Visual Information Design

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* Based on slides by Luke Vink, Scott Klemmer, and James Landay

Hall of Fame or Shame?

Palm Beach, Florida

Ballot 2000

Eye drawn to the wrong holes.
If only 1% error rate, can still change a close election

One Possible Redesign


Outline

- Good Form
  - visual hierarchy, layout, proximity, small multiples & space
- Team Break
- Good Form (cont.)
  - grids, typography & icons
- Color
- “Interesting Design”
The Art of Balance
Promotion & demotion of important objects
First Question for any design
- What are the most important things?

Information should be prioritized based on its importance to the user

Visual Hierarchy and Reading Order

1. size
2. color
3. layout
4. spacing
5. style

Using Proximity to Indicate Relationships

Gestalt Psychology in information design
Information blocks should be grouped together if related, but unrelated elements should be located at some distance from each other.
Small Multiples

- Economy of line
- Similarities enable us to notice differences

Proximity & Small Multiples in Use

Today Weather
iOS App

Using Blank / White Space as an Object

- White space can be used to suggest importance or prestige
- The more space around a group, the more valuable it should be for the user
- Think of whitespace as an “element” – consider its position
White Space = Value

What Are The Important Things Here?

TEAM BREAK
(FINISH LOW-FI PROTOTYPE OR SLIDES)

Jan Tschichold’s Revolution
Champion of Modernist Typography

Type Classifications

<table>
<thead>
<tr>
<th>Sans Serif</th>
<th>Serif</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optima</td>
<td>vs</td>
</tr>
<tr>
<td>answ</td>
<td>answ</td>
</tr>
<tr>
<td>vs</td>
<td>itc</td>
</tr>
<tr>
<td>answ</td>
<td>answ</td>
</tr>
<tr>
<td>True Italic</td>
<td></td>
</tr>
<tr>
<td>answ</td>
<td>answ</td>
</tr>
</tbody>
</table>
Asymmetric Typography

Grid Systems

- A key pattern for implementing rationality, modernism, asymmetry
- Note that no elements are “centered”

Iconography: Differences that Make a Difference

Color Definitions (digital)

- **Hue** is gradation of color (i.e., name: “yellow”)
- **Saturation** is purity of the hue (vividness)
  - how much gray
- **Luminance** is the brightness in an image
Color: Edward Tufte – by luminance

The Basics of the Color Wheel

WARM

COOL

Color Harmony

“A pleasing arrangement of parts, whether it be music, poetry, color, or an ice cream sundae.”

Using Appropriate Color “Harmonies”

Complimentary

Not so good for text

Hand on the eyes

This color scheme must be managed well so it is not jarring. Bad with Text!!
43. Complimentary (e.g., Children’s Bedroom)

44. Analogous
   - Always easy on the eyes, this type of color scheme always looks “natural”

45. Analogous (e.g., Beyond Oil)

46. Split Complimentary
   - Often a good choice for beginners, because it is difficult to mess up.

47. Split Complimentary

48. Monochromatic
Tools that help with color selection

http://colorschemedesigner.com/
http://color.adobe.com/
http://www.colourlovers.com

Mood Boards – Team Exercise (10 min)

- Start thinking about what images represent your solution space, and what colors & icons you want to use for medium-fi
- Don’t forget to pick primary and secondary colors!
- Copy this slide deck to your team folder (also posted in Slack)
  - https://docs.google.com/presentation/d/16PWyT9yMaJy2LczeNmiZ2ZaH-llQxR73qX8UIivwHenkW4/edit#slide=id.p

Exit Ticket
https://forms.gle/u7Sekvxhr9eHr9gL

Visual Design that is Interesting
[the wow factor]

Non Conventional Layouts

- Hard to get right & easy to overdo!
- Try new shapes
  - circular charts
  - hexagonal objects
- Like all techniques (color, etc) – restrict unconventional layouts to the most important information
Dynamic Movement

- Hard to get right & easy to overdo!
- Animation is best used to connect information & create “flow”
- Like size, color & unusual shapes, animation draws attention to the eye & suggests importance

Metaphors (using the real world to describe info)

- Hard to get right & easy to overdo!
- Very useful to provide meaning and connect information to logic
- As you have seen before, the more direct or specific a metaphor, the more contextually relevant it is to a generation or time

The best designs balance the techniques you have seen and
The less techniques used, the easier it is to balance them
In other words,

Keep it Focused

Summary

- Start with context – what is the nature of the information? What is the most important?
- Design first in grayscale to focus on hierarchy
- Small changes help us see key differences – e.g., small multiples
- Avoid clutter, focus on the essence of your tasks
- Use color properly – not for ordering!
- Only use 1-2 colors at a time, unless absolutely necessary

Further Reading

- Kevin Mullet and Darrell Sano, Designing Visual Interfaces
- Edward Tufte’s books and course
- Robin Williams, The Non-Designer’s Design Book
- Typography
  - Jan Tschichold, The New Typography
  - Robert Bringhurst, The Elements of Typographic Style
  - http://www.adobe.com/type/
- Typography on the web
  - http://www.microsoft.com/typography/

Next Time

- Mon
  - Designing the Future: Early & Future Visions of HCI
  - Read
    - As We May Think by Vannevar Bush
    - Tools For Thought Ch 2 (Engelbart Demo)
  - Listen to: Of Mice and Men (99% Invisible podcast)
- Studio on Friday
  - present low-fi prototype/user study results – key things learned
  - work on sketching out new designs