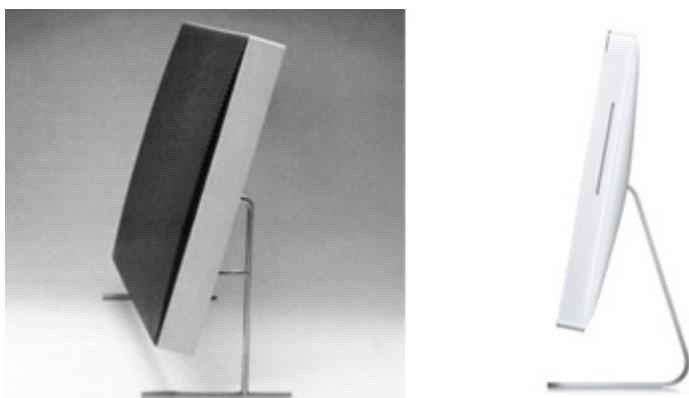
- Braun/Apple detailing



- Braun T3 pocket radio and Apple iPod



- Braun L60 sound system, Apple iPod HiFi



- Braun LE1 Speaker and Apple iMac

10 design principles

- Good design is innovative
- Good design makes a product useful
- Good design is aesthetic
- Good design helps us to understand a product
- Good design is unobtrusive
- Good design is honest
- Good design is durable
- Good design is consequent to the last detail
- Good design is concerned with the environment
- Good design is as little design as possible

(Deiter Rams)

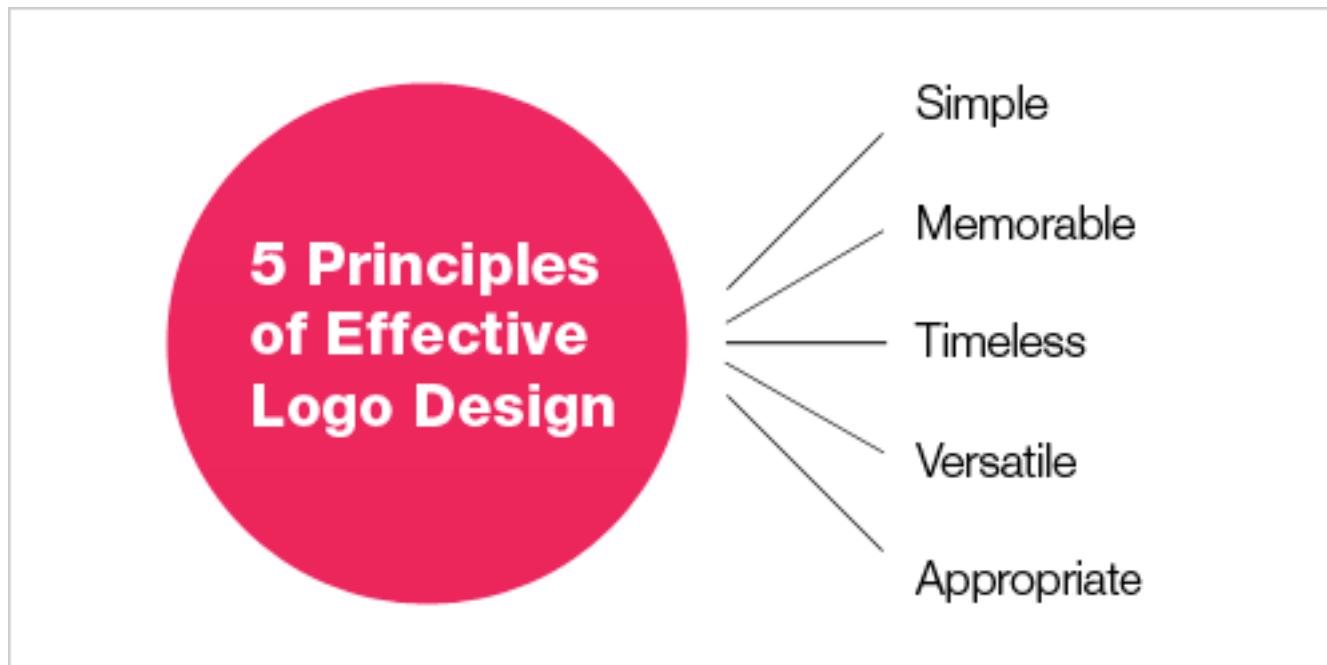
Design case study: Logo design

Why logos?

