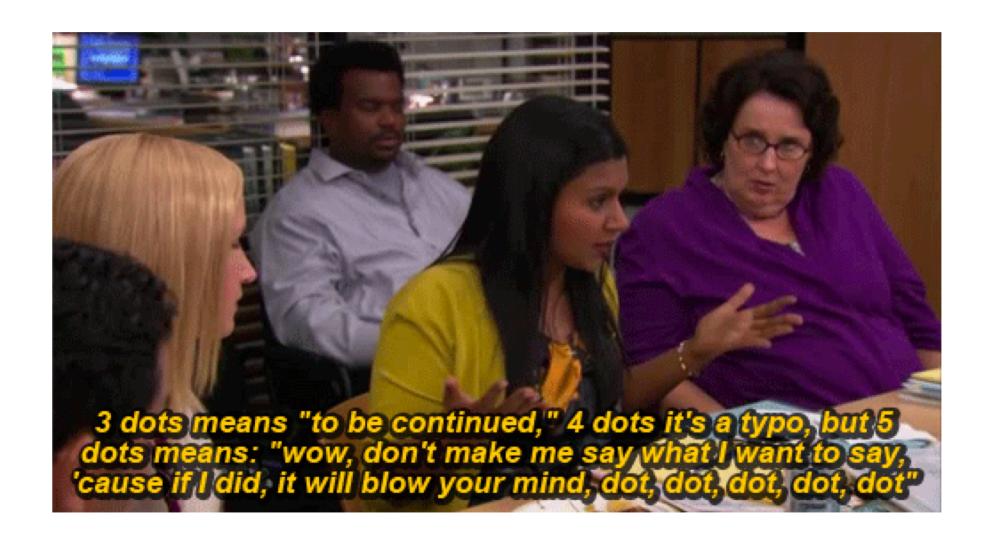
Color, Typography, Gestalt

Prof. Lydia Chilton COMS 4170 26 February 2024

The human brain is always interpreting meaning.

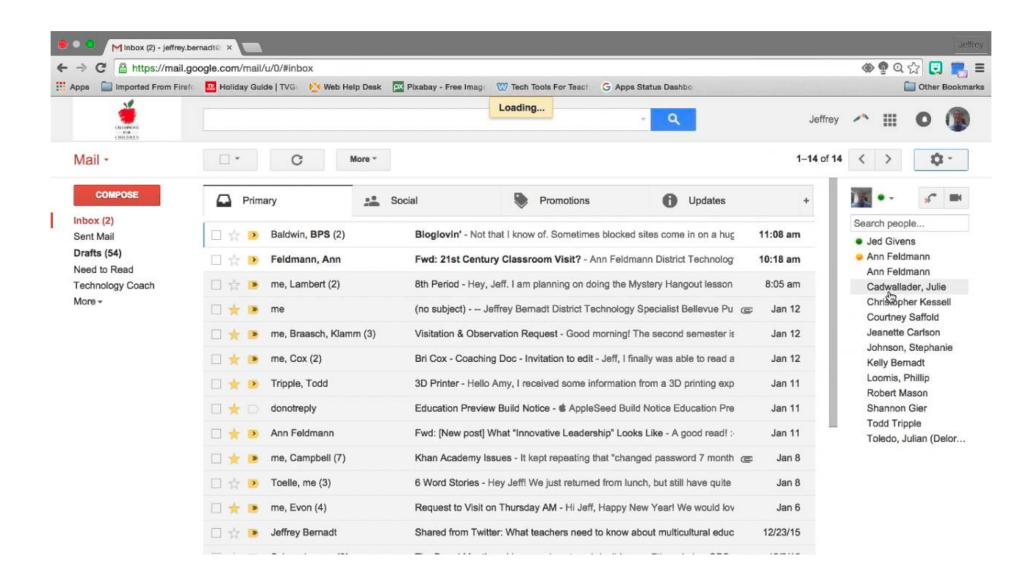


Color and Meaning

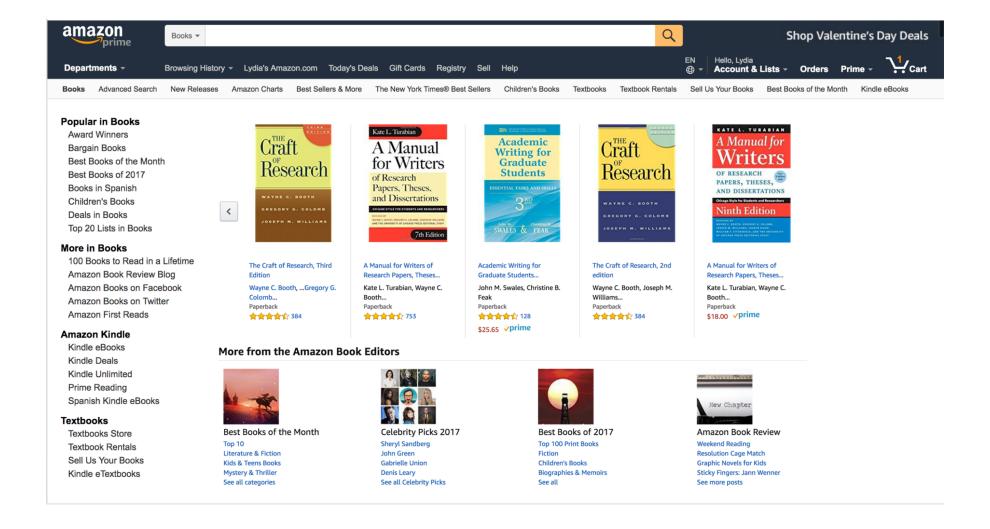
In addition to signaling importance, colors have meaning.



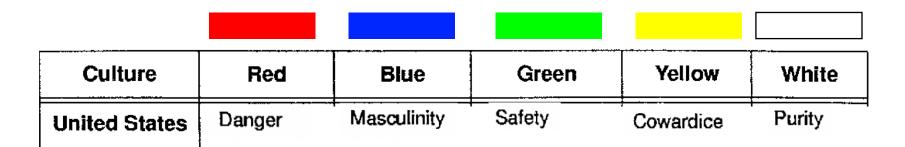
Where is color used? What does it mean?



Where is color used? What does it mean?



What are your associations with these colors?



And the associations in France?

Culture	Red	Blue	Green	Yellow	White	
United States	Danger	Masculinity	Safety	Cowardice	Purity	
France	Aristocracy	Freedom Peace	Criminality	Temporary	Neutrality	



Culture	Red	Blue	Green	Yellow	White
United States	Danger	Masculinity	Safety	Cowardice	Purity
France	Aristocracy	Freedom Peace	Criminality	Temporary	Neutrality
Egypt	Death	Virtue Faith Truth	Fertility Strength	Happiness Prosperity	Joy
India	Life Creativity		Prosperity Fertility	Success	Death Purity
Japan	Anger Danger	Villainy	Future Youth Energy	Grace Nobility	Death
China	Happiness	Heavens Clouds	Ming Dynasty Heavens Clouds	Birth Wealth Power	Death Purity

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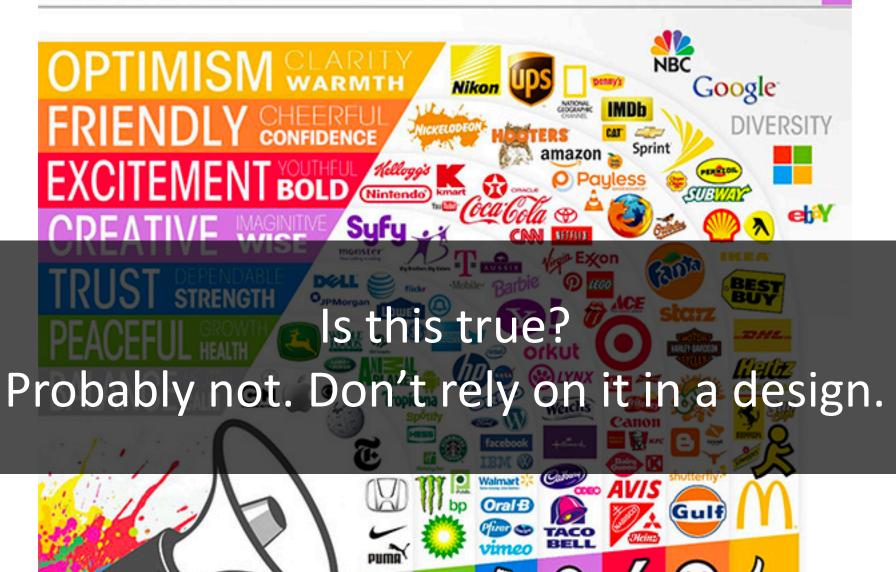
Culture	Red	Blue	Green	Yellow	White
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China	Happiness	Heavens Clouds	Ming Dynasty Heavens Clouds	Birth Wealth Power	Death Purity

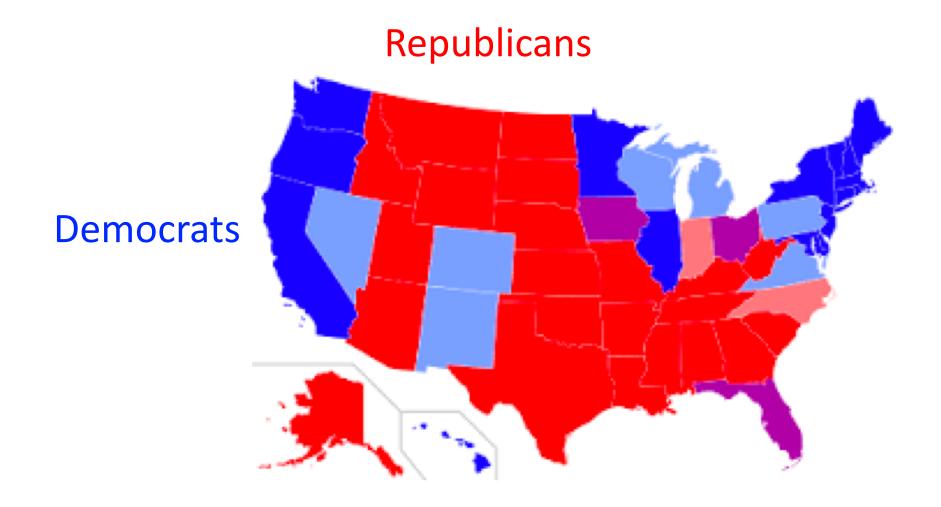
What does blue mean in India?

