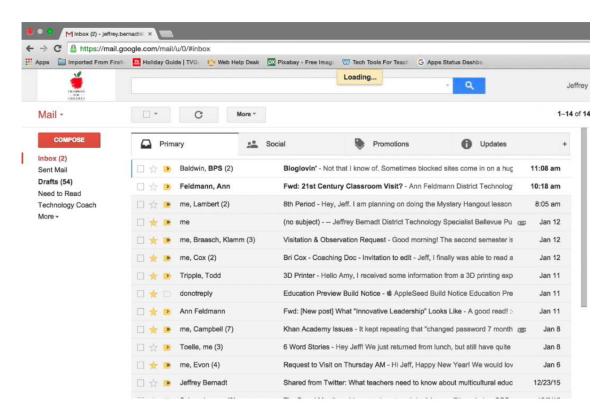
## Color, Typography, Gestalt

Prof. Lydia Chilton COMS 4170 3 March 2025

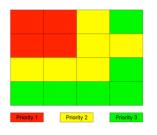
# The main feature of many websites is to display information in a way that helps users accomplish a goal.

```
( 37) Loans with tiny points are here now
      Jul 01 R. Jackson
                          ( 123) Loans with tiny rates are here now
      Aug 05 Benjamin E. Mag ( 50) Long time no hear
       May 17 Krista Aaron (44) long time no see....
      Jun 03 Josiah House ( 35) Looking for a hot date tonight, tomorrow, or next week?
       Jul 03 Brigitte I. Hay ( 63) Looking for a N.ew H.Ome?
                          ( 58) Looking for you
       May 17 Joe Burns
       Jun 01 Save in a poor ( 145) Low Rate Consolidation Mortgage Loan
     + Jul 02 Igiel@virtualig ( 2) LowCost SoftWare OnCD
*-Mutt: Mail/junk/spam [Msgs:950 Old:142 10M]---(subject/date)--
ate: Mon, 17 May 2004 03:40:09 +0100
rom: Krista Aaron <Christinefeminine@highstream.com>
ubject: long time no see....
  Autoview using /usr/bin/elinks -force-html -dump ''/tmp/mutt.html'' -- ]
My name is Jen and I'm new to this dating thing. I've checked out your profile
you put up and it's interesting. =) I just want to get to know you a little
          better if you don't mind, come check my profile out at:
                         www.livejen.com/chat.html
also got a webcam so we can make it interesting, anyways hope you get back to
                         gxsnkxxgnduvyjwyceudcjobxs
                            zcozccrociesbehgbpow
                        rnxlfujnqpblipdkgwwyqofracsz
                        xmqawbxsb.jrppoibvlpfhqowldtp
                         bixhghvrxtqgfeoqcofzycb
                         hugzffaffulsklpzhrfxbtt
                          btpztlfotqmmoaiwlosqv
    627/950: Krista Aaron
  is not bound. Press '?' for help.
```



#### Seven tools for visually indicating importance







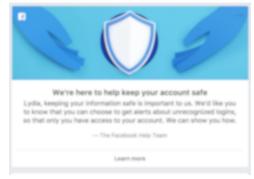


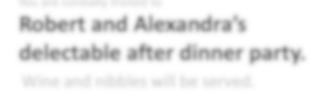
Conceptual grouping

Location

Whitespace

Size







**Images** 

Contrast

Color

#### The human brain is always interpreting meaning.

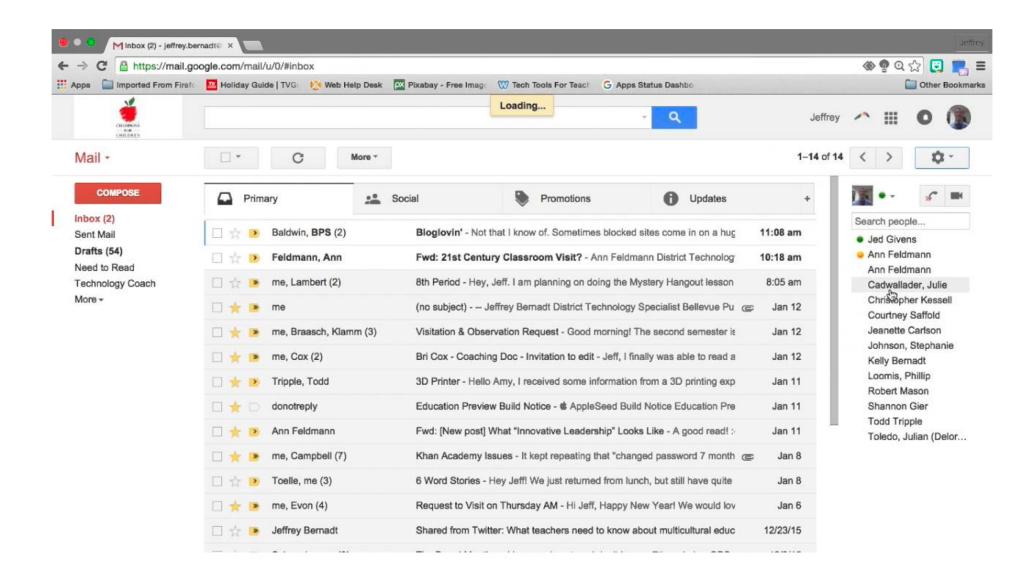


### Color and Meaning

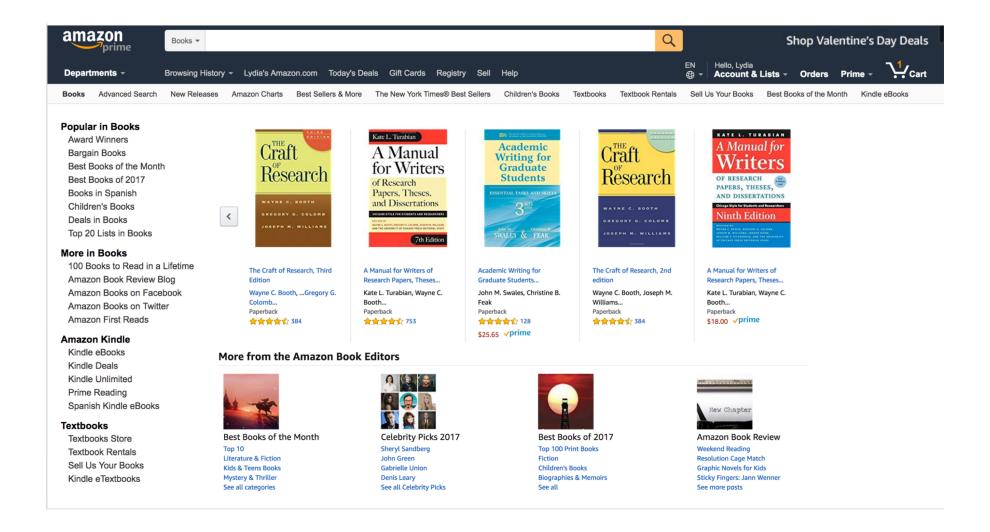
## In addition to signaling importance, colors have meaning.



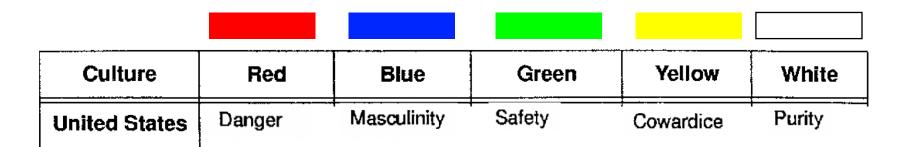
#### Where is color used? What does it mean?



#### 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

Culture	Red	Blue	Green	Yellow	White
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Japan	Anger Danger	Villainy	Future Youth Energy	Grace Nobility	Death
China	Happiness	Heavens Clouds	Ming Dynasty Heavens Clouds	Birth Wealth Power	Death Purity

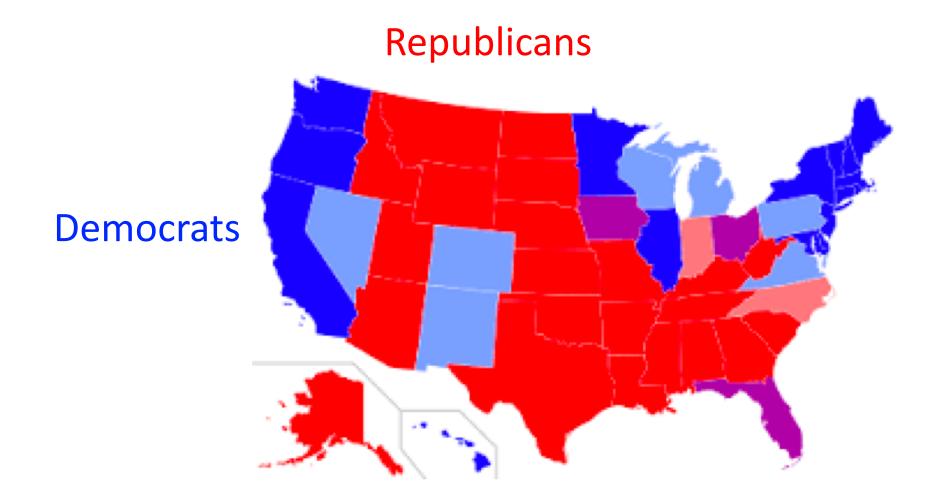
#### What does blue mean in India?