More on creativity, less on user
needs and experience

But can still learn a lot

Logo design



Simple

- KISS
- Easy to recognise, memorable



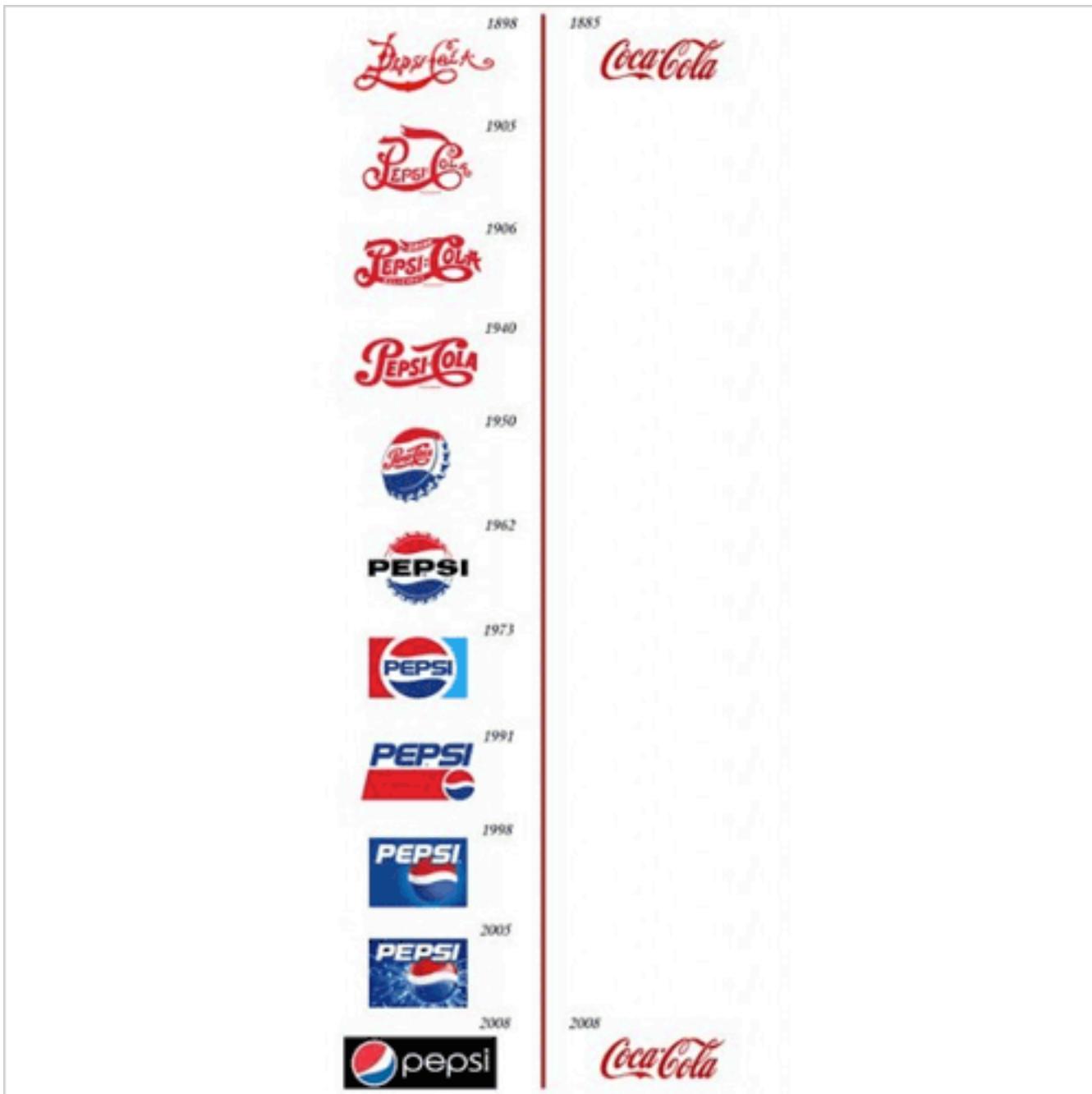
Memorable

- Simple and appropriate
 - But subject of logo not that critical



Timeless





Versatile

- Works in black and white as well as colour?
- Works on postage stamp, billboard?
- Works online, on paper?