Culture	Red	Blue	Green	Yellow	White
United States	Danger	Masculinity	Safety	Cowardice	Purity
France	Aristocracy	Freedom Peace	Criminality	Temporary	Neutrality
Egypt	Death	Virtue Faith Truth	Fertility Strength	Happiness Prosperity	Joy
India	Life Creativity	:	Prosperity Fertility	Success	Death Purity
Japan	Anger Danger	Villainy	Future Youth Energy	Grace Nobility	Death
China	Happiness	Heavens Clouds	Ming Dynasty Heavens Clouds	Birth Wealth Power	Death Purity

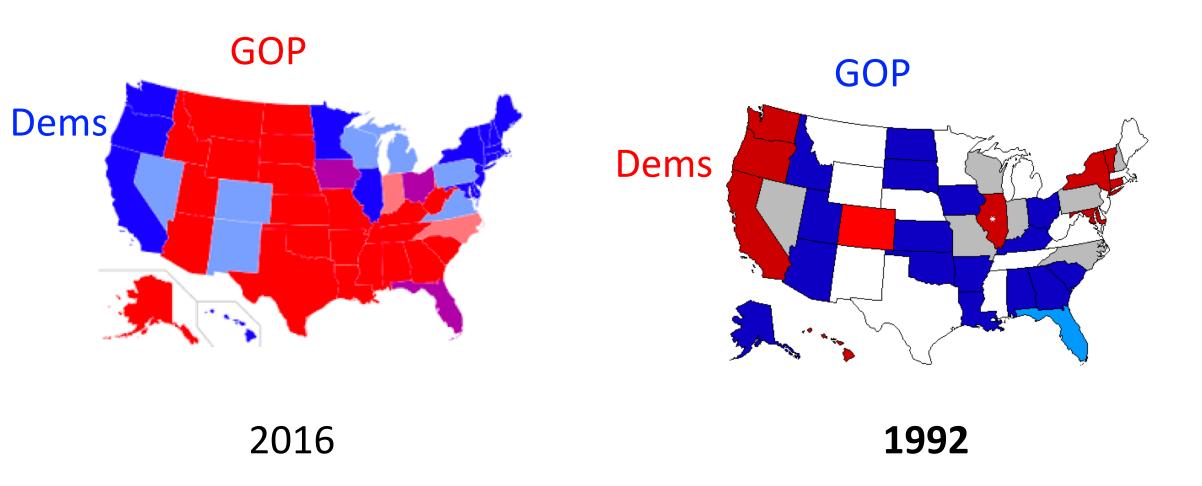
COLOR EMOTION GUIDE



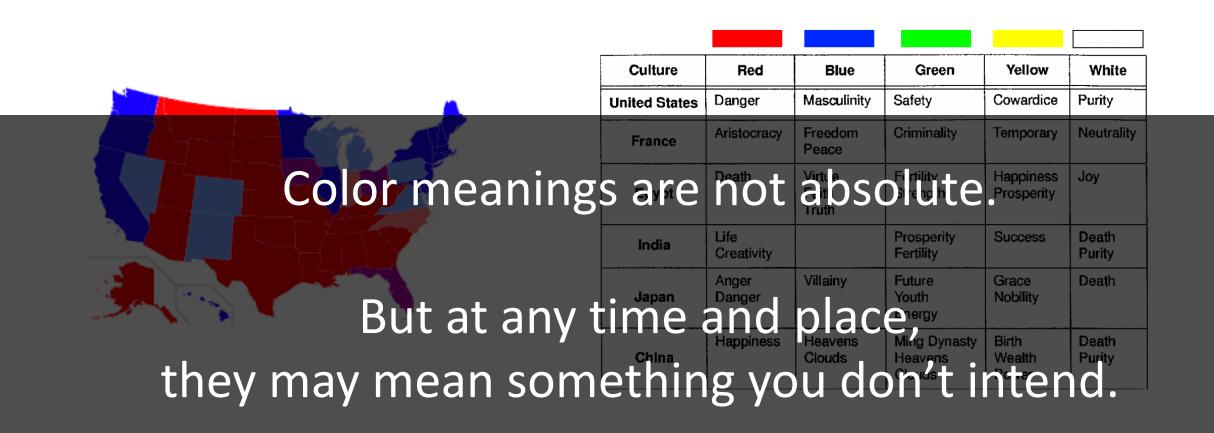
What cultural associations do these colors have?



When did the "red state" association start?



Are color meanings arbitrary?



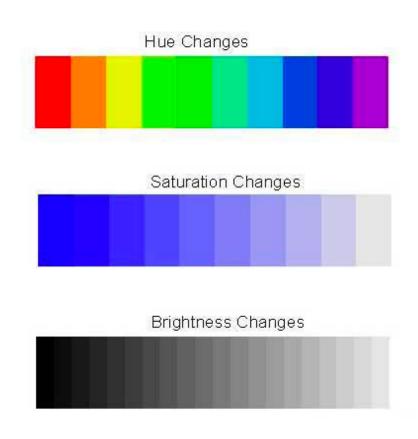
In your designs, stick to simple color meanings.

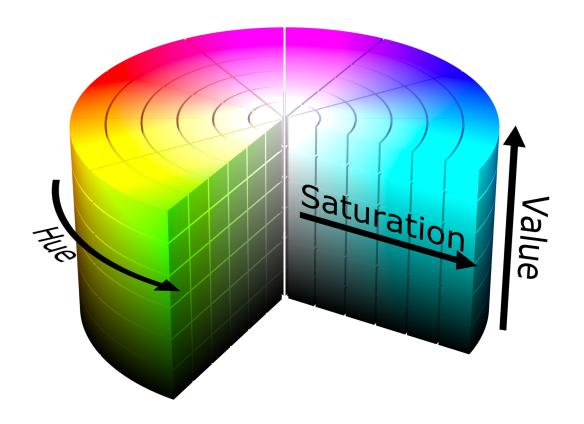


Don't use color as the only way to convey meaning. Use grouping, whitespace, **position**, size, contrast,

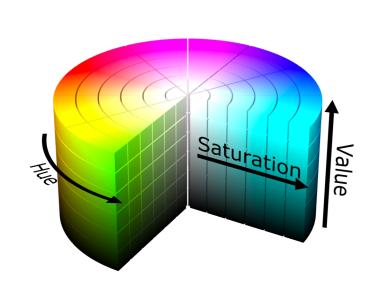
Color Representation

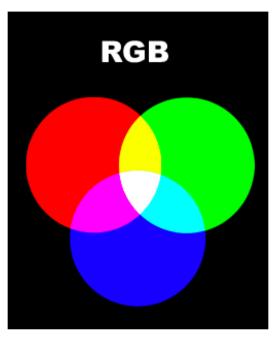
There are three perceptual dimensions of color: HSV – Hue, Saturation, Value (Brightness)

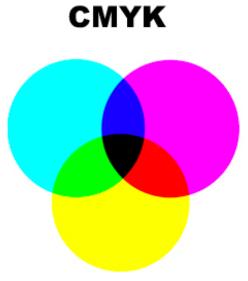


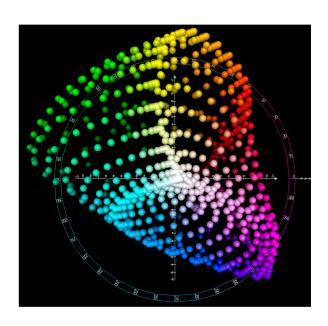


There are many ways to represent color









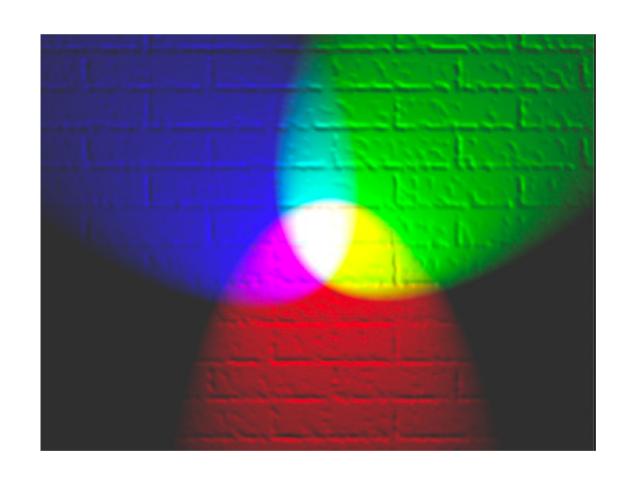
Hue, Saturation, Value

Red, Green, Blue

Cyan, Magenta, Yellow (Key = Black) Subtractive color model

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?

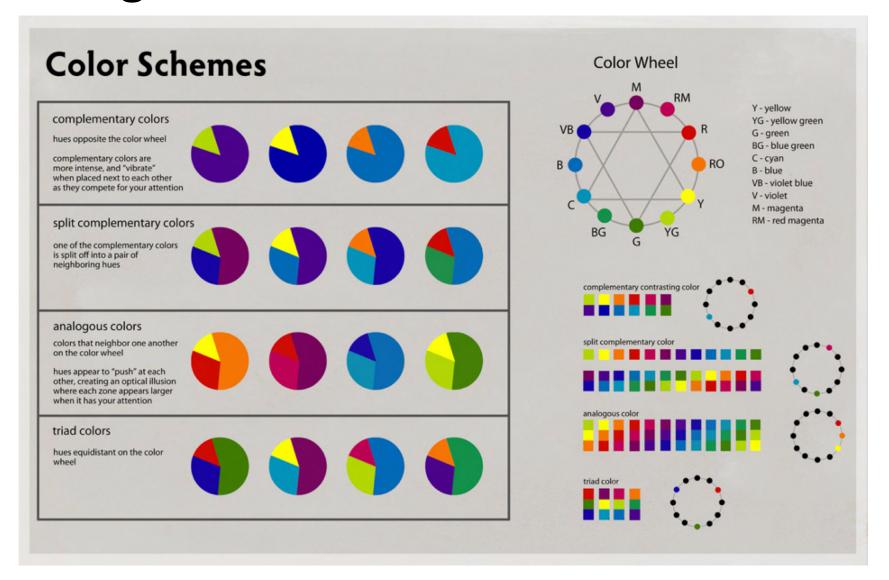




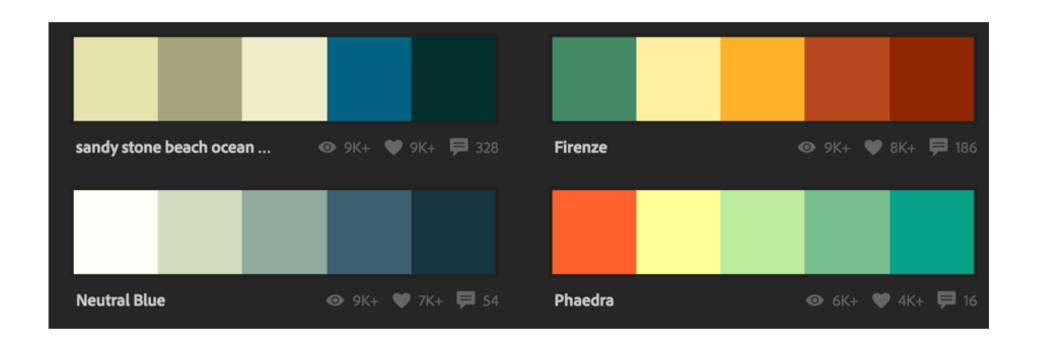
Ways to specify a color in HTML

```
.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);
```

