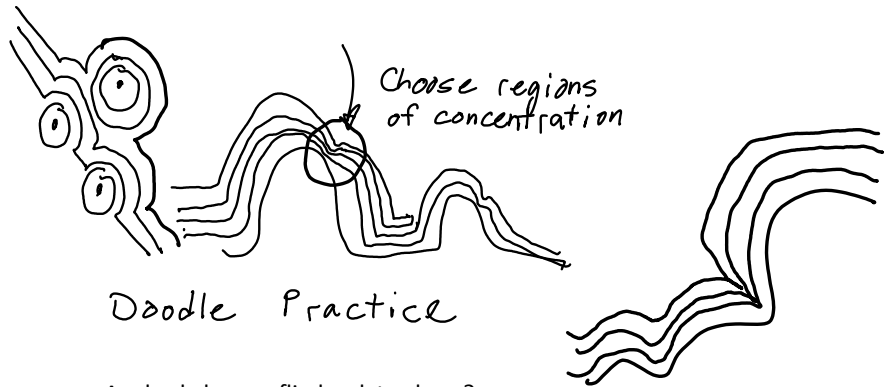


22 Stuff and Color

Monday, April 01, 2019 11:51 PM

Today:

- 10 minute team time
- Schedule
- More text resources
- Universal aesthetics topics
- Color



Anybody have a flip book to share?

Lecture topics coming up:

Universal Aesthetics

Case study: The Chair

Chair design will be case study, including Taschen and Phaidon curation, plus more detailed look at Eames/Herman Miller lounge chair



\$4,935.00USD

Current and recent designers:

Martha Stewart

Dyson

Apple: Steve Jobs, Jonny Ive

Elon Musk

David Kelly IDEO/Stanford D-school

Tommy Bahama: clothing

Zaha Hadid: Curved architectures and shoes

Buckminster Fuller

Rick Owens: Fashion

Alexander McQueen: Strange fashion

Walt Disney

John Fluevog: Shoes (From Prof. Miller)

Temple Grandin: animal handling systems

Philippe Starck

Karim Rashid

Ross Lovegrove

Yves Béhar

Horacio Pagani

Dieter Rams (Braun)

Chris Precht
architect

Ben Burtt
audio design for films

Virgil Abloh Vitton Shoes
+
Men's design

Renzo Piano
architect

Any others you are interested in? Votes for these?
text resources in my office library:

Phaidon Design Classics, Volumes 1, 2 and 3. London ; New York: Phaidon Press, 2006.

The three-volume book is an authoritative collection of design classics, which includes 999 industrially manufactured products, carefully selected by a group of experts. From cars to furniture, from tableware to cameras, from everyday objects to aeroplanes, this breadth of classic design has never before been collated. These volumes will be the sourcebooks on design from the early 1800's to the present, bringing together patents, prototypes, old advertisements, original drawings, images showing the process of manufacture, as well as rare archival photographs. Over fifty authors ranging from designers to curators, critics, and academics, have contributed with short texts for each objects, providing detailed research and precise information. Each artifact gets

2 pages

Available as an app for iPad, \$15 (hardcopy is \$160)



From https://www.google.com/search?q=phaidon+design&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKewiPnf_A25PLAhVELmMKHf7LCyYQ7AkIRA&biw=1010&bih=327

Taschen, publisher of **inexpensive** art and design texts. <https://www.taschen.com/>

Universal Principles of Design (UPDes)