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

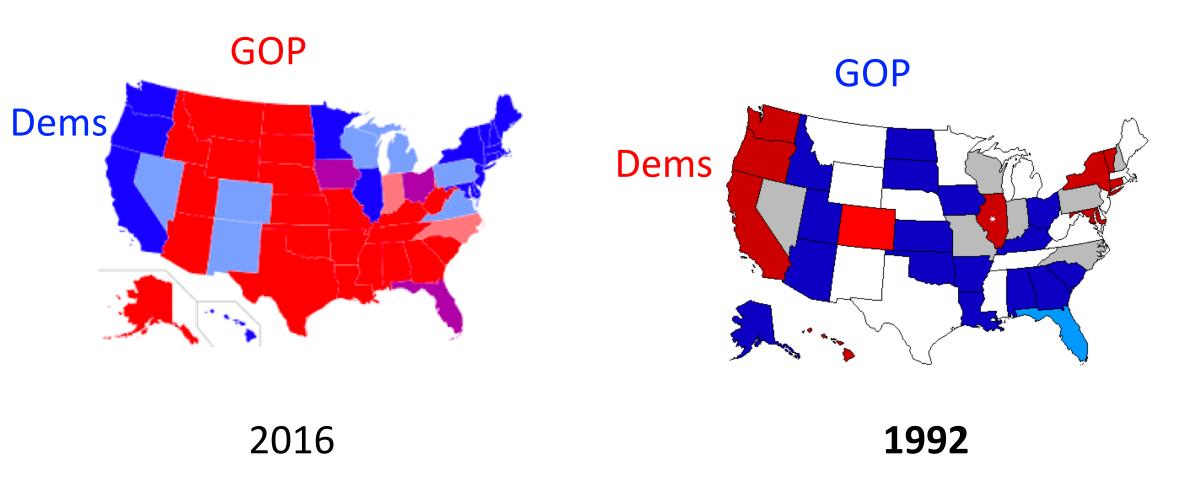
## COLOR EMOTION GUIDE



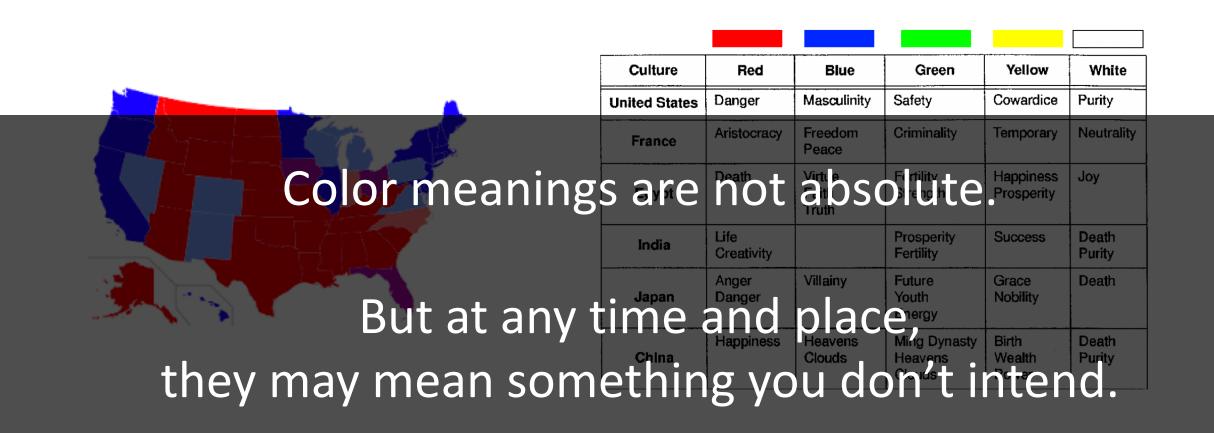
#### What cultural associations do these colors have?



#### When did the "red state" association start?



#### Are color meanings arbitrary?



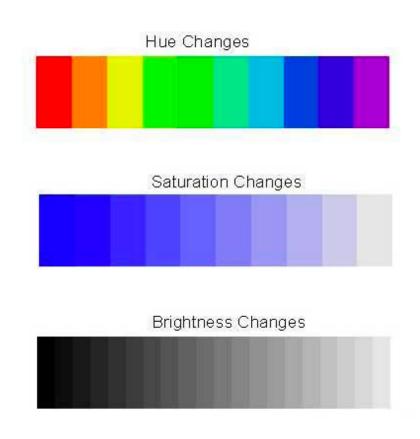
In your designs, stick to simple color meanings.

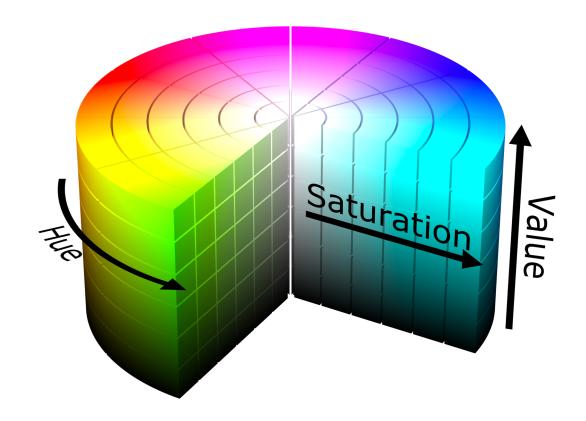


Don't use color as the only way to convey meaning. Use grouping, whitespace, position, size, contrast,

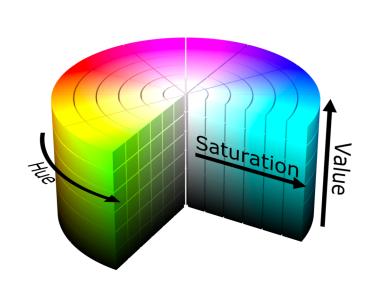
### Color Representation

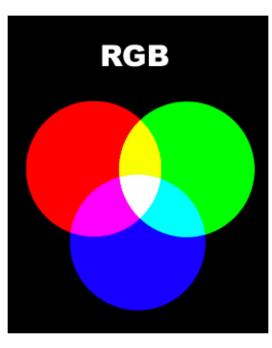
## There are three perceptual dimensions of color: HSV – Hue, Saturation, Value (Brightness)

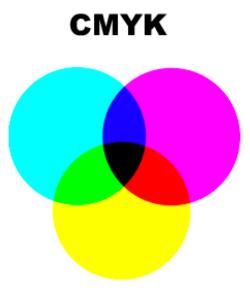


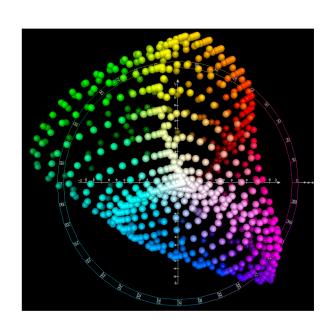


#### There are many ways to represent color









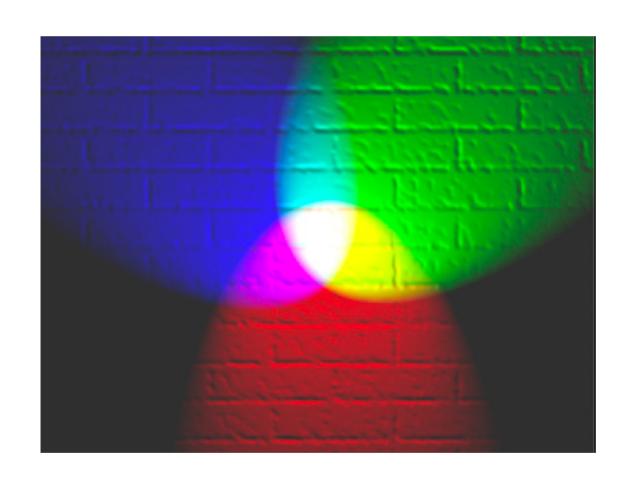
Hue, Saturation, Value

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?