Choosing color combinations

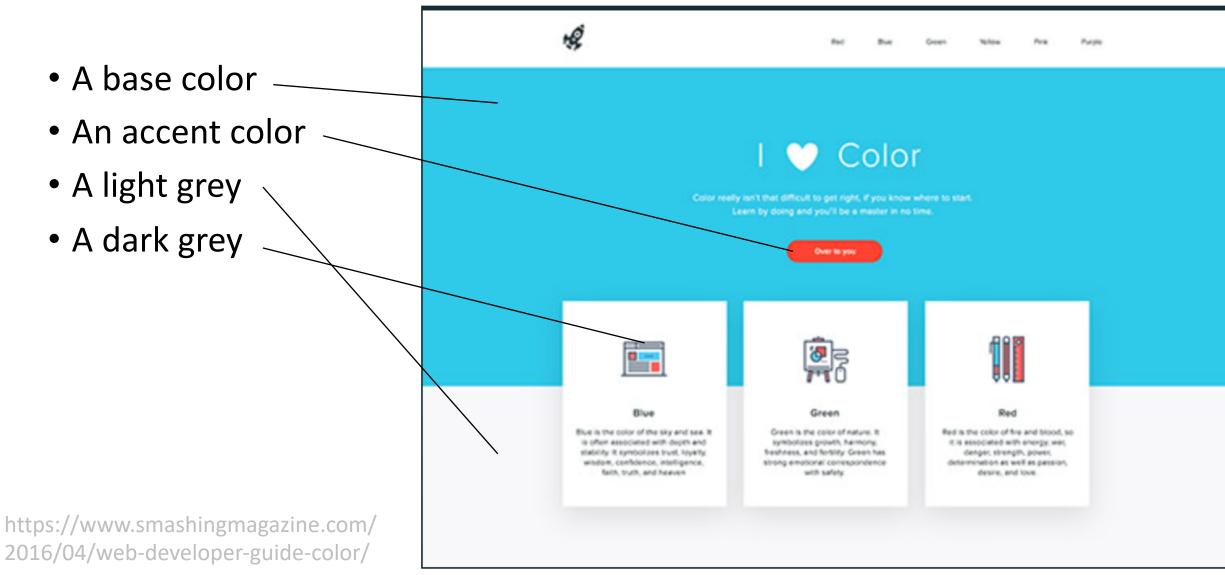


If you are not a color expert, get inspiration from experts.

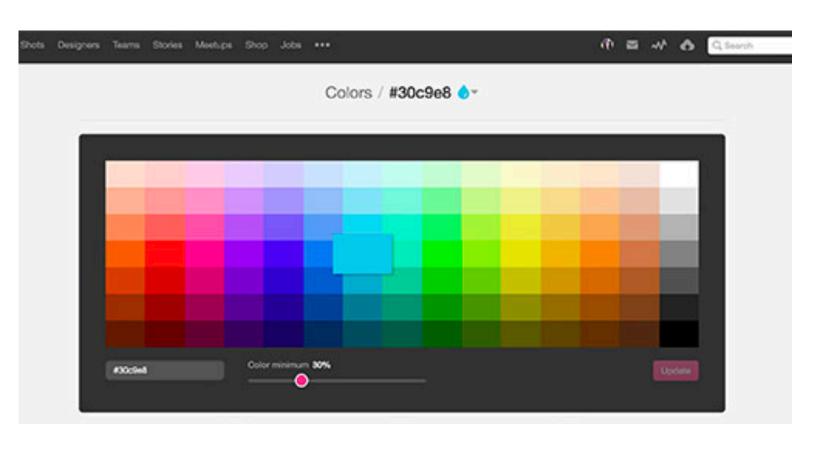


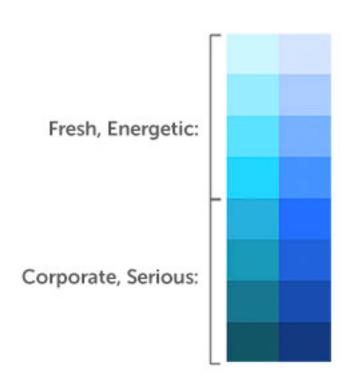
Basic Web Color Advice

Pick four colors (and a white background)



There are tools to help pick base colors

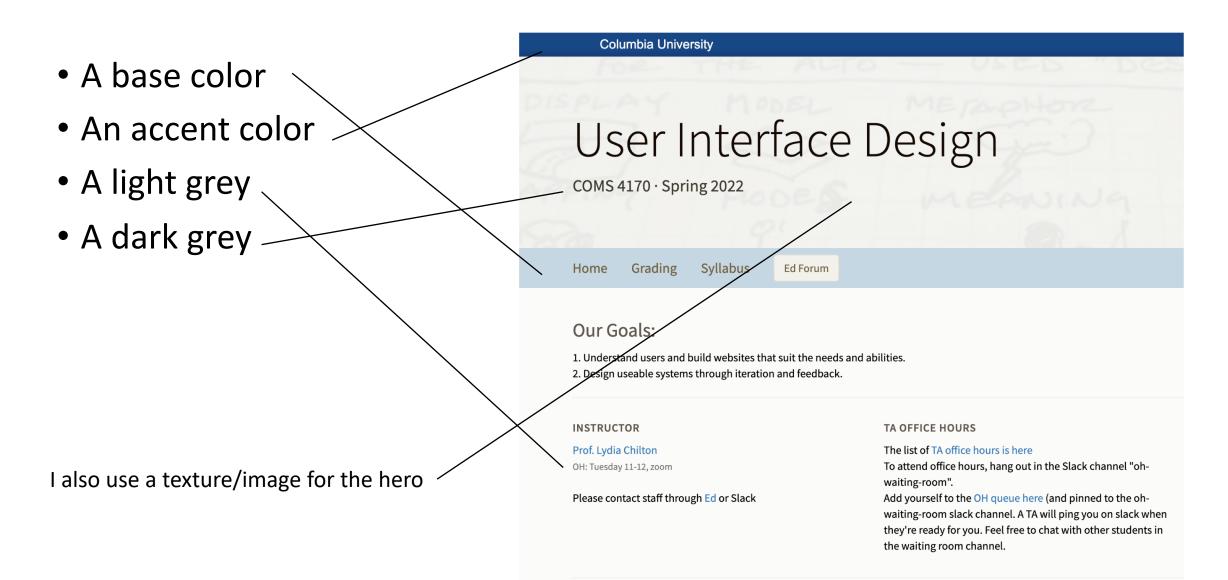


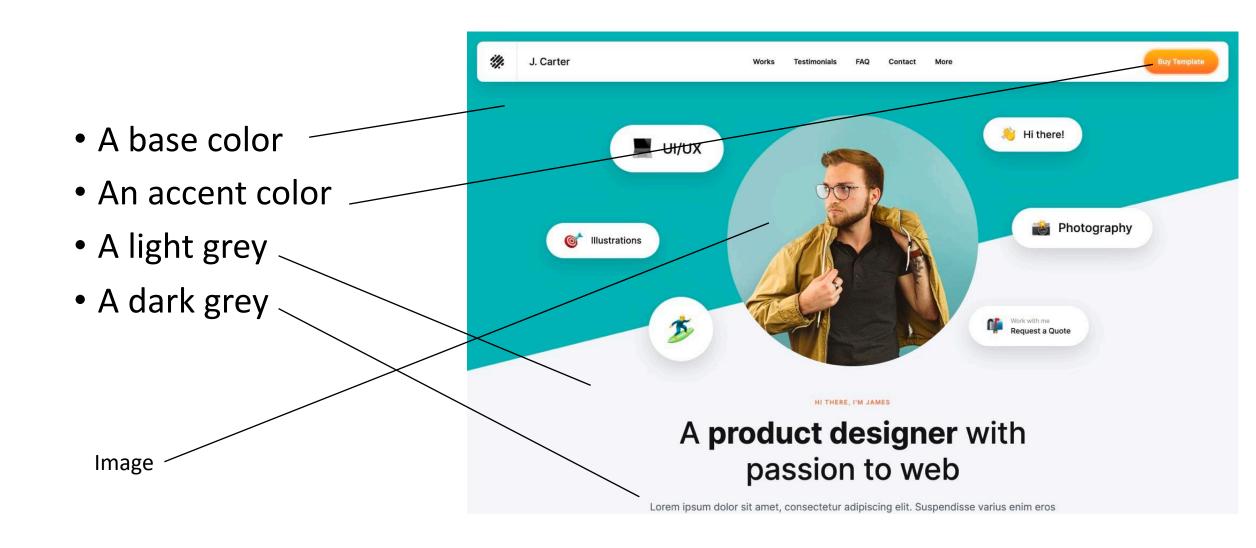


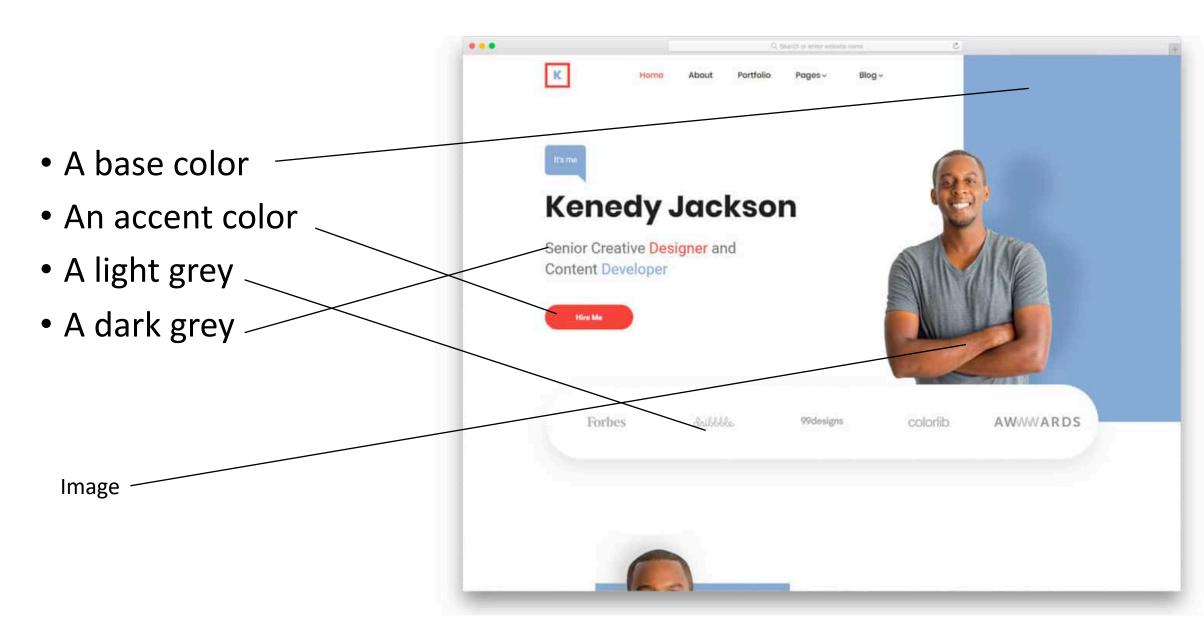
Make your design in greyscale first!