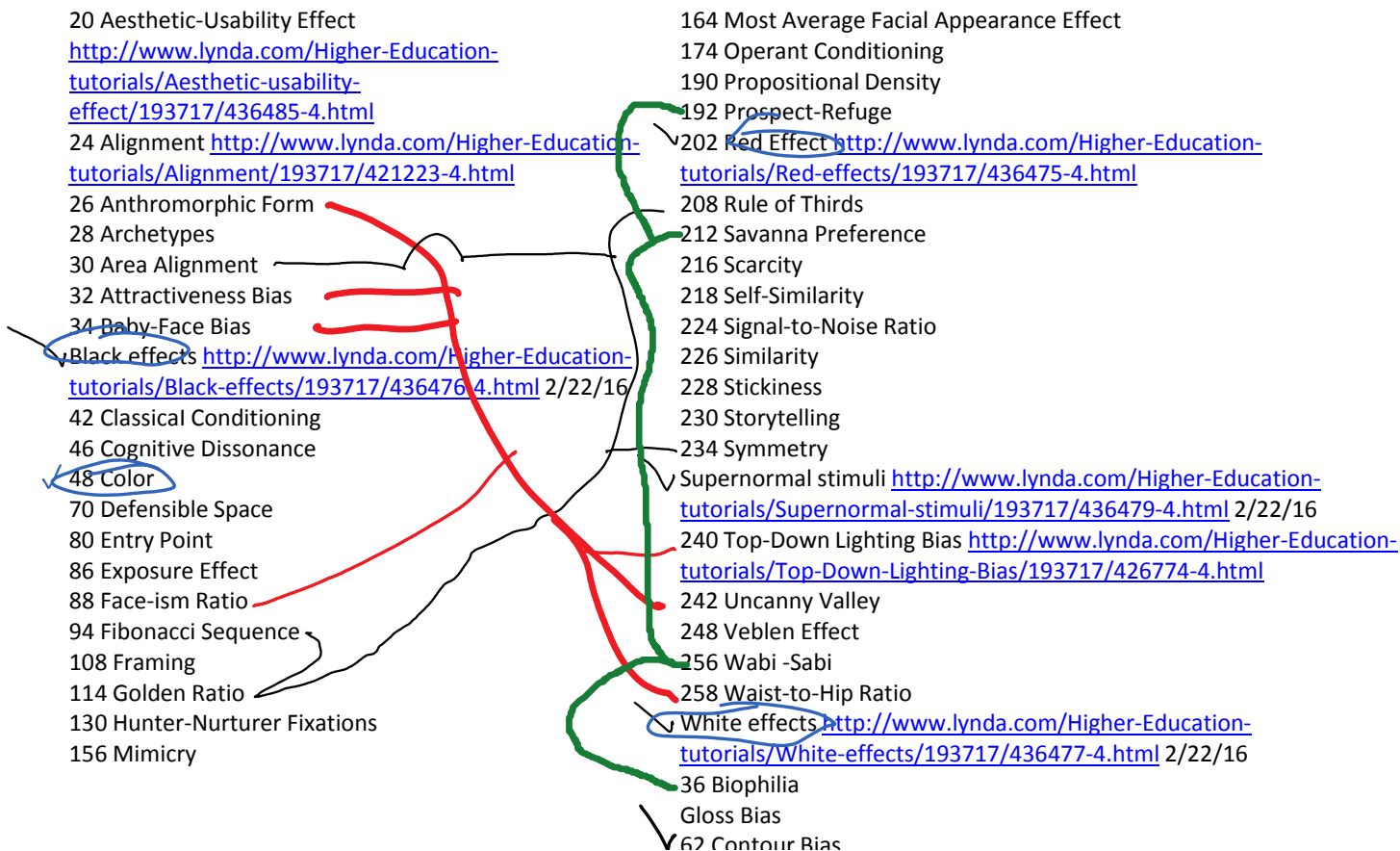
Book and video series, available on Lynda.com (<http://www.colorado.edu/lynda>)

Many good functional design rules, based on ergonomics, psychology, market research; what do people do when they interact with designs? Text has references that video omits.

And some good aesthetics rules, based on research on human likes/dislikes.

Possible lecture/discussion topics

I will curate, but requests will be taken



36 Biophilia

Gloss Bias

62 Contour Bias

Universal Principles of Design (UPDes)

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(<http://www.colorado.edu/lynda>)

Many good functional design rules, based on ergonomics, psychology, market research; what do people do when they interact with designs? Text has references that video omits.

And some good aesthetics rules, based on research on human likes/dislikes.