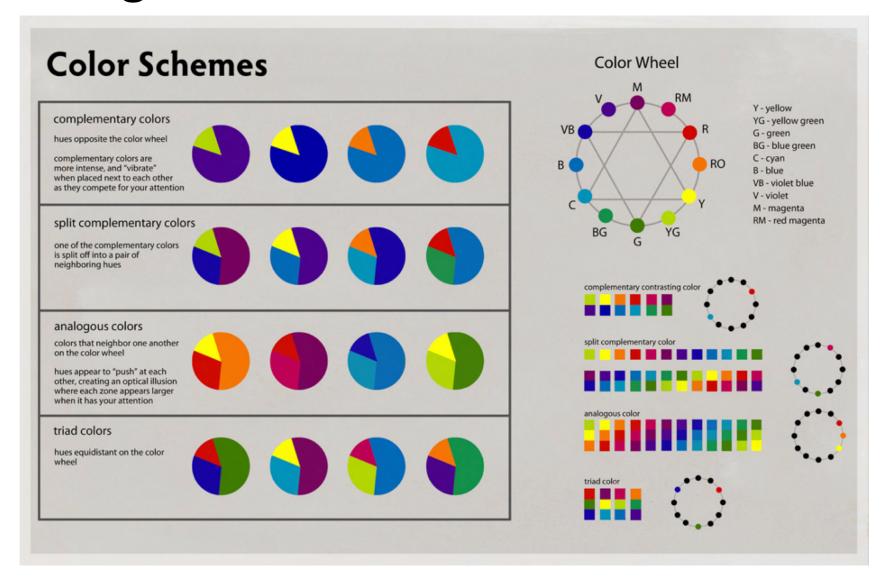




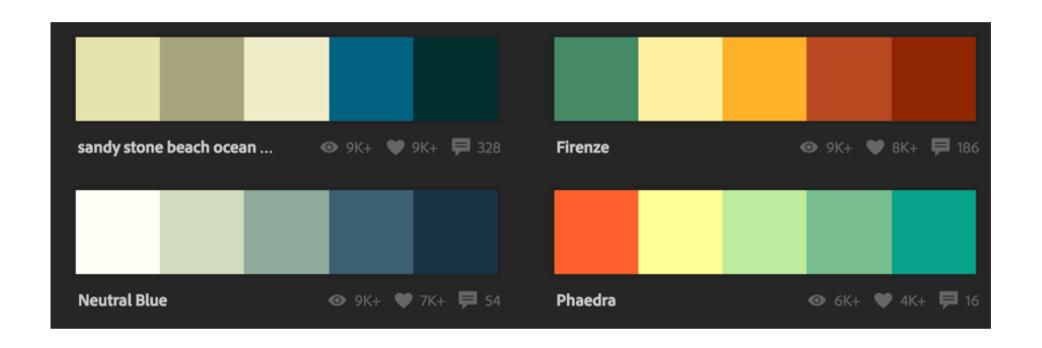
#### Ways to specify a color in HTML

```
.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

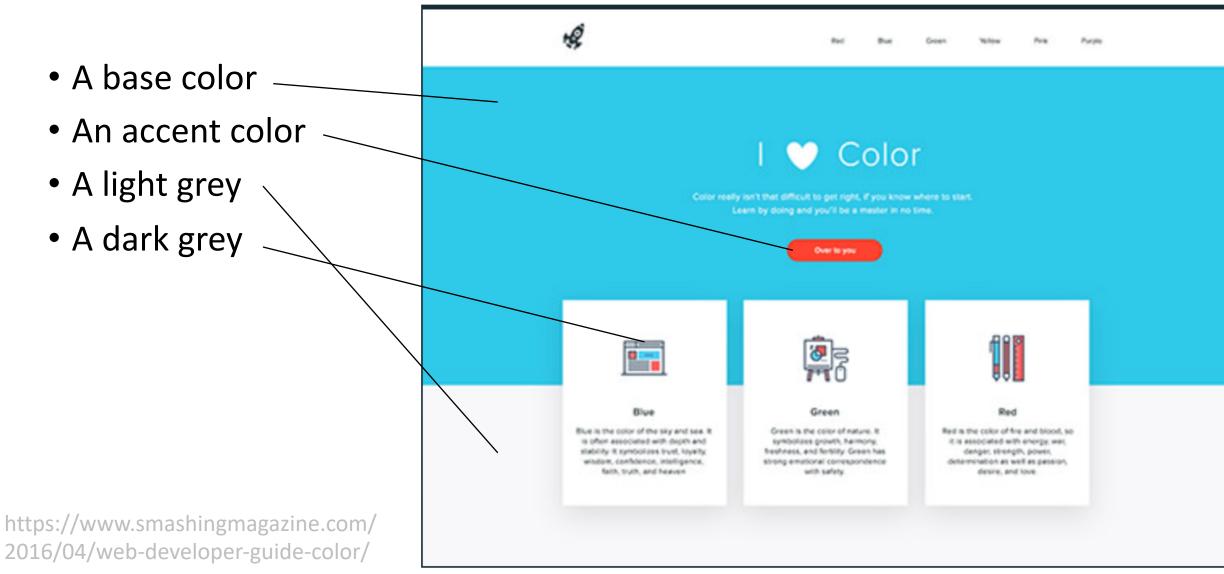


If you are not a color expert, get inspiration from experts.

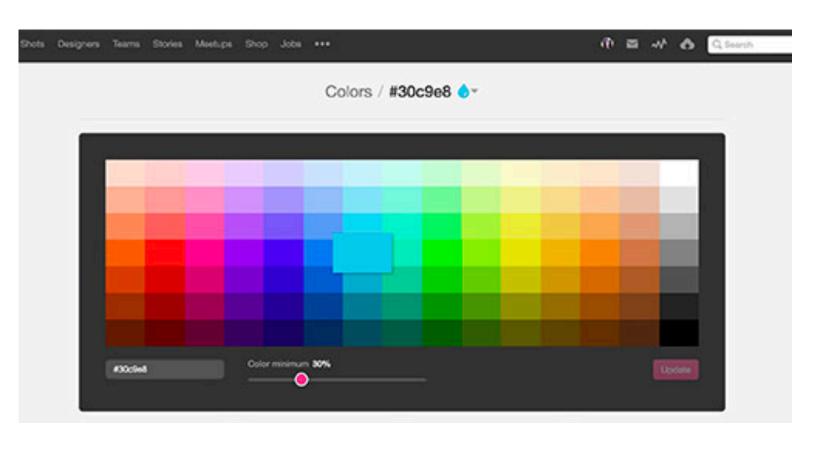


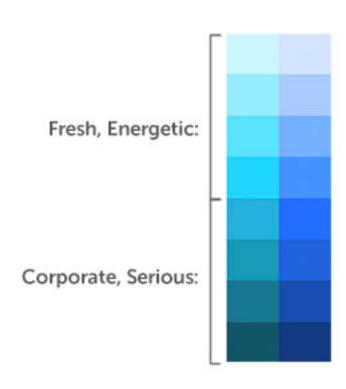
#### Basic Web Color Advice

#### Pick four colors (and a white background)



#### There are tools to help pick base colors

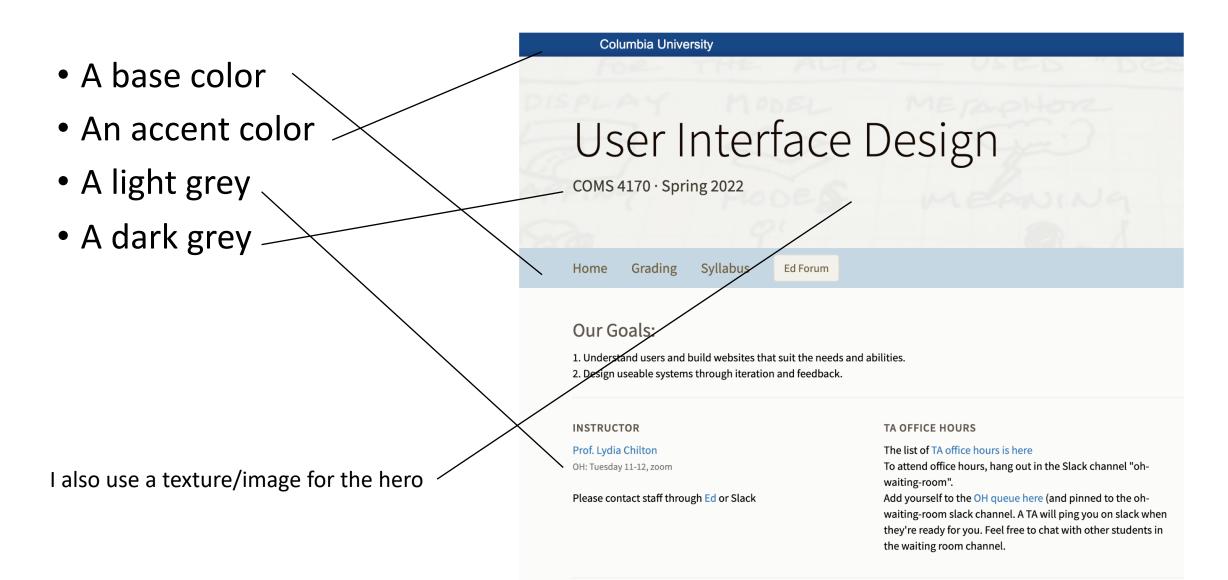


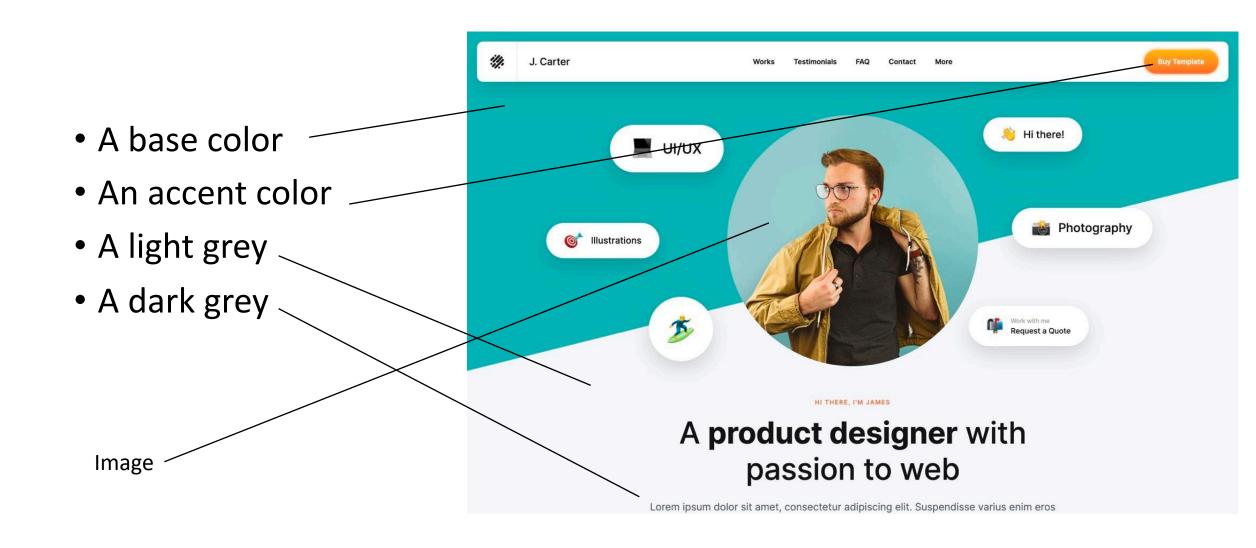


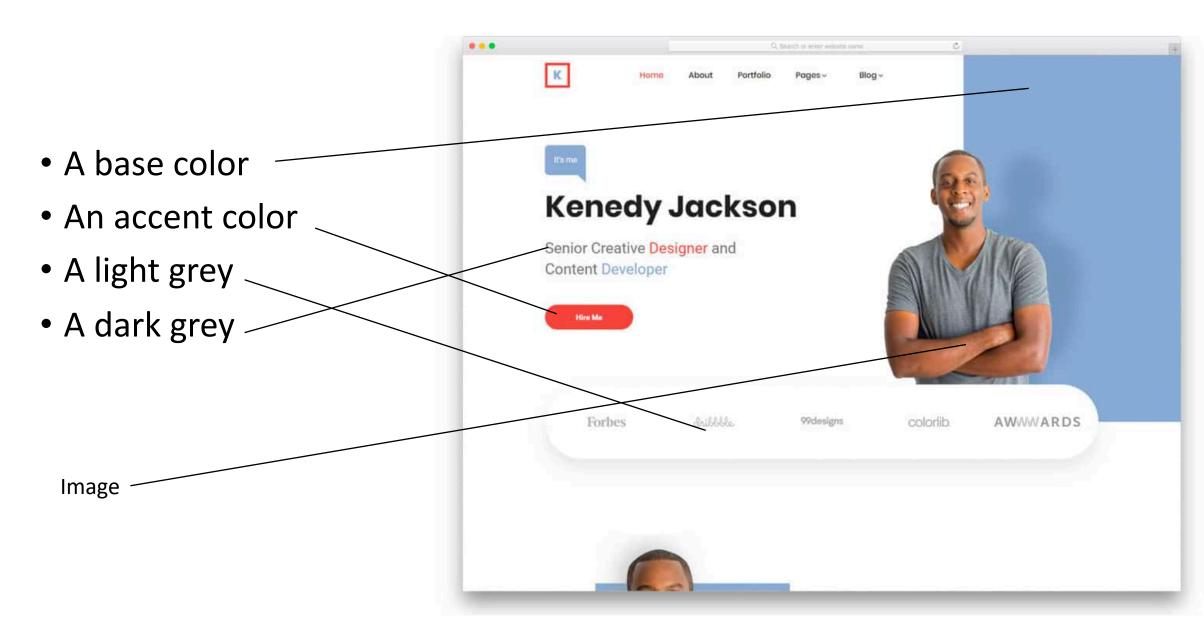
#### Make your design in greyscale first!



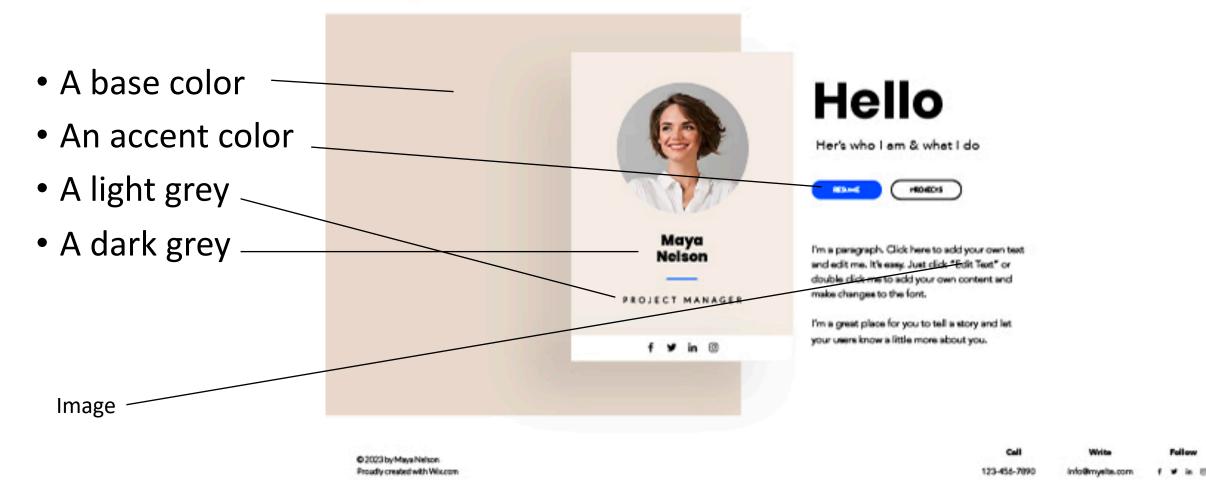
#### What are the 4170 site colors?





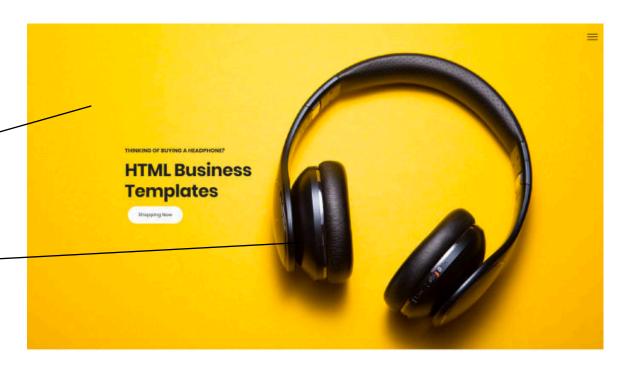


#### Maya Nelson / PROJECT MANAGER



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

Image



#### Find a quality and right headphones not easy

Lerem ipsum deler sit amet, consectatur adipisionig elif. Asperiores poor es sarum est voluptates consequatur quam. Qui id illo nisi dolores quidem maxime, ab, nobis consectatur, dolore placest simmaper Animi. A rescunt, eius dolores