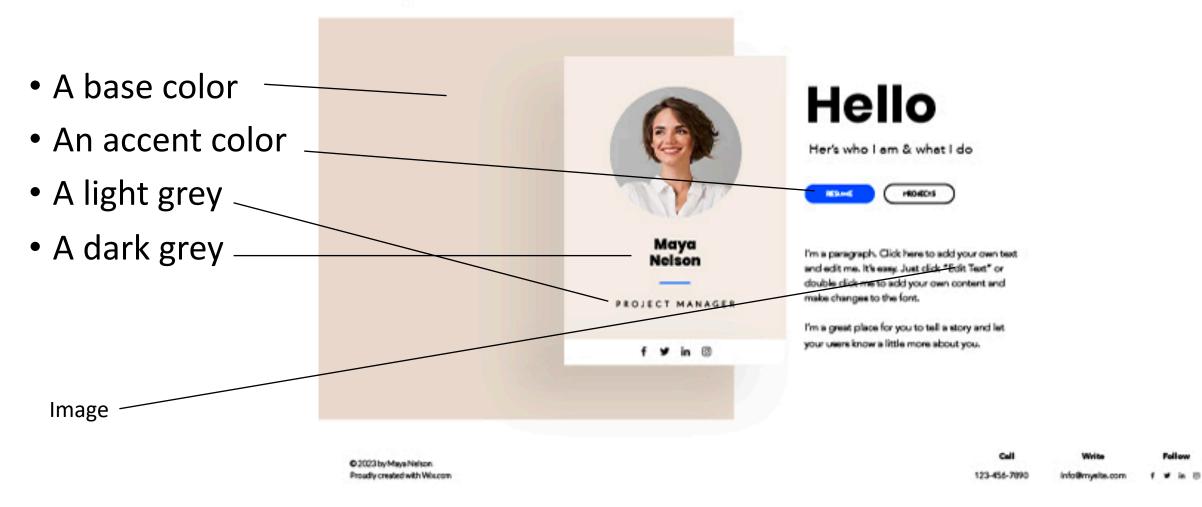
What are the 4170 site colors?







Maya Nelson / PROJECT MANAGER



- A base color
- An accent color
- A light grey
- A dark grey -

Image



Find a quality and right headphones not easy

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores popular estrum est voluptates consequatur quam. Qui id illo nisi dolores quidem maxime, ab, noisi consectetur, dolore placeut simmatere Animir. A nesciunt, eius dolores magnam facere consectetur totam oupriditate, rem et quam commodi fugit rerum magni destrus sit quasi deleniti. Afque vel consectetur, molitia repellendus voluptas corrupti odio accusantium architector | pare time.

Business HTML Templates Free Download

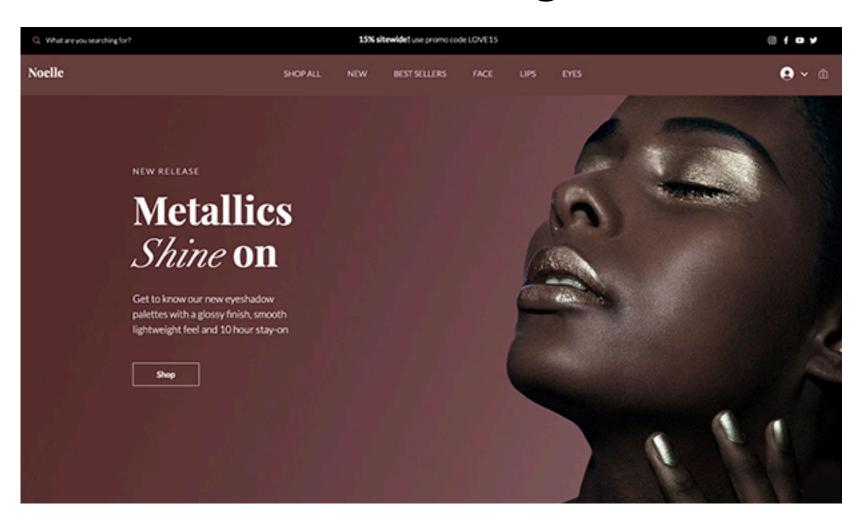
Hottest headphones of the month



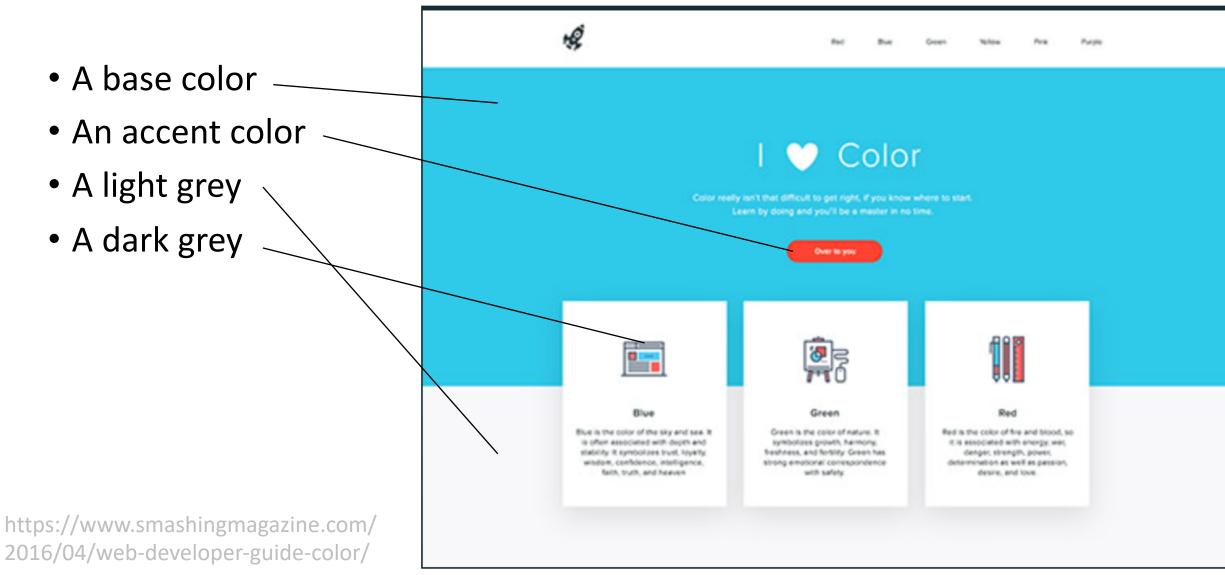




These rules are trickier for dark backgrounds. Please stick to a white background for now.



Pick four colors (and a white background)



Typography

Typography is an art form



Gill Sans, designed by Eric Gill and released by the Monotype Corporation in 1928

Six Typographic terms



S Point size

SS

Gill Sans Calibri

Sixpographic Terms

Leading

Sixpographic Terms

Six \ x-height

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

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

ascenders

Six Typographic Terms

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

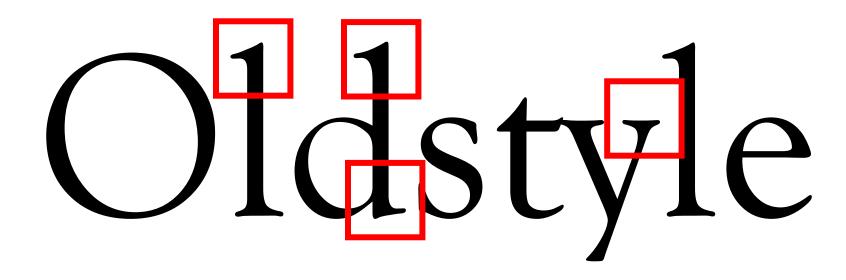
Roboto Black & Black Oblique

Roboto Condensed Light & Condensed Light Oblique

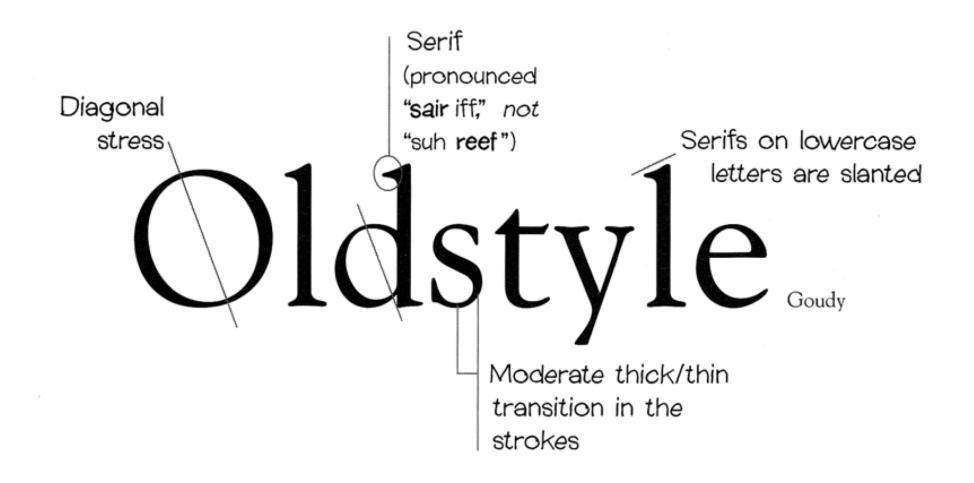
Roboto Condensed & Condensed Oblique

Roboto Condensed Bold & Condensed Bold Oblique

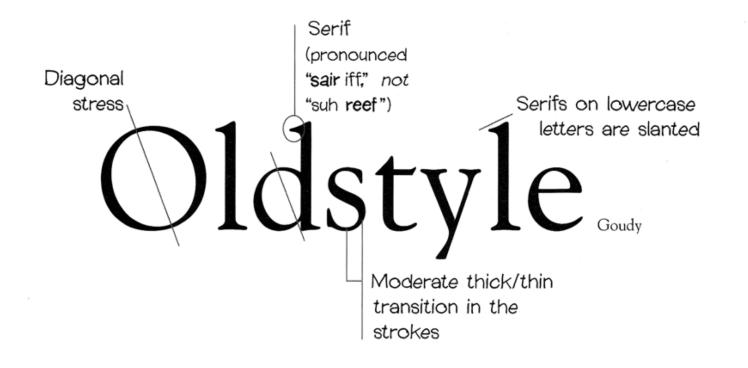
What indicates a serif font?



