Design Day

Thurs, Feb 27th  
Kraft Center

Design Industry Keynote  
Professor Harry West,  
Former CEO at frog design  
*Pizza Included*

Breaking into Design Panel  
Columbia designers from companies  
including Google, United Nations, Airbnb,  
IDEO, Tencent, and Nike

Fri, Feb 28th  
Pulitzer Hall, 1st Floor

How to Get a Design Job  
Portfolio & Design Recruiting

Building Practical Design Skills  
Figma 101

Creating Your Design Story  
Branding & Storytelling

Color, Typography, Gestalt

No screens

Prof. Lydia Chilton
COMS 4170
24 February 2020

Say your name
The human brain is always interpreting meaning, even if it’s not there.

Use color, type, and gestalt carefully.
Color
In addition to signaling importance, colors have meaning.
Where is color used? What does it mean?

<table>
<thead>
<tr>
<th>Primary</th>
<th>Social</th>
<th>Promotions</th>
<th>Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin, BPS</td>
<td>Bloglovin'</td>
<td>Fwd: 21st Century Classroom Visit</td>
<td>11:08 am</td>
</tr>
<tr>
<td>Feldmann, Ann</td>
<td>- Not that I know of. Sometimes blocked sites come in on a hug</td>
<td>Fwd: 21st Century Classroom Visit</td>
<td>10:18 am</td>
</tr>
<tr>
<td>me, Lambert</td>
<td></td>
<td>8th Period</td>
<td>8:05 am</td>
</tr>
<tr>
<td>me, Klaas, Klaas</td>
<td></td>
<td>Visitation &amp; Observation Request</td>
<td>8:05 am</td>
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<tr>
<td>me, Cox</td>
<td></td>
<td>- Invitation to edit</td>
<td>8:05 am</td>
</tr>
<tr>
<td>Triple, Todd</td>
<td></td>
<td>3D Printer</td>
<td>8:05 am</td>
</tr>
<tr>
<td>donotreply</td>
<td></td>
<td>Education Preview Build Notice</td>
<td>8:05 am</td>
</tr>
<tr>
<td>Ann Feldmann</td>
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<td>Fwd: [New post]</td>
<td>8:05 am</td>
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<tr>
<td>me, Campbell</td>
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<td>Khan Academy Issues</td>
<td>8:05 am</td>
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<td>Toelle, me</td>
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<td>6 Word Stories</td>
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<td>me, Evon</td>
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<td>Request to Visit</td>
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<tr>
<td>Jeffrey Bernadt</td>
<td></td>
<td>Shared from Twitter</td>
<td>8:05 am</td>
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Where is color used? What does it mean?
What are your associations with these colors?

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And the associations in France?

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## What does blue mean in India?

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*Note: The blue color in India is associated with wealth, power, and beauty.*
What cultural associations do these colors have?
What cultural associations do these colors have?

2016

1992
Are color meanings arbitrary?

Color meanings are not absolute.

But at any time and place, they may mean something you don’t intend.
Color Representation
There are three perceptual dimensions of color: HSV – Hue, Saturation, Value (Brightness)
There are many ways to represent Color

- Hue, Saturation, Value
- Red, Green, Blue
- Cyan, Magenta, Yellow (Black)
- Luminosity, a, b
The web uses represents color in RGB.

If you have have
Red: 0, Green: 0, Blue: 0
What color will you get?

If you have have
Red: 100%
Green: 100%
Blue: 100%
What color will you get?
Ways to specify a color in HTML

```html
.green_text{
    color: green;
}

.green_text{
    color: rgb(0,0, 255);
}

.green_text{
    color: #0000FF;
}

.green_text{
    color: rgba(0,0, 255, 0.5);
}
```
Choosing color combinations

Color Schemes

- **Complementary colors**
  - Hues opposite the color wheel
  - Complementary colors are more intense and "vibrate" when placed next to each other as they compete for your attention

- **Split complementary colors**
  - One of the complementary colors is split off into a pair of neighboring hues

- **Analogous colors**
  - Colors that neighbor one another on the color wheel
  - Hues appear to "push" at each other, creating an optical illusion where each zone appears larger when it has your attention