magnam facere consectatur totam oupristate, rem et quam commodi. flugit rerum <u>magni dostris sit</u> quasi deleniti. Atque vel consectatur, molitis repellendus voluptas corrupti odio accusantium architecto! Januari et al.

#### Business HTML Templates Free Download

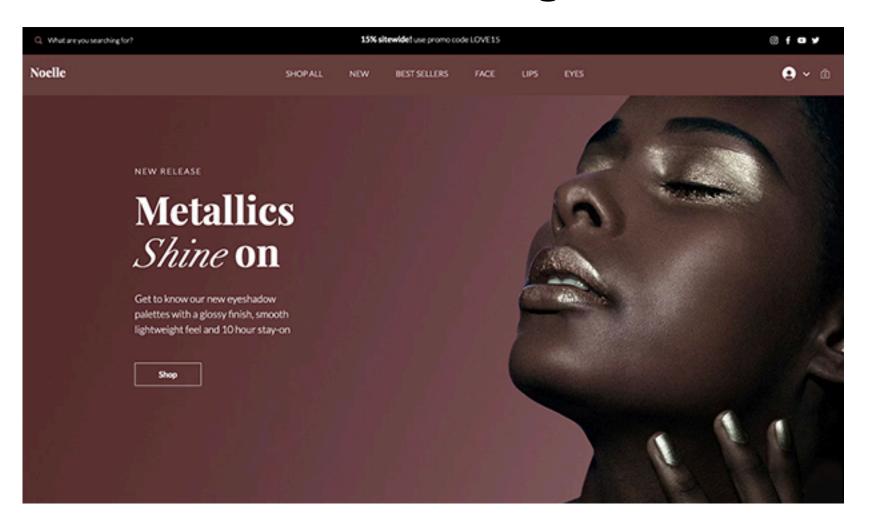
#### Hottest headphones of the month



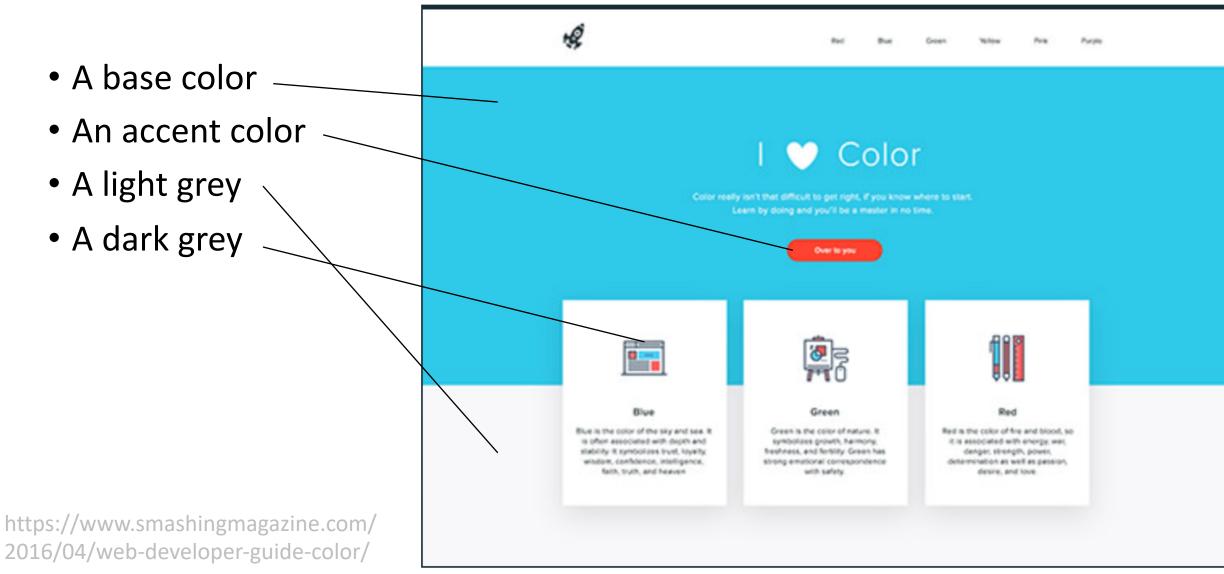




# These rules are trickier for dark backgrounds. Please stick to a white background for now.



### 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

S Leading
S Leading

## 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

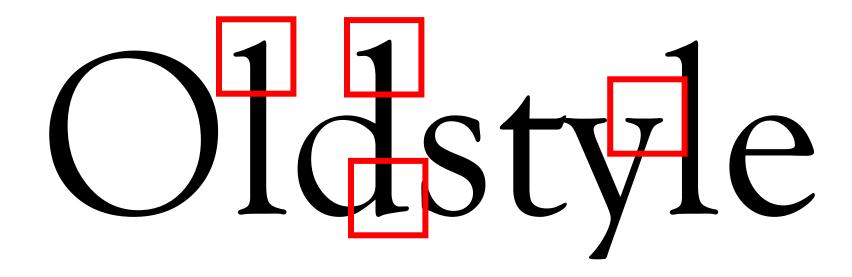
Roboto Black & Black Oblique

Roboto Condensed Light & Condensed Light Oblique

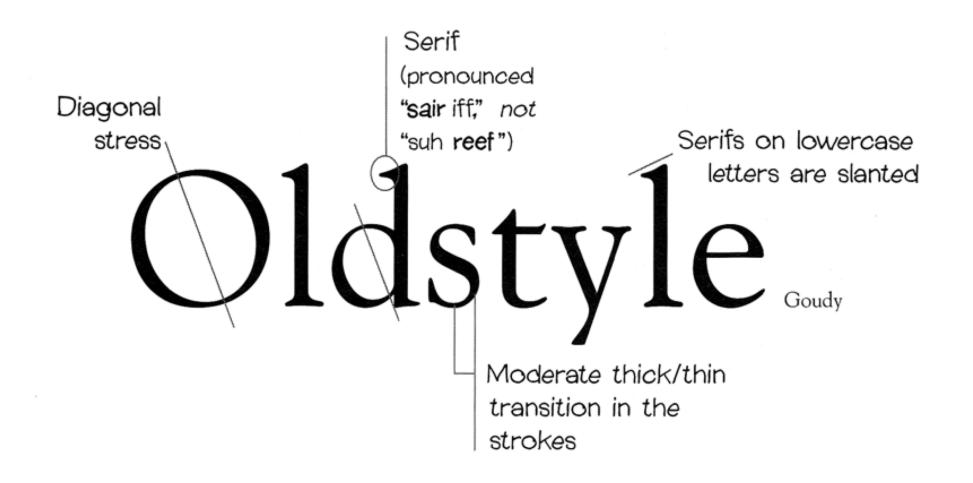
Roboto Condensed & Condensed Oblique

**Roboto Condensed Bold & Condensed Bold Oblique** 

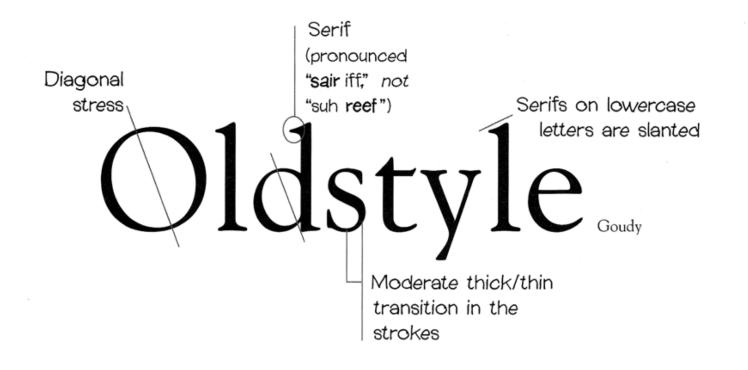
#### What indicates a serif font?

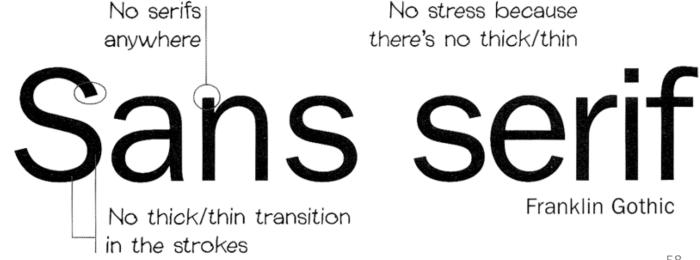


#### Serifs – there's more!



### 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 Hork 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?

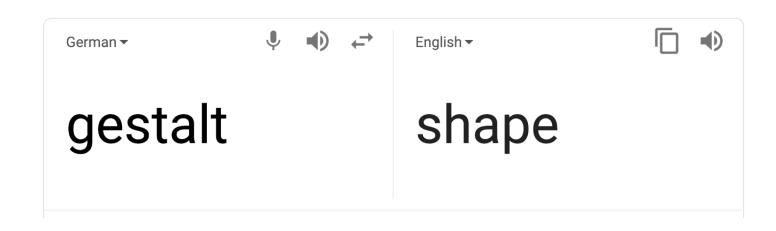