Serifs – there's more!



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?

The New York Times

THEATER It's a Theater, With Craft Beer and D.J.s Until 6 a.m.

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.



Watch VICE News Tonight on HBO weekdays at 7:30.

Should you?



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, fonts have cultural connotations



MOTHERBOARD

Scientists Found Breathable C Another Galaxy for the First Ti

Molecular oxygen is a key component of the air humans breathe, and now astronomers have spotted it a half-billion light years away. But don't hold your breath for quasar whippets.

The New York Times

Microbes Point the Way to Shipwrecks

Distinct microbiomes flourish around sunken ships as they become artificial reefs, new research in the Gulf of Mexico reveals.

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).

Gill Sans Light 48 pt

Gill Sans Light, 16 pt

UC Berkeley OldStyle, 12 pt

Mixing San Serif and Serif is ok. (But edgier)

BAD font mix: Conflicting 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).

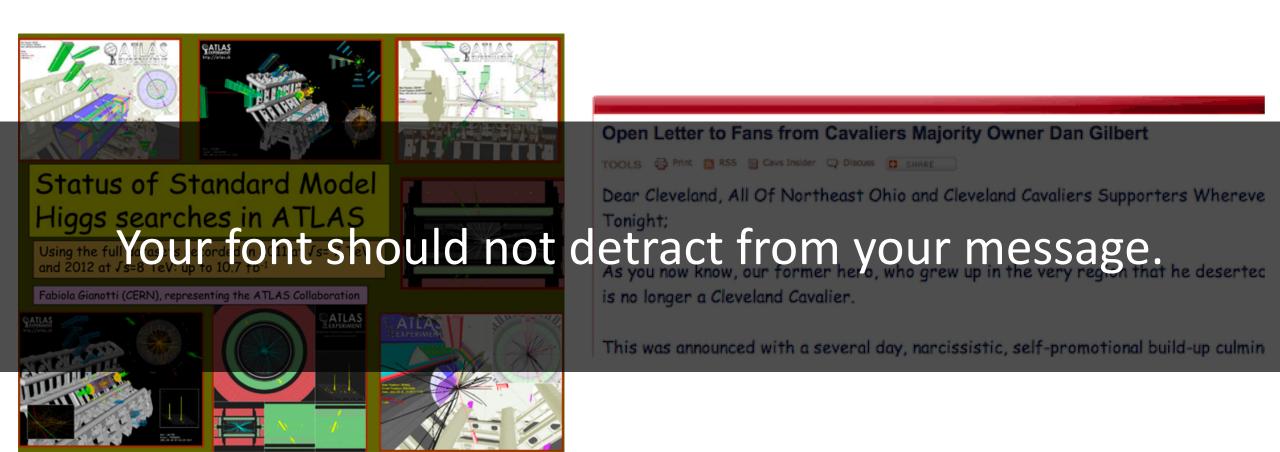
Arial 36 pt

Futura Medium, 14 pt

Myriad Regular, 12 pt

Mixing multi San Serif or Serif fonts is considered bad. It doesn't look intentional.

What connotation does this font have?

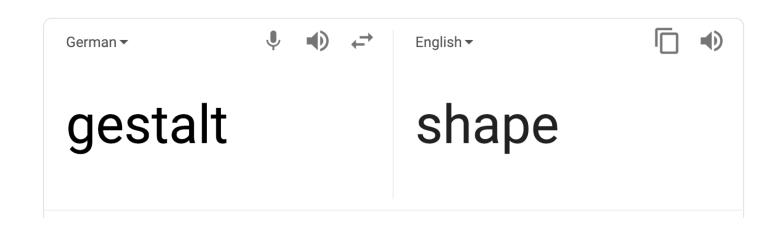


You're an idiot.

Eight Gestalt Principles

ge·stalt /gəˈSHtält/ noun PSYCHOLOGY

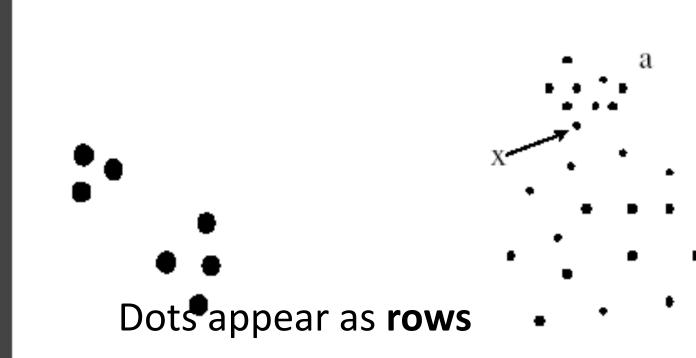
an organized whole that is perceived as more than the sum of its parts.



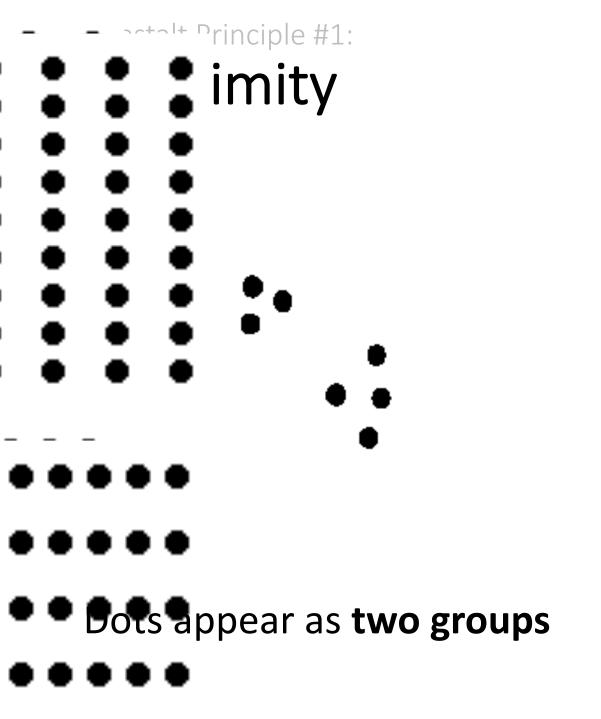
Gesta

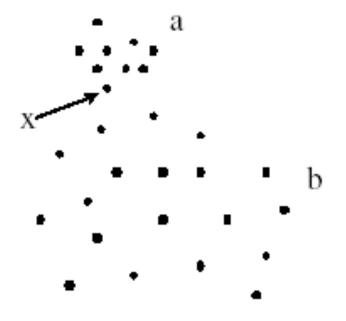
Proximity

Prd



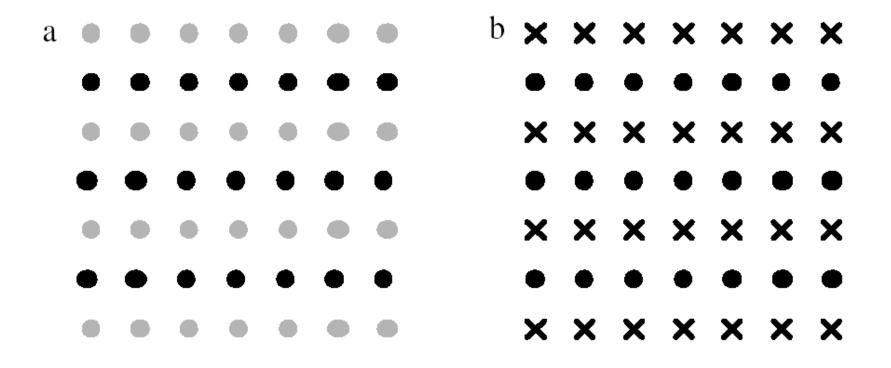
Dots appear as columns





X is in group a.

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

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

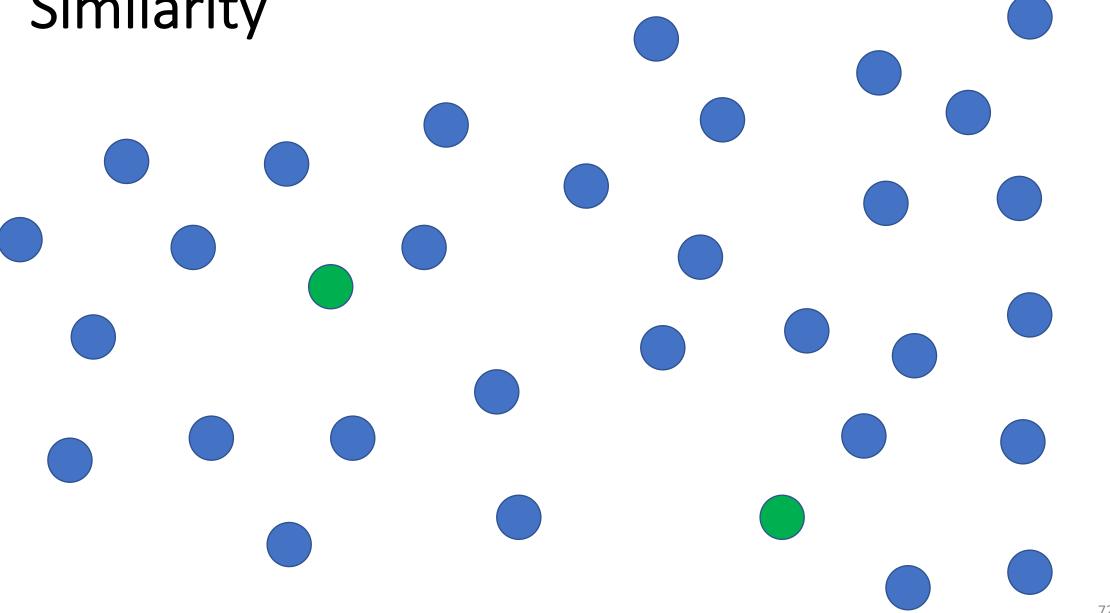
Apple and raspberry pecan crisp with vanilla ice cream

Gestalt Principle #2:

Similarity

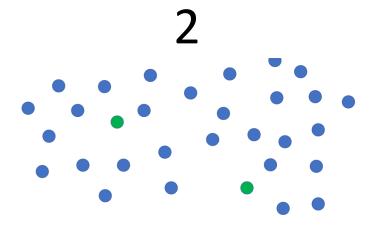
How many green circles are there?