- **Triad colors**
  - Hues equidistant on the color wheel
If you are not a color expert, let an expert pick for you. Use color last.
Typography
Typography is an art form

Gill Sans, designed by Eric Gill and released by the Monotype Corporation in 1928
Six Typographic terms
Point size

Gill Sans  Calibri

Six Typographic Terms

Leading
Six x-height

Typefaces with high x-height:
- easier to read at small point size

- Gill Sans
- Lucida Bright
  *high x-height*

Typefaces with low x-height:
- harder to read at small point size

- Baskerville
  *Low x-height*

Lucida Bright: 1993, Charles Bigelow & Kris Holmes  · Baskerville, 1757, John Baskerville
Six Typographic Terms

ascenders
descenders
Six Typographic Terms

light  regular  bold

weight
Weights and Styles

Roboto Thin & Thin Oblique
Roboto Light & Light Oblique
Roboto Regular & Oblique
Roboto Medium & Medium Oblique
Roboto Bold & Bold Oblique
**Roboto Black & Black Oblique**
Roboto Condensed Light & Condensed Light Oblique
Roboto Condensed & Condensed Oblique
Roboto Condensed Bold & Condensed Bold Oblique
What indicates a serif font?
Serifs – there’s more!

Oldstyle

Diagonal stress

Serif (pronounced “sair iff,” not “suh reef”)

Serifs on lowercase letters are slanted

Moderate thick/thin transition in the strokes

Goudy
Serif vs.
Sans serifs
The Serif Hypothesis

Serif fonts are faster to read. The little hooks indicate where your eyes should move next.

There is no evidence to support this. Any differences in reading speed are dwarfed by individual differences, or familiarity.
Who follows the Serif Hypothesis?

LONDON — The stage filled with women in Princess Diana masks, smashing VHS cassettes with hammers. A dancer wove her way through a bar, muttering about kittens. A figure wrapped in a filthy comforter emerged from a tent, crawling among clubbers dressed in fetish gear.

BUDAPEST, Hungary — An hour’s drive from the capital, across the flat and frozen Hungarian plain, the small town of Halásztelek is noisy with construction work as builders put the finishing touches on new single-story houses. They look like a 1950s American suburb that was dropped in the middle of Central Europe, but their humble appearance belies great ambition.
Like Colors, there are cultural connotations for fonts

San Serif = Modern, simple

Serif = Intellectual, Elite
Mixing fonts: Concordant fonts

Typography
FROM WIKIPEDIA, THE FREE ENCYCLOPEDIA

Typography is the art and technique of arranging type, type design, and modifying type glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning).

Adobe Caslon Semibold
48 pt

Adobe Caslon Smallcaps, 14 pt

Adobe Caslon Regular, 12 pt

Mixing fonts of the same font-family is great.
Mixing fonts: Contrasting fonts

Typography
From Wikipedia, the free encyclopedia

Typography is the art and technique of arranging type, type design, and modifying type glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning).

Mixing San Serif and Serif is ok. (But edgier)
BAD font mix: Conflicting fonts

Typography
From Wikipedia, the free encyclopedia

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<th>Futura Medium, 14 pt</th>
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<tr>
<td>36 pt</td>
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<tr>
<td>Myriad Regular, 12 pt</td>
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</table>

Mixing multi San Serif or Serif fonts is considered bad. It doesn’t look intentional.
What connotation does this font have?

Your font should not detract from your message.

You’re an idiot.
Eight Gestalt Principles
gestalt

an organized whole that is perceived as more than the sum of its parts.
Gestalt Principle #1: Proximity

Dots appear as **columns**

Dots appear as **rows**
Gestalt Principle #1: Proximity

Dots appear as **two groups**

X is in group a.
Gestalt Principle #2: Similarity
How is similarity used to convey meaning?