You're an idiot.

## Eight Gestalt Principles

# ge·stalt /gəˈSHtält/ noun PSYCHOLOGY

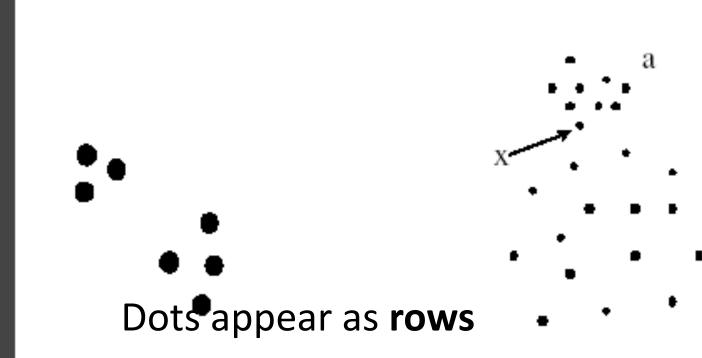
an organized whole that is perceived as more than the sum of its parts.



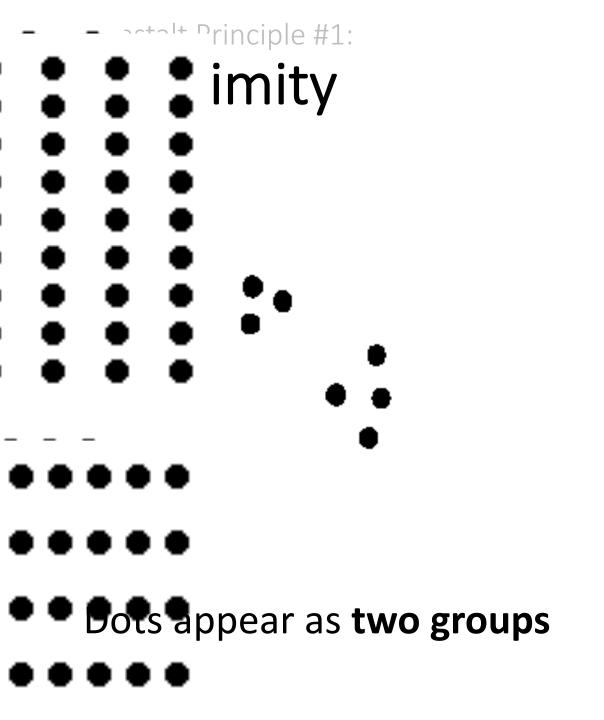
Gesta

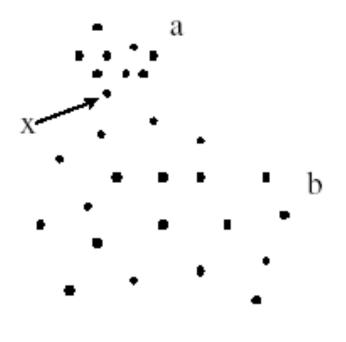
Proximity

Prd



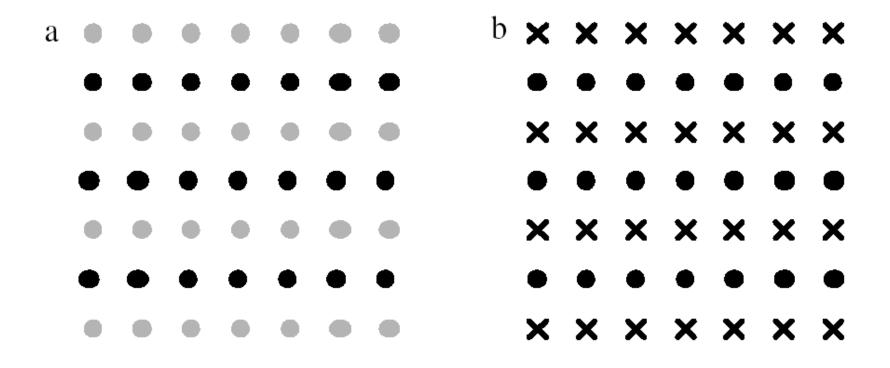
Dots appear as columns





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

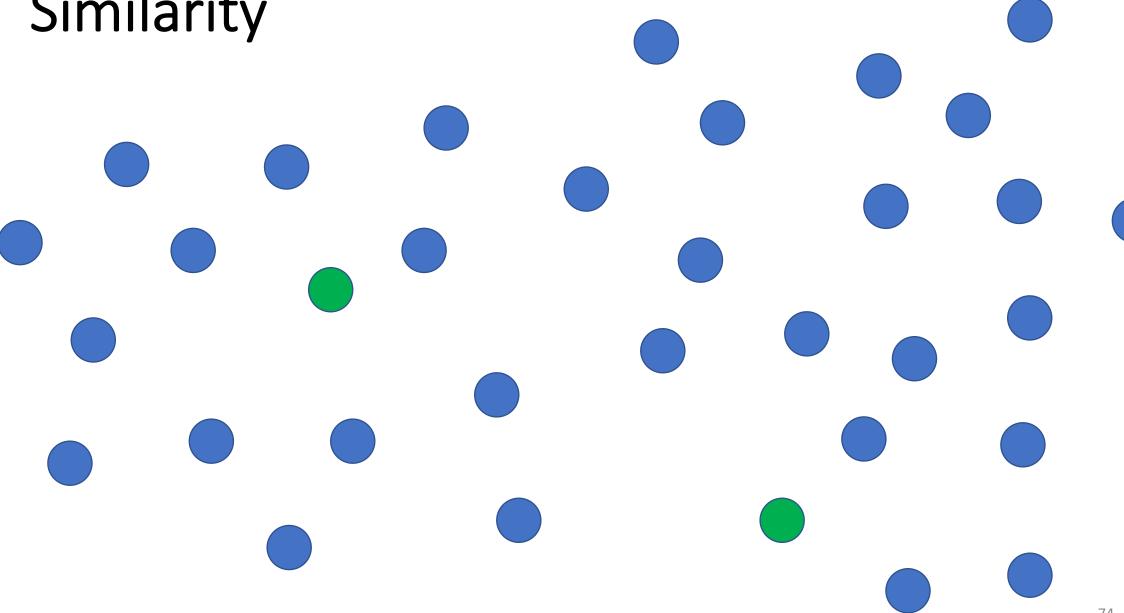
Apple and raspberry pecan crisp with vanilla ice cream

Gestalt Principle #2:

## Similarity

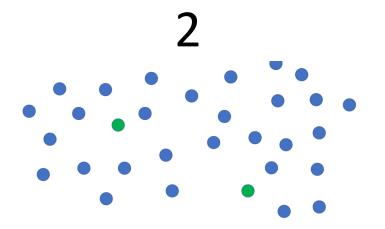
How many green circles are there?

## Similarity



## Similarity

#### How many green circles are there?

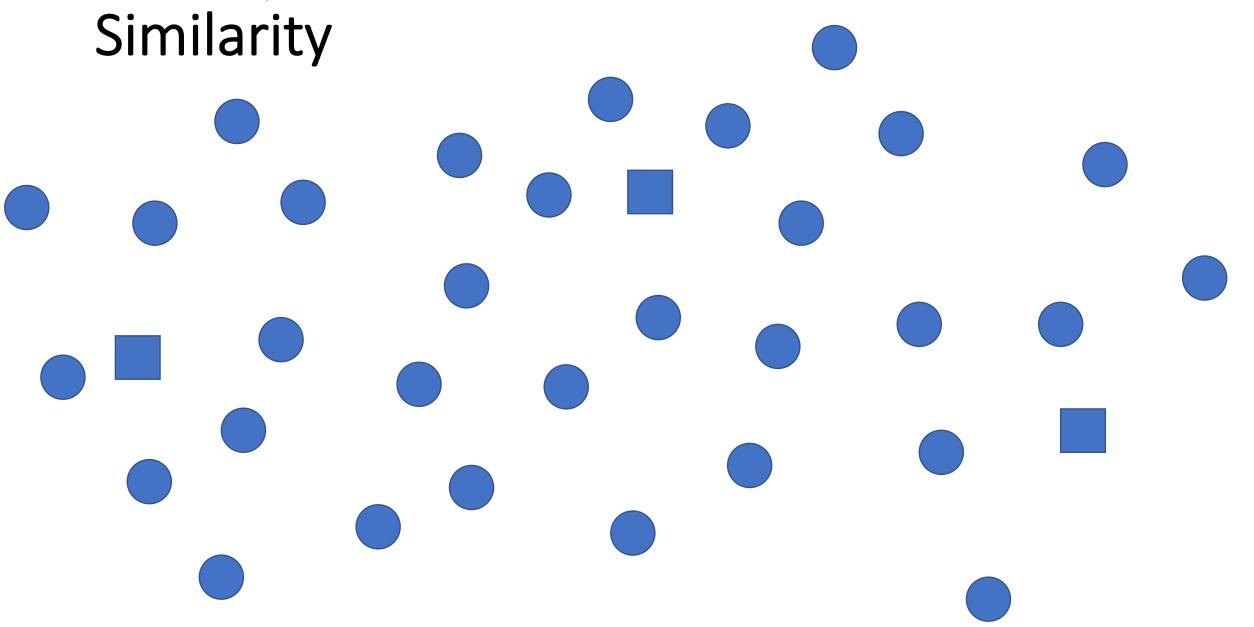


Gestalt Principle #2:

### Similarity

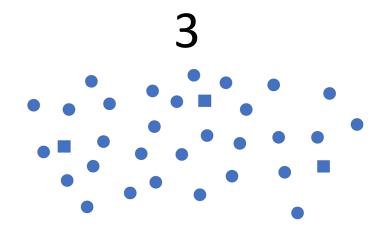
How many **rectangles** are there?

Gestalt Principle #2:



## Similarity

### How many **rectangles** are there?



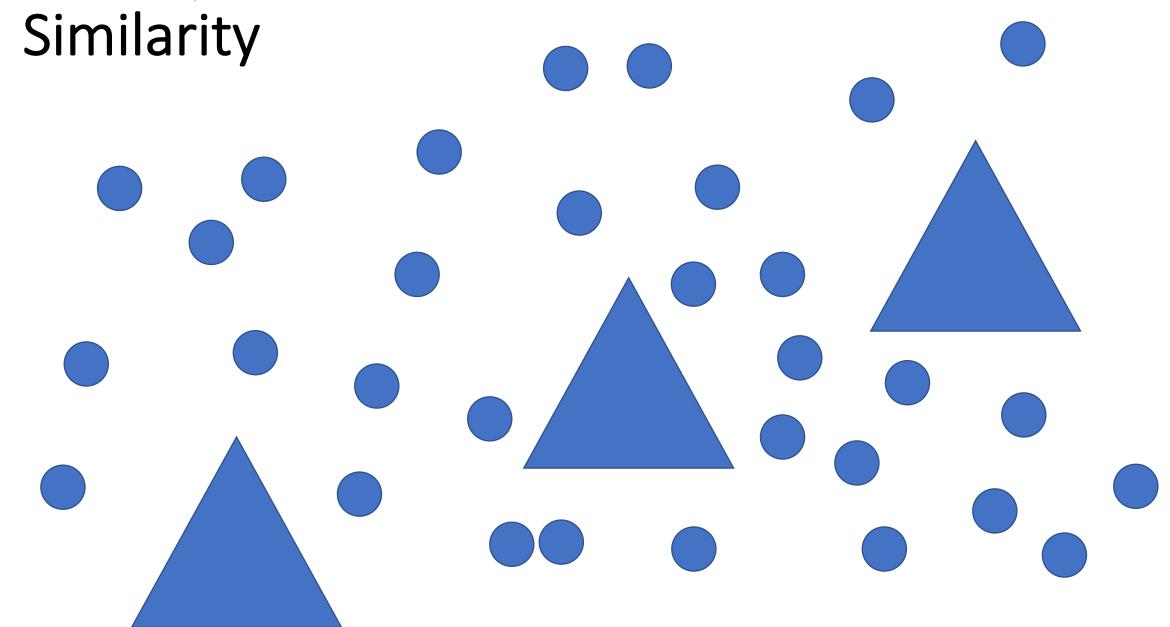
Shapes are hard to scan for

Gestalt Principle #2:

### Similarity

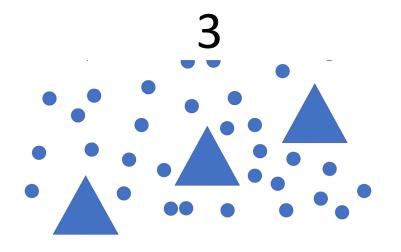
How many **triangles** are there?

Gestalt Principle #2:



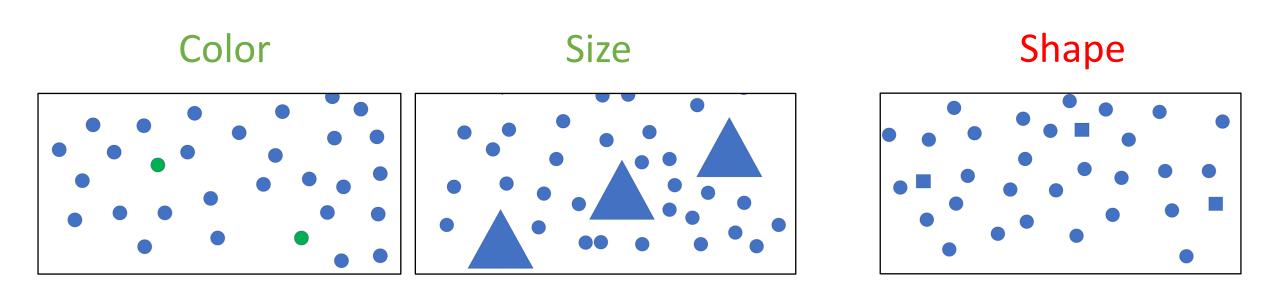
#### Similarity

#### How many **triangles** are there?



Size is easy to scan for

#### What properties are easy to scan for similarity?

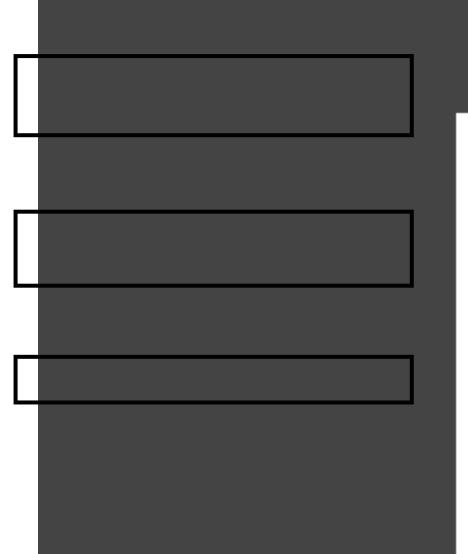


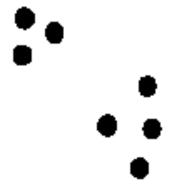
Color and Size scans better than shape

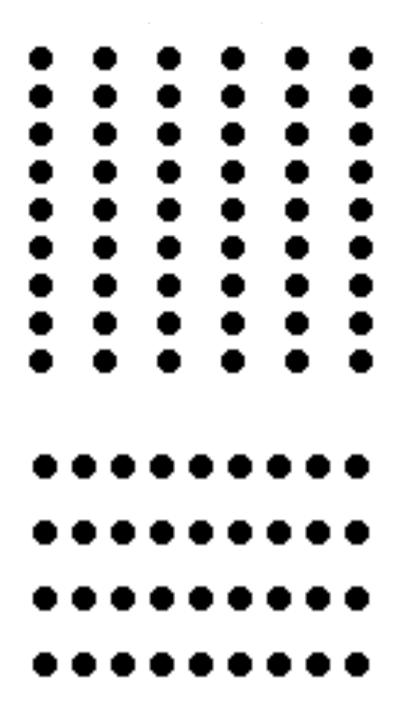
Gestalt Principle #3:

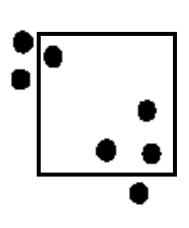
#### Enclosure

#### Proximity





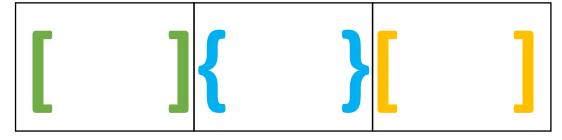




#### Symmetry

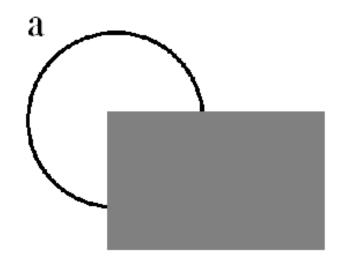
[ ]{ ]





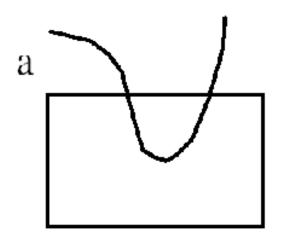
Symmetry indicates 3 groups

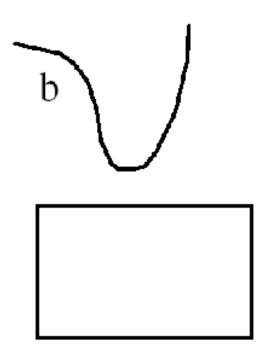
#### Closure

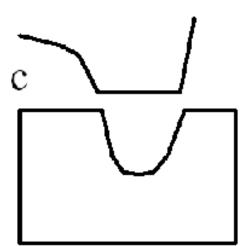




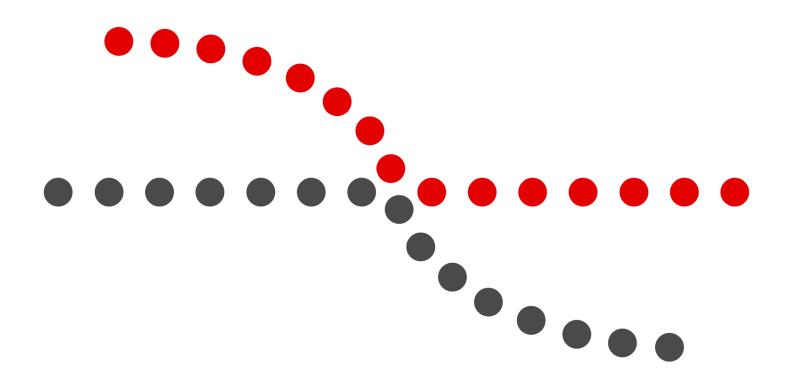
#### Continuity







#### Continuity

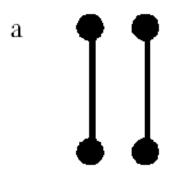


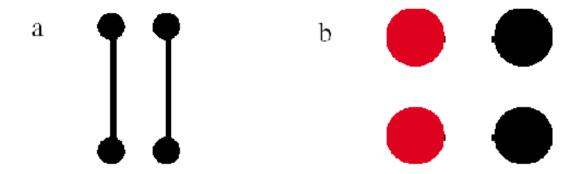
Gestalt Principle #7:

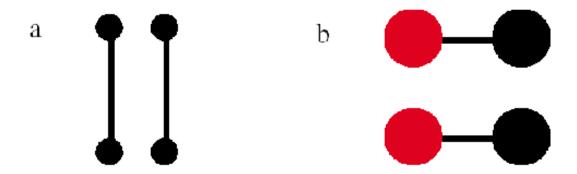
#### Connection

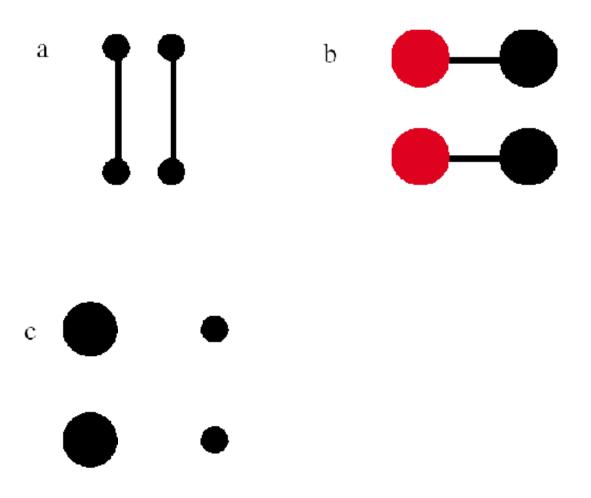
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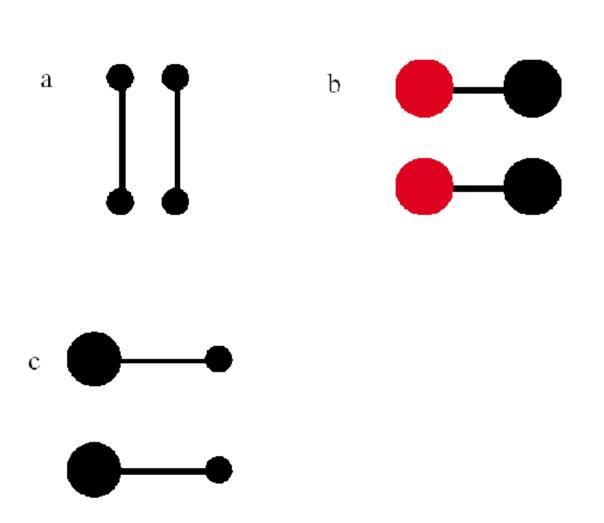
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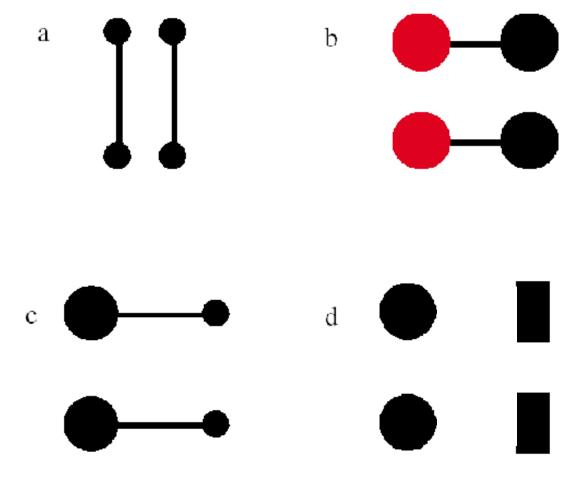