Similarity



Similarity

How many green circles are there?

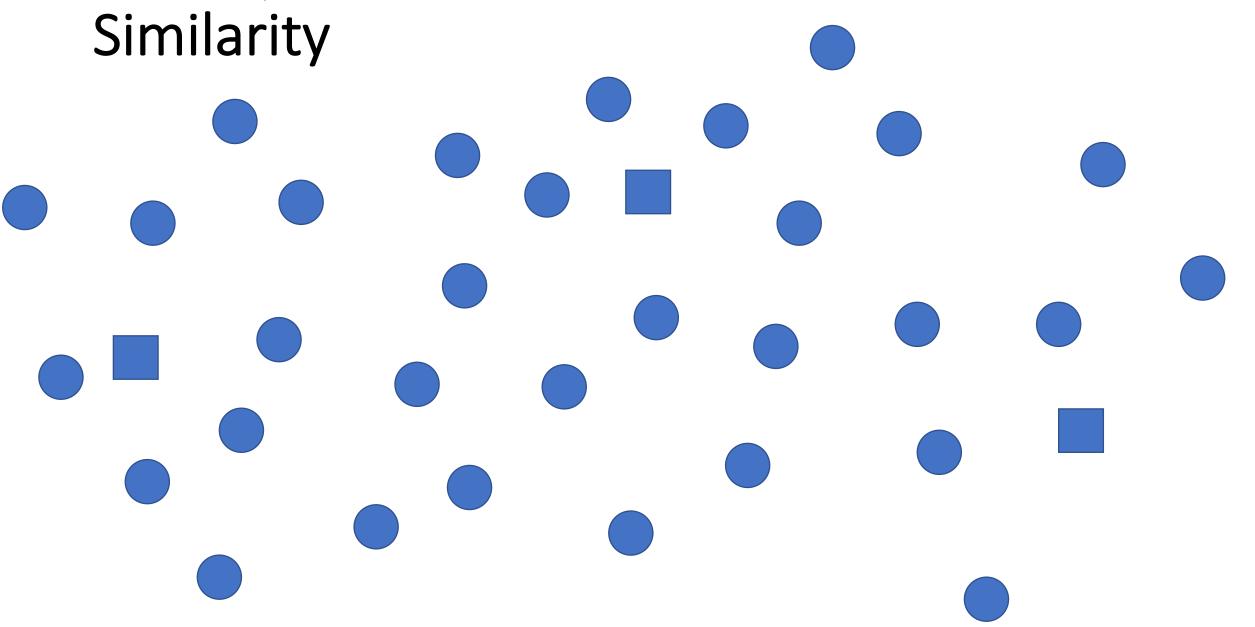


Gestalt Principle #2:

Similarity

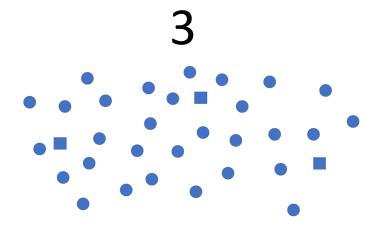
How many **rectangles** are there?

Gestalt Principle #2:



Similarity

How many **rectangles** are there?

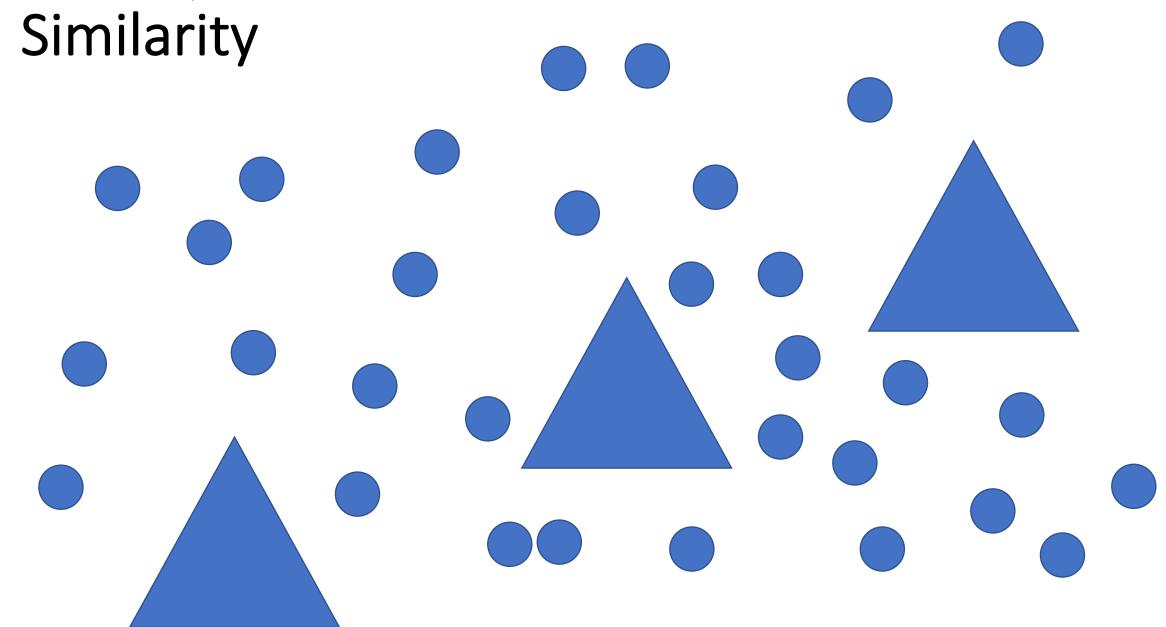


Shapes are hard to scan for

Gestalt Principle #2:

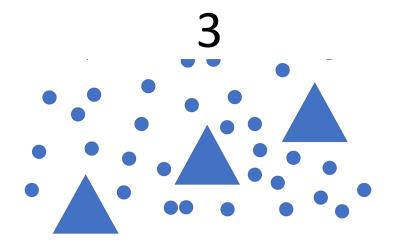
Similarity

How many **triangles** are there?



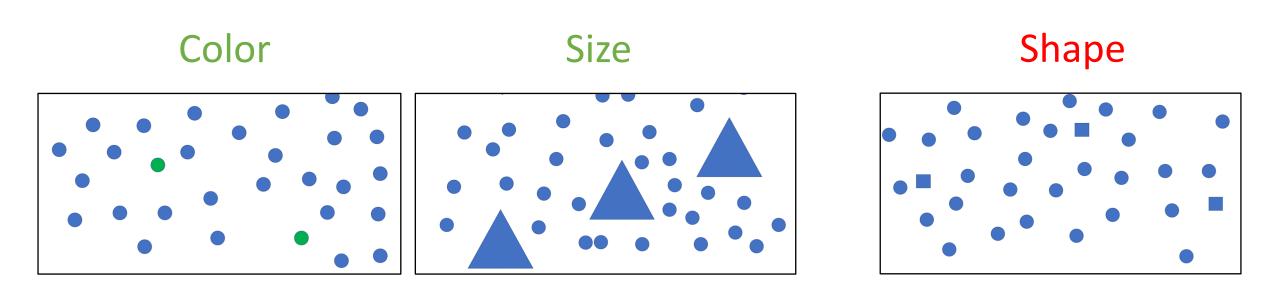
Similarity

How many **triangles** are there?



Size is easy to scan for

What properties are easy to scan for similarity?

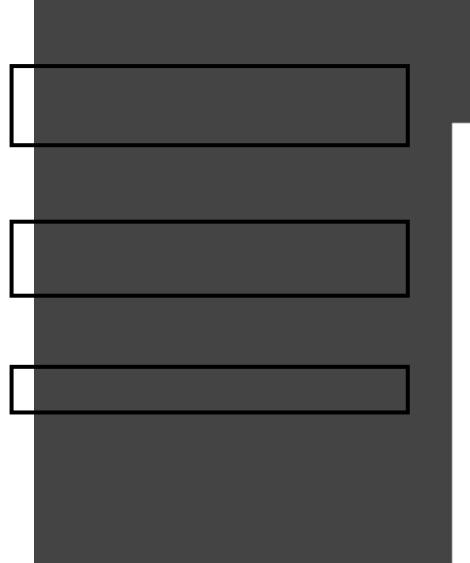


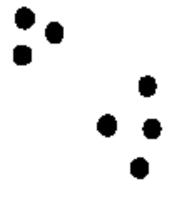
Color and Size scans better than shape

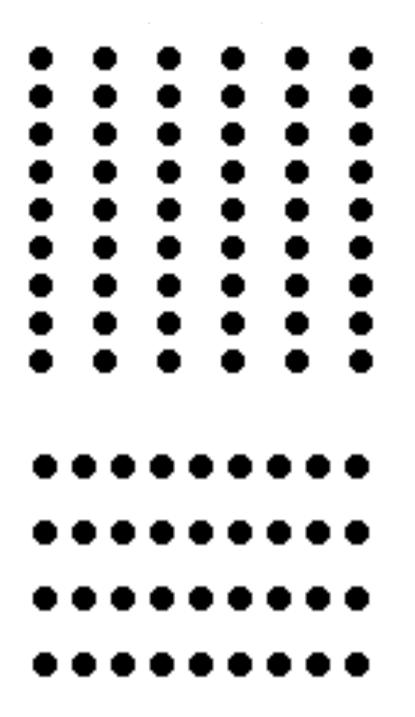
Gestalt Principle #3:

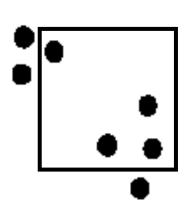
Enclosure

Proximity







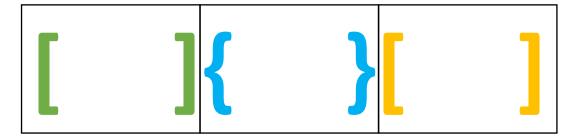


Symmetry

[]{]