Tuesday, November 4 — Election Day

An American Menu

$75

Caesar salad with anchovies, egg, and Parmesan cheese

Clam chowder with Maine lobster and pancetta

Grilled chicken with house-made barbeque sauce with potato purée and greens

Apple and raspberry pecan crisp with vanilla ice cream
Gestalt Principle #2: Similarity

How many green circles are there?
Gestalt Principle #2: 
Similarity
Gestalt Principle #2: Similarity

How many green circles are there?

2

Colors are easy to scan for
Gestalt Principle #2: Similarity

How many rectangles are there?
Gestalt Principle #2: 

Similarity
Gestalt Principle #2: 

Similarity

How many rectangles are there?

3

Shapes are hard to scan for
Gestalt Principle #2: Similarity

How many *triangles* are there?
Gestalt Principle #2:

Similarity
Gestalt Principle #2: Similarity

How many triangles are there?

3

Size is easy to scan for
What properties are easy to scan for similarity?

Color and Size scans better than shape
Gestalt Principle #3: Enclosure
Gestalt Principle #3: Enclosure
Gestalt Principle #4: Symmetry

Proximity indicates 4 groups

Symmetry indicates 3 groups
Gestalt Principle #5:

Closure

a

b
Gestalt Principle #6: Continuity
Gestalt Principle #6:

Continuity
Gestalt Principle #7: Connection

a

b

c

d
Gestalt Principle #8:

Figure and Ground
8 Gestalt Principles
2 Gestalt Principles I actually use
I use **proximity** and **color/contrast similarity**

Tuesday, November 4 — Election Day

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Apple and raspberry pecan crisp with vanilla ice cream

TUESDAY, NOVEMBER 4 — ELECTION DAY

**AN AMERICAN MENU**

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with anchovies, egg, and Parmesan cheese

**Clam chowder**
with Maine lobster and pancetta

**Grilled chicken**
with house-made barbecue sauce with potato purée and greens

**Apple and raspberry pecan crisp**
with vanilla ice cream
Quiz: 8 Gestalt Principles

- Proximity
- Similarity
- Enclosure
- Symmetry
- Closure
- Continuity
- Connection
- Figure & ground
Quiz: what property is being used here?

Continuity
Our minds perceive lines and curves as continuing on their trajectory
Quiz: what property is being used here?

For other uses, see Design (disambiguation).

Design can have different connotations in different fields of application (see design disciplines below), but there are two basic meanings of design: as a verb and as a noun.

Design (as a verb: to design) is the intentional creation of a plan or specification for the construction of an object or system or for the implementation of an activity or process.

Design (as a noun: a design) can refer to such a plan or specification (e.g. a drawing or other document) or to the created object, etc., and features of it such as aesthetic, functional, economic or socio-political.

The process of creating a design can be brief (a quick sketch) or lengthy and complicated, involving considerable research, negotiation, reflection, modelling, interactive adjustment and re-design. In some cases, the direct construction of an object without an explicit prior plan (such as in craftwork and some engineering, coding, and graphic design) is also considered to be a design activity.

Similarity of Color
It is easy to scan for color
Quiz: what property is being used here?

Figure and ground
Summary
The human brain is always interpreting meaning, even if it’s not there.

Use color, type, and gestalt carefully
# Color Meaning and Representation

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<td>Villainy</td>
<td>Future</td>
</tr>
<tr>
<td></td>
<td>Danger</td>
<td></td>
<td>Youth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Energy</td>
</tr>
<tr>
<td>China</td>
<td>Happiness</td>
<td>Heavens</td>
<td>Ming Dynasty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clouds</td>
<td>Heavens Clouds</td>
</tr>
</tbody>
</table>

```css
.blue_text{
  color: blue;
}

.blue_text{
  color: rgb(0,0,255);
}

.blue_text{
  color: #0000FF;
}

.blue_transparent_text{
  color: rgba(0,0,255, 0.5);
}
```
Typography Terms

Serif fonts are faster to read. The little hooks indicate where your eyes should move next.

There is no evidence to support this. Any differences in reading speed are dwarfed by individual differences, or familiarity.

Microbes Point the Way to Shipwrecks

Your font should enhance your message, Not detract from it.
8 Gestalt Principles
Fill out participation now!
HW 5 is due Wednesday.