Appropriate

- Addresses audience
 - Does not have to show what business does

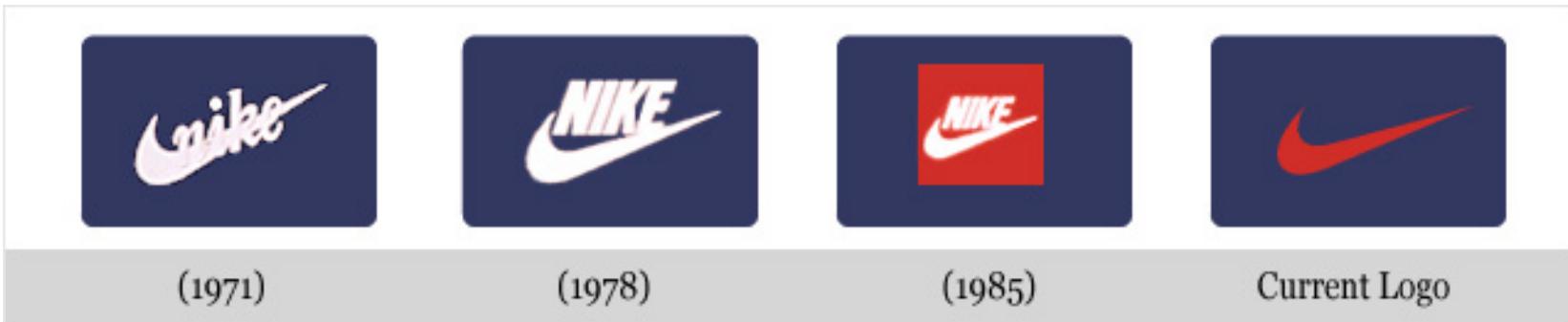




Learning from 50 top brands

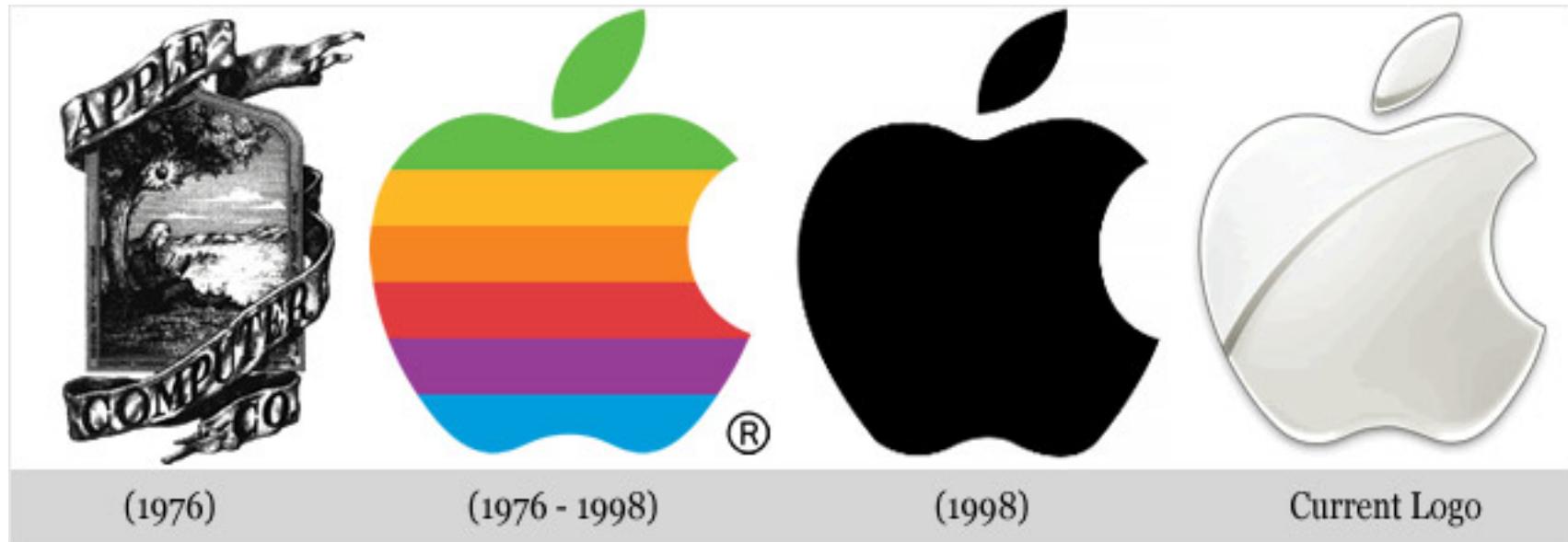
- The name does not describe the product sold (94%) (ie. in most cases a logo is used to identify a company, not describe what it does.)
- The by-line tag is not included in the logo (90%)
- The font style is clean and clear (84%)
- The logo design uses one colour only (74%)

Nike



- Decent logo design is not cheap
- There are always exceptions! Nike's was \$35 in 1971

Apple



- Complex original, simplified to capture main feature of Apple at the time - colour graphics
- Does the bitten apple pay homage to Alan Turing who committed suicide by eating apple laced with cyanide? Rainbow colours reflect rainbow flag as homage to Turing's homosexuality.
- Or Byte?