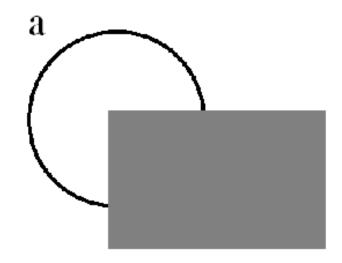


Proximity indicates 4 groups



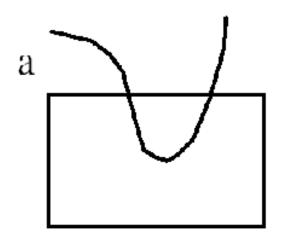
Symmetry indicates 3 groups

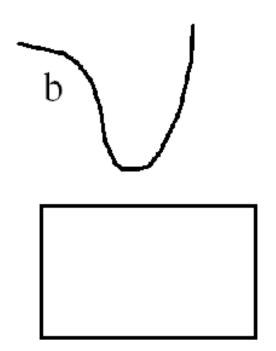
Closure

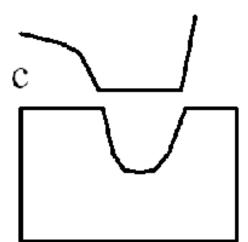




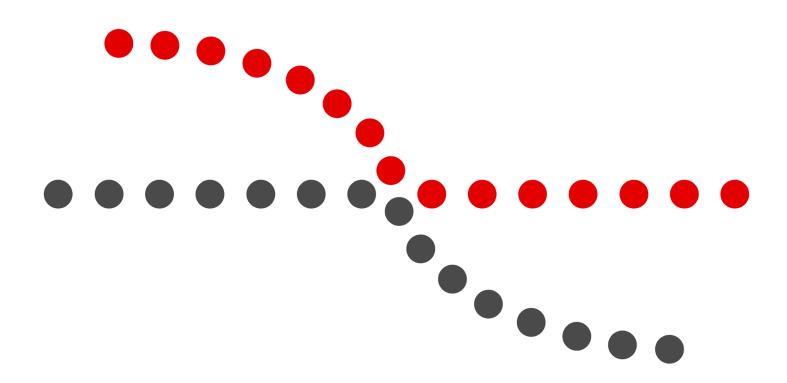
Continuity







Continuity

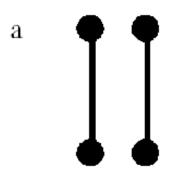


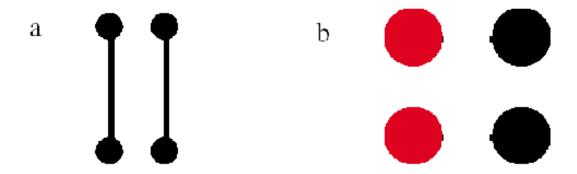
Gestalt Principle #7:

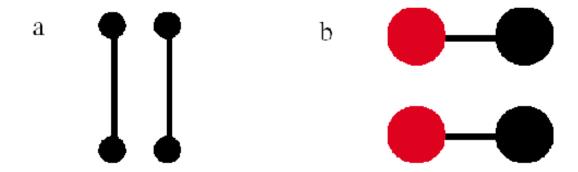
Connection

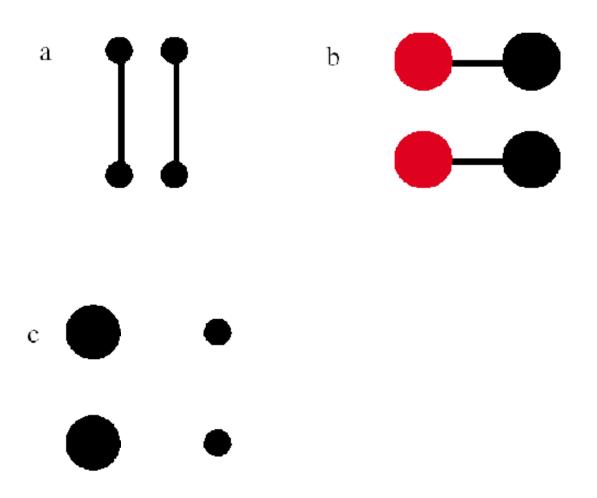
a • •

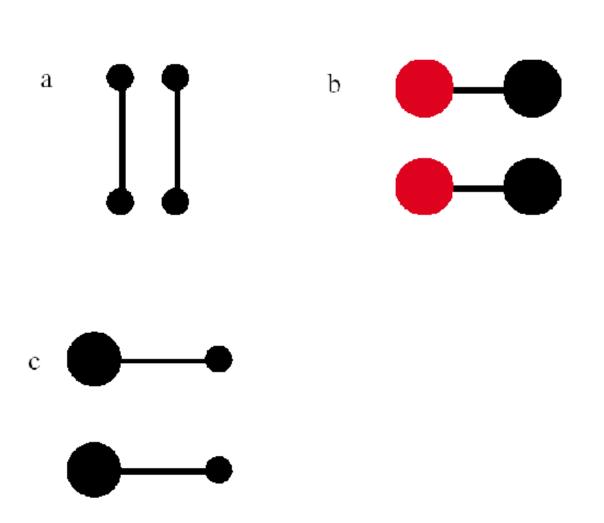
.

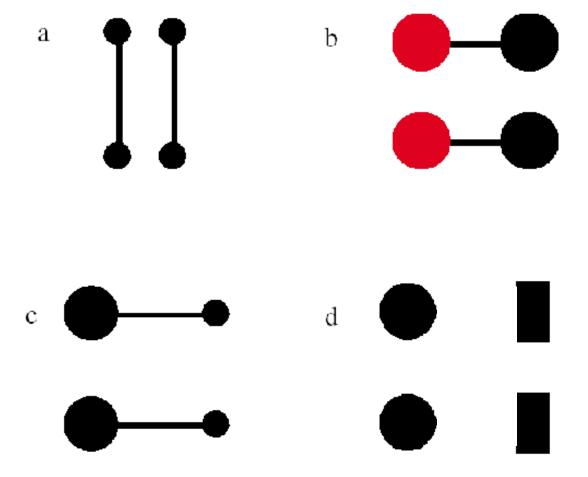












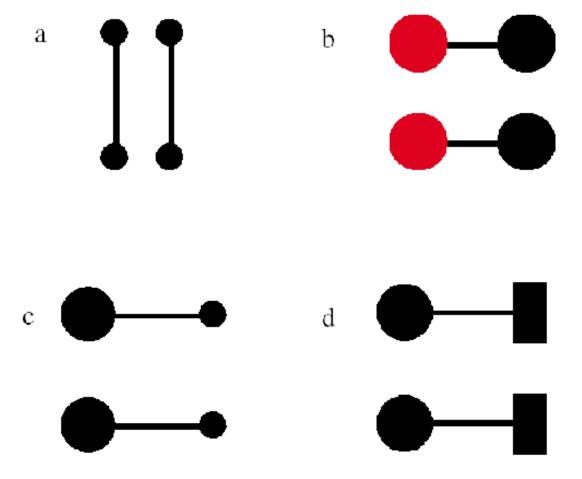
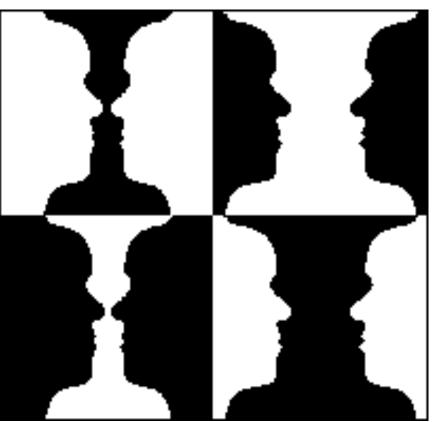
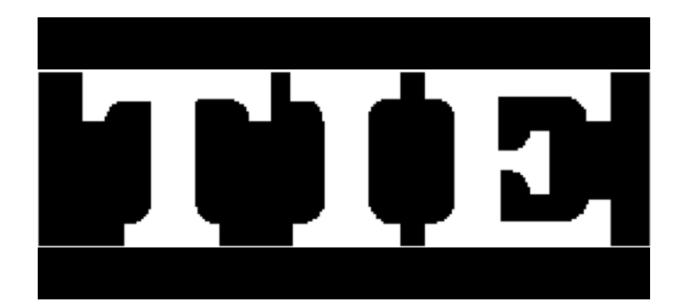


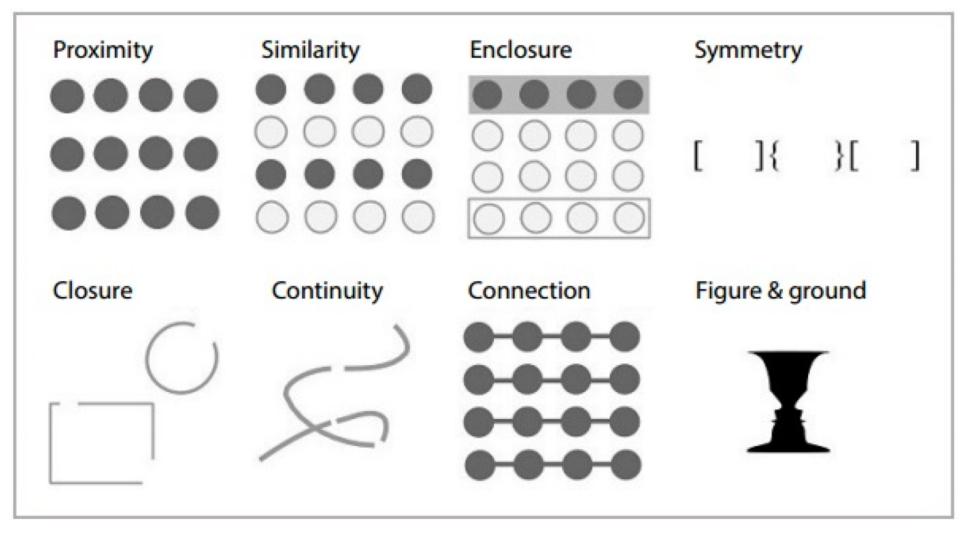
Figure and Ground



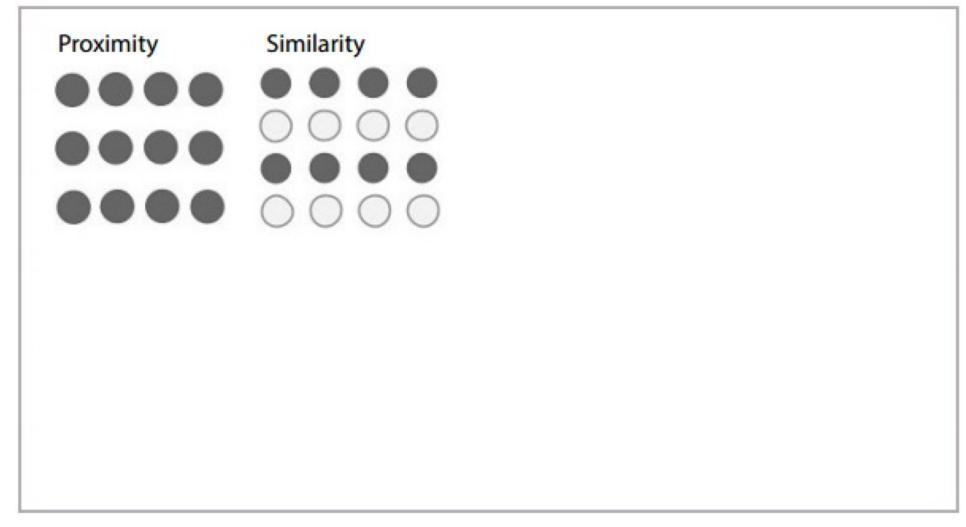




8 Gestalt Principles



2 Gestalt Principles I actually use



I use proximity and similarity (contrast)