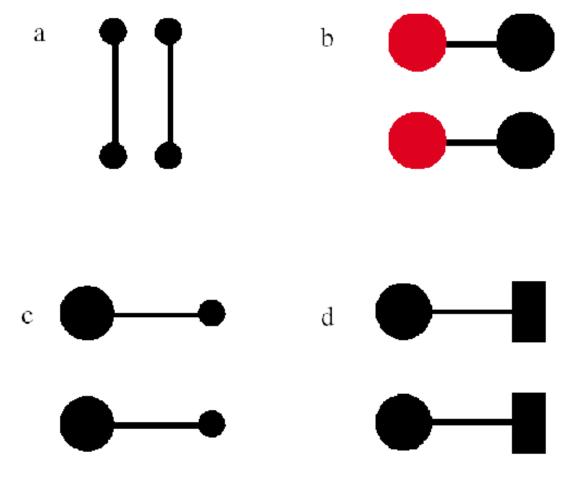






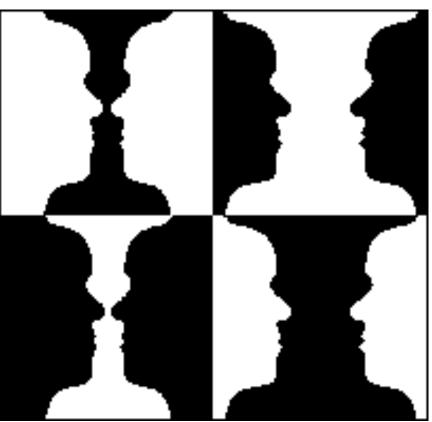




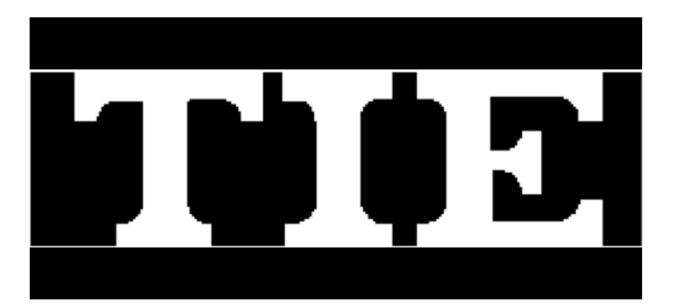


#### Figure and Ground

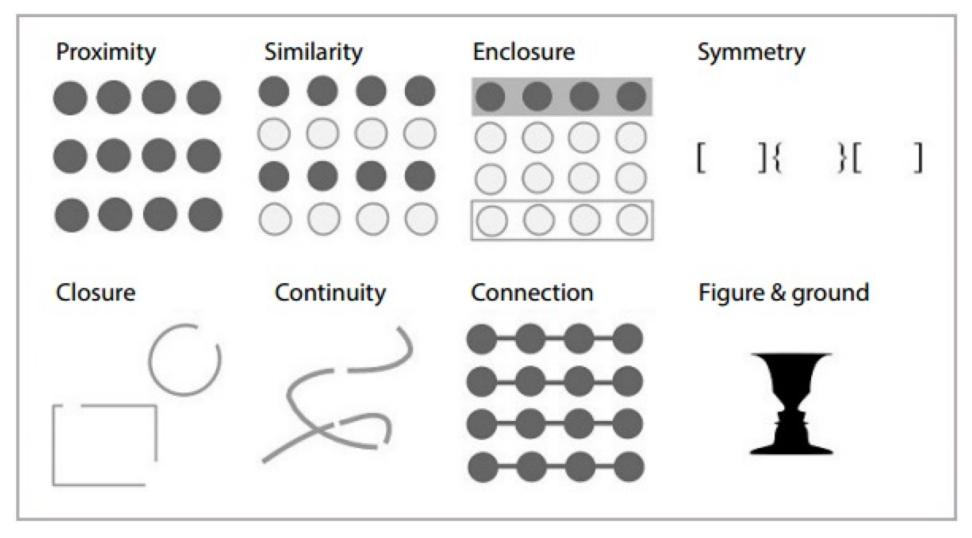




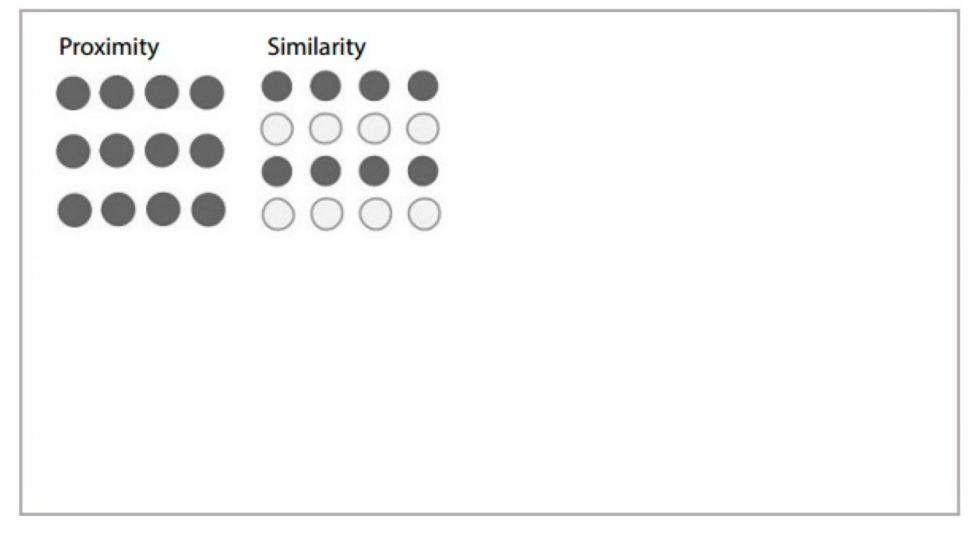
# 



#### 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

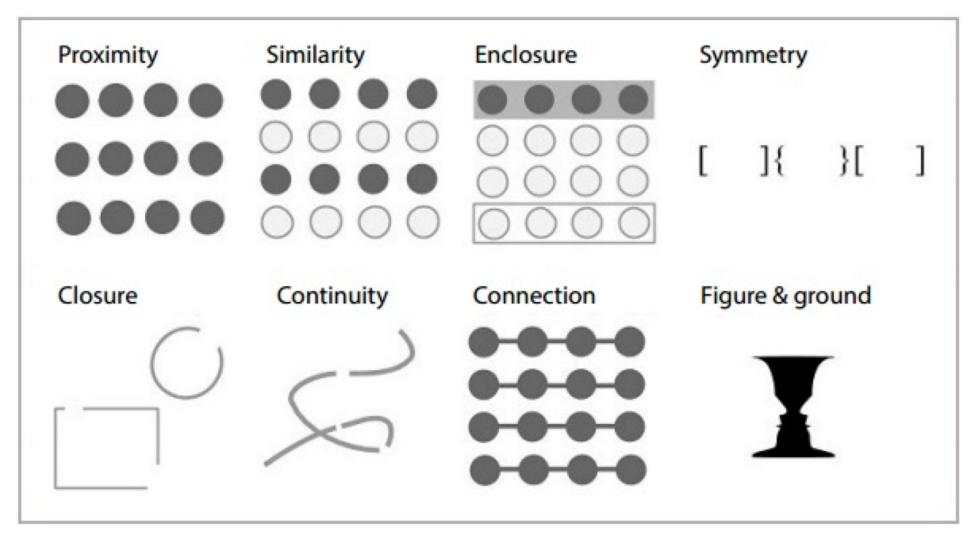
Caesar salad with anchovies, egg, and Parmesan cheese

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.

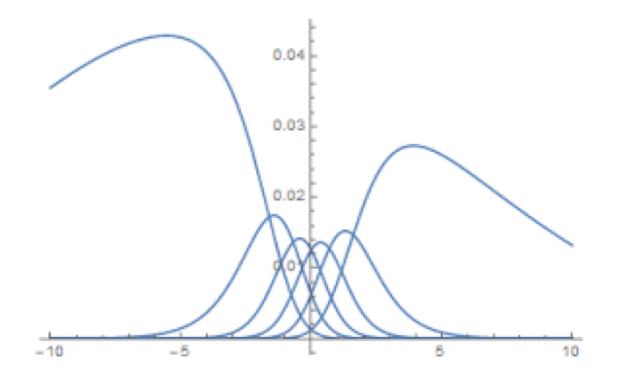
**Design** (as a noun: a design) can refer to such a plan or specification (e.g. a drawing or other document) or to the created object, etc., and features of it such as aesthetic, functional, economic or socio-political.

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?

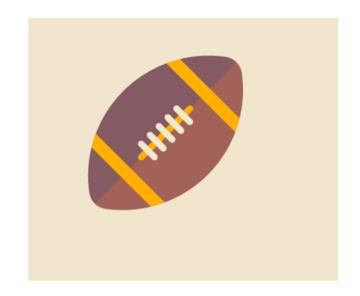


**Continuity** 

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.

**Proximity**Similar 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

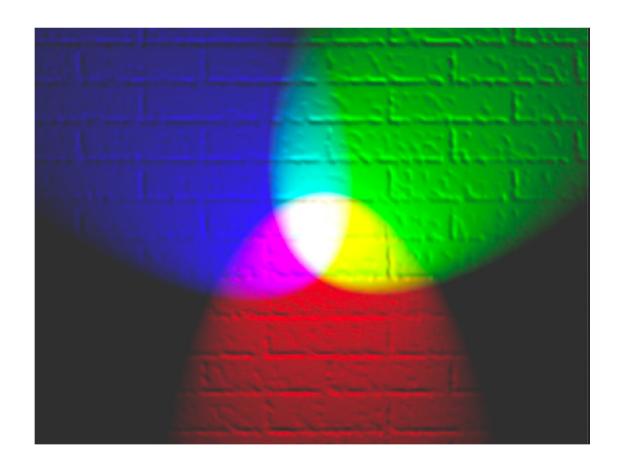
### Summary

#### 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



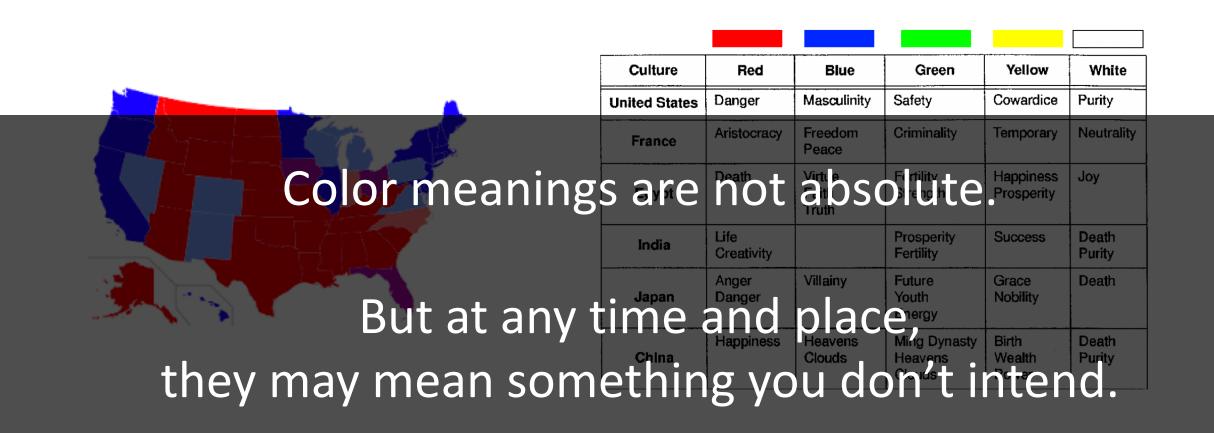
```
.blue_text{
    color: blue;
}