Case Studies

- Just Creative Design logo

<http://justcreativedesign.com/2008/04/24/logo-design-process-of-just-creative-design/>

- Fitucci

<http://justcreativedesign.com/2008/11/27/logo-design-process-fitucci/>



- More logo evolution

<http://www.instantshift.com/2009/01/29/20-corporate-brand-logo-evolution/>



- *“Dreadful. There’s NO life in this logo whatsoever, as evident by the keeled over M. I’m assuming they tried to play with the relationship between the 2 words (quite literally, Animals “taking over” the planet), but it fails*
- *“Oh my God! Where is the reflection towards animals or wildlife. Just green text. Horrible. The old one was old, but this is ridiculous.”*



- *“Ironic that a logo for a product that can help produce works of art (with technical flair) is so poorly executed.”*
- *“In my opinion it’s outdated, a mess and doesn’t project anything specific. Awful colors. Whoever accepted that logo, made a big mistake.”*

Hidden messages

- Many logos are clever on more than one level



amazon.com.



MARRIAGE

G A L E R I E S
Lafayette



yoga australia

Principles, guidelines and standards

help for designing

design rules

Designing for maximum usability
– the goal of interaction design

- Principles of usability
 - general understanding
- Standards and guidelines
 - direction for design

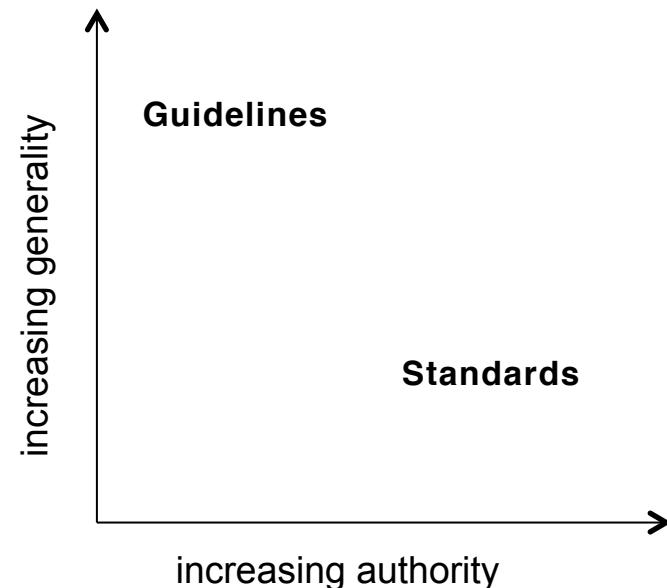
Usability

- Easy
- Efficient
- Entertaining

One of the aims of good design

types of design rules

- principles
 - abstract design rules
 - low authority
 - high generality
- standards
 - specific design rules
 - high authority
 - limited application
- guidelines
 - lower authority
 - more general application



Standards

- set by national or international bodies to ensure compliance by a large community of designers standards require sound underlying theory and slowly changing technology
- hardware standards more common than software high authority and low level of detail
- ISO 9241 defines usability as effectiveness, efficiency and satisfaction with which users accomplish tasks

Guidelines

- more suggestive and general
- many textbooks and reports full of guidelines
- abstract guidelines (principles) applicable during early life cycle activities
- detailed guidelines (style guides) applicable during later life cycle activities
- understanding justification for guidelines aids in resolving conflicts

Golden rules and heuristics

- “Broad brush” design rules
- Useful check list for good design
- Better design using these than using nothing!
- Different collections e.g.
 - Nielsen’s 10 Heuristics
 - Shneiderman’s 8 Golden Rules
 - Norman’s 7 Principles

Shneiderman's 8 Golden Rules

1. *Strive for consistency*
2. *Enable frequent users to use shortcuts*
3. *Offer informative feedback*
4. *Design dialogs to yield closure*
5. *Offer error prevention and simple error handling*
6. *Permit easy reversal of actions*
7. *Support internal locus of control*
8. *Reduce short-term memory load*

Norman's 7 Principles

1. *Use both knowledge in the world and knowledge in the head.*
2. *Simplify the structure of tasks.*
3. *Make things visible: bridge the gulfs of Execution and Evaluation.*
4. *Get the mappings right.*
5. *Exploit the power of constraints, both natural and artificial.*
6. *Design for error.*
7. *When all else fails, standardize.*