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

TUESDAY, NOVEMBER 4 — ELECTION DAY

AN AMERICAN MENU \$75

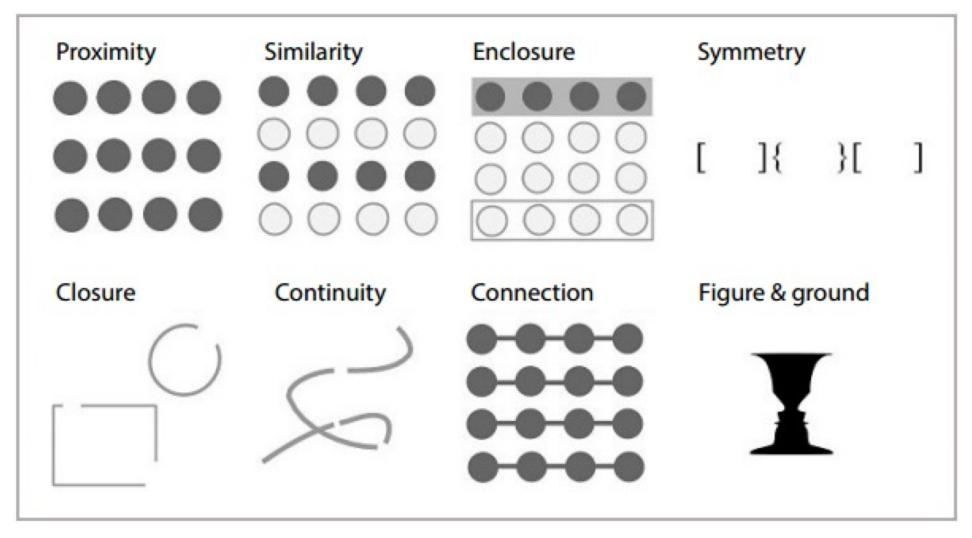
Caesar salad with anchovies, egg, and Parmesan cheese

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

Quiz: 8 Gestalt Principles



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.

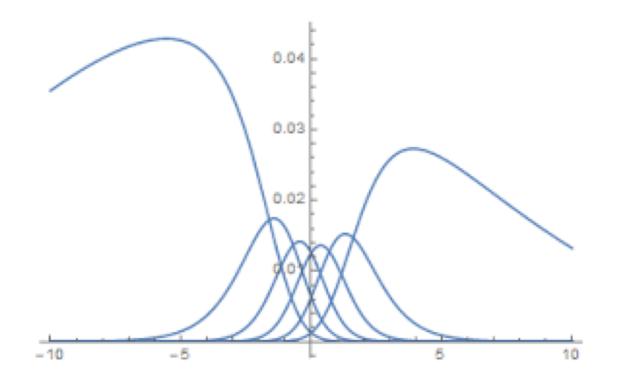
Design (as a noun: a design) can refer to such a plan or specification (e.g. a drawing or other document) or to the created object, etc., and features of it such as aesthetic, functional, economic or socio-political.

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.

Contents [hide] 1 Definitions 2 Design as a process 2.1 The rational model 2.1.1 Example sequence of stages 2.1.2 Criticism of the rational model 2.2 The action-centric model 2.2.1 Descriptions of design activities 3 Design disciplines 4 Philosophies and studies of design 4.1 Philosophies for guiding design 4.2 Approaches to design

Similarity of Color It is easy to scan for color

Quiz: what property is being used here?

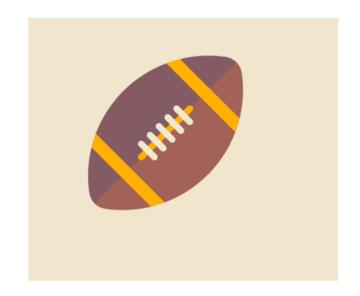


Continuity

Our minds perceive lines and curves as continuing on their trajectory

Quiz: what property is being used on the right?





Closure
Our minds fill in missing details

Quiz: what property is being used here?

February 1st.

You are cordially invited to

Vine and nibbles will be served.

When: February 20th, 2019 at 9:30pm.

ProximitySimilar data are close to each other

Robert and Alexandra's delectable after dinner

Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by

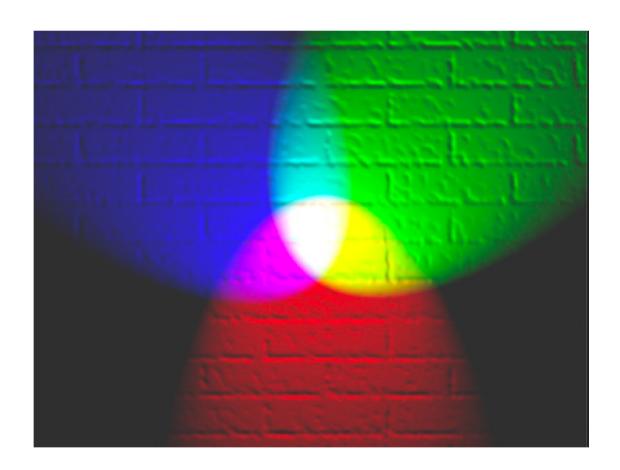
Summary

The human brain is always interpreting meaning.



Color Meaning and Representation

Culture	Red	Blue	Green
United States	Danger	Masculinity	Safety
France	Aristocracy	Freedom Peace	Criminality
Egypt	Death	Virtue Faith Truth	Fertility Strength
India	Life Creativity		Prosperity Fertility
Japan	Anger Danger	Villainy	Future Youth Energy
China	Happiness	Heavens Clouds	Ming Dynasty Heavens Clouds



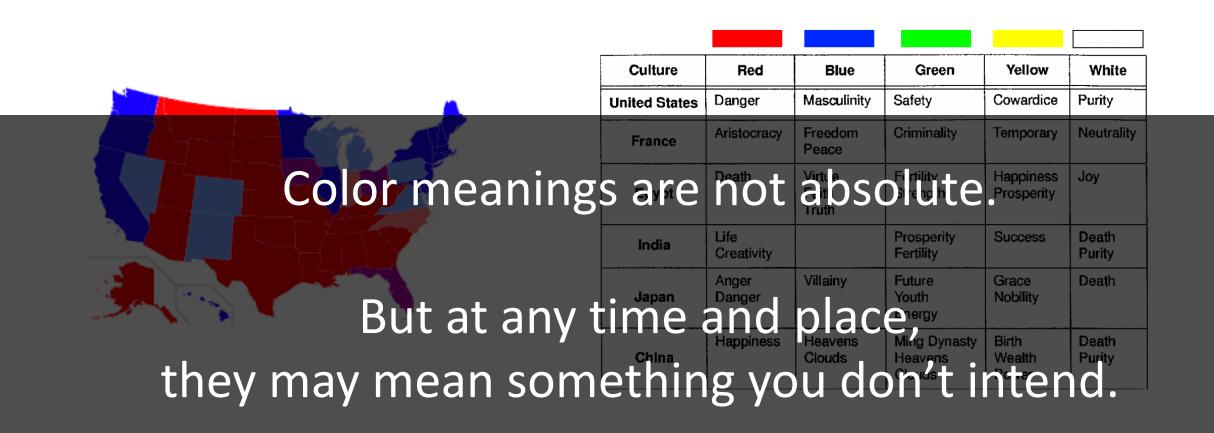
```
.blue_text{
    color: blue;
}

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

.blue_text{
    color: #0000FF;
}

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

Are color meanings arbitrary?



In your designs, stick to simple color meanings.



Don't use color as the only way to convey meaning. Use grouping, whitespace, **position**, size, contrast,

Typography Terms and Meaning



Microbes Point the Way to Shipwrecks

Serifs = "Intellectual, elite"

Scientists Found Breathable C Another Galaxy for the First Ti

Molecular oxygen is a key component of the air humans breathe, and now astronomers have spotted it a half-billion light years away. But don't hold your breath for quasar whippets. San Serifs = "Modern, simple"

Status of Standard Model Higgs searches in ATLAS

Using the full datasets recorded in 2011 at Js= 7 TeV and 2012 at Js=8 TeV: up to 10.7 fb-1

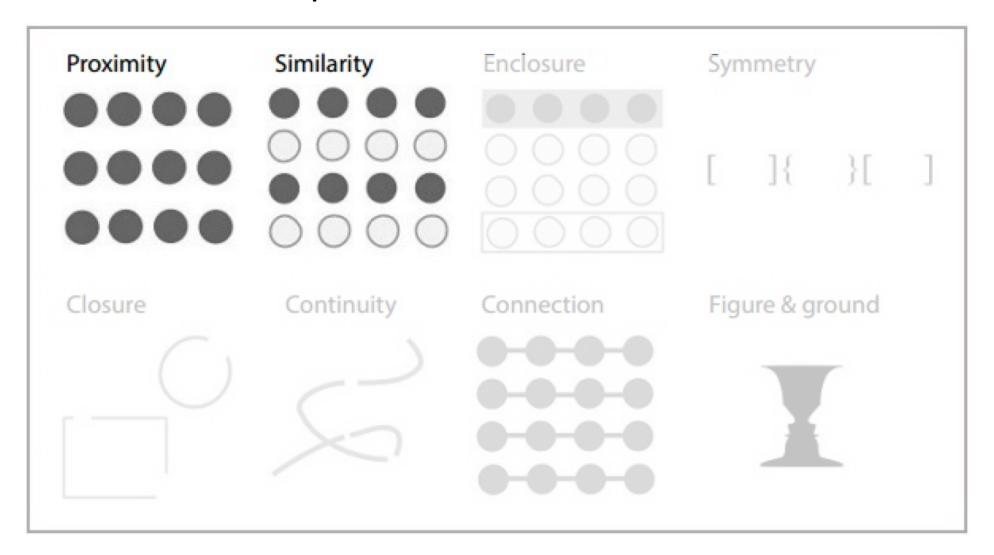
Fabiola Gianotti (CERN), representing the ATLAS Collaboration

SATLAS

Comic Sans = "Idiotic"

Your font should enhance your message, not detract from it.

8 Gestalt Principles



Pick four colors (and a white background)

