Color in UX

By Scott Lenger
Sr. Designer/Developer @ BOG

Why Color?

Because too often the job of "User Experience" is focused on wireframes and limited to getting the user from A -> B, without any consideration of emotional engagement or feelings.

The More You Know!

Behavioral Science
https://www.nickkolenda.com/color-psychology/

Regular Science https://earthobservatory.nasa.gov/blogs/elegantfigures/2013/08/05/subtleties-of-color-part-1-of-6/

History of working with color in print and on screen
http://theresamarierhyne.com/Theresa-Marie_Rhynes_Viewpoint/Applying_Color_Chapter.html

Nonlinear color, datavisulation, chroma.js
https://www.vis4.net/blog/2013/09/mastering-multi-hued-color-scales/

UX Definition, per usability.gov

User experience (UX) focuses on having a deep understanding of users, what they need, what they value, their abilities, and also their limitations. It also takes into account the **business goals** and objectives of the group managing the project. UX best practices promote improving the quality of the user's interaction with and **perceptions** of your product and any related services.

Meaning of Colors

power energy passion love aggression danger	optimism hope cherful warmth happiness positivity	trust security order cleanliness strenght reliability
energy balance warmth creativity cherfulness enthusiasm	nature health good luck fertility finances eco-friendly	spirituality mystery royalty sophistication femininity glamourousness

LEAD STORY

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FEATURED VIDEO

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Military Spouse Appreciation

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The Army Strategy and Vision

STAND-TO!

Today's Focus:
Army Officer Commissioning

javascript:;

America's NAVY
FORGED BY THE SEA

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LEADERSHIP UPDATES

SAS 2019

The Sea-Air-Space Exposition (SAS) is an annual event hosted by the Navy League of the United States. SAS brings together the U.S. defense industrial base, private-sector U.S. companies, and key military decision makers for an innovative, educational, and professional maritime-based event.

Learn More ▶

RROC

AAPI HERITAGE MONTH

SUSTAINABILITY - AGILITY - SUPERIORITY

SeaAirSpace

The Navy League's
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NAVY NEWS SERVICE TOP STORIES 🔊

EXERCISE NORTHERN EDGE 2019 KICKS OFF IN ALASKA

Approximately 10,000 U.S. military personnel are participating in the joint training exercise on and above central Alaska ranges and the Gulf of Alaska, May 13-24.

May 13, 2019

NAVY ANNOUNCES UNIVERSAL TRAINING PRECAUTIONS FOR PHYSICAL EXERCISE

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Adventurous	Old	Industrial	**Innovative**	Formal	Organic	Appealing
Unique	**Upbeat**	**Hip**	Stimulating	Historic	Bold	Bright
Sleek	Smart	Business-like