Today, some video topics

Why aren't all products black? Kira's question

Isn't always functional; heat absorption, tracing transparency

Black is too common; wear a color to stand out

If everything was black, would lose dominance, high value perception

Colors can affect other moods, emotions

Black is depressing

Not always practical, could add weight

Don't always want to signal power, aggression

Lack of contrast is not appealing

Hard to photograph

Signals unapproachability

Hard to see in the dark

From last year:

May not match sense of identity; aggressive, authority, threatening

Other colors can create a tiered pricing structure for broader marketing

Matt not great in black. Might not make best contrast

Need other colors for contrast

Doesn't allow full range of expression

Want to portray more fun in a different color. Black is not a loud color

Might not be functional. Outdoor equipment can get lost.

Hard to keep clean (cars, stovetops). Harder to perceive form.

Humans like color too

Water bottles maybe better in blue, other connotations.

Black is the color of death.

Summary:

White effects: White = good, light. Timeless, high-value

Black effects: Black = serious, aggressive, threatening. Timeless, high-value

Red effects

Increases attractiveness of humans, but suppresses high level cognition.

Only wear red on weekends, unless negotiating.

Color

Nomenclature

Digital, photoshop

Pantone <https://en.wikipedia.org/wiki/Pantone>

Additive/subtractive physics



Color1

Color

Color is used in design to attract attention, group elements, indicate meaning, and enhance aesthetics.

Color can make designs more visually interesting and aesthetic, and can reinforce the organization and meaning of elements in a design. If applied improperly, however, color can seriously harm the form and function of a design. The following guidelines address common issues regarding the use of color.¹

Number of Colors

Use color conservatively. Limit the palette to what the eye can process at one glance (about five colors depending on the complexity of the design). Do not use color as the only means to impart information since a significant portion of the population has limited color vision.

Color Combinations

Achieve aesthetic color combinations by using adjacent colors on the color wheel (analogous), opposing colors on the color wheel (complementary), colors at the corners of a symmetrical polygon circumscribed in the color wheel (triadic and quadratic), or color combinations found in nature. Use warmer colors for foreground elements, and cooler colors for background elements. Light gray is a safe color to use for grouping elements without competing with other colors.

Saturation

Use saturated colors (pure hues) when attracting attention is the priority. Use desaturated colors when performance and efficiency are the priority. Generally, desaturated, bright colors are perceived as friendly and professional; desaturated, dark colors are perceived as serious and professional; and saturated colors are perceived as more exciting and dynamic. Exercise caution when combining saturated colors, as they can visually interfere with one another and increase eye fatigue.

Symbolism

There is no substantive evidence supporting general effects of color on emotion or mood. Similarly, there is no universal symbolism for different colors—different cultures attach different meanings to colors. Therefore, verify the meaning of colors and color combinations for a particular target audience prior to use.²

See also Expectation Effect, Highlighting, Interference Effects, Similarity, and Uniform Connectedness.

Livingstone, Margaret, and David Hubel.
Vision and Art: The Biology of Seeing.
Reprint edition. Abrams, 2008.

¹ A nice treatment of color theory is *Interaction of Color* by Josef Albers, Yale University Press, 1963. For a more applied treatment, see *The Art of Color: The Subjective Experience and Objective Rationale of Color* by Johannes Itten, John Wiley & Sons, 1997; and *Human-Computer Interaction* by Jenny Preece, et al., Addison Wesley, 1994.

² It is reasonable to assume that dark colors will make people sleepy, light colors will make people lively, and irritating colors will make people irritated. Otherwise, the only observable influence of color on behavior is its ability to lead people to repaint walls unnecessarily. For those determined to try to calm drunks and win football games through the application of color, see *The Power of Color* by Morton Walker, Avery Publishing, 1991.



Analogous



Example from Nature



Triadic



Example from Nature

Analogous color combinations use colors that are next to each other on the color wheel.

Triadic color combinations use colors at the corners of an equilateral triangle circumscribed in the color wheel.



Complementary



Example from Nature



Quadratic



Example from Nature

Complementary color combinations use two colors that are directly across from each other on the color wheel.

Quadratic color combinations use colors at the corners of a square or rectangle circumscribed in the color wheel.



Hues from yellow to red-violet on the color wheel are warm. Hues from violet to green-yellow are cool.

Saturation refers to the amount of gray added to a hue. As saturation increases, the amount of gray decreases. Brightness refers to the amount of white added to a hue—as brightness increases, the amount of white increases.