.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

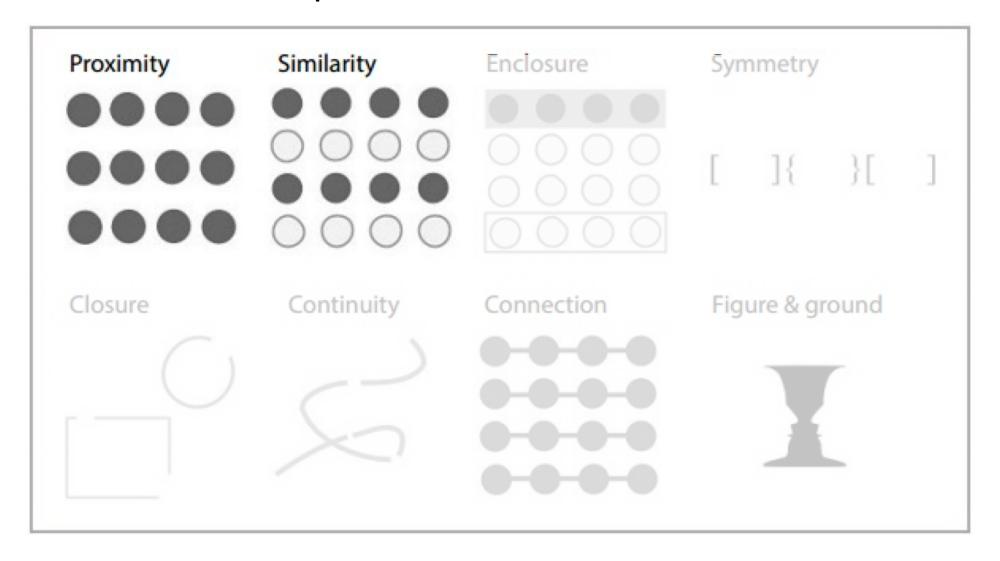
Using the full datasets recorded in 2011 at Js= 7 TeV and 2012 at Js=8 TeV: up to 10.7 fb-1

Fabiola Gianotti (CERN), representing the ATLAS Collaboration

Comic Sans = "Idiotic"

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

#### 8 Gestalt Principles



#### Pick four colors (and a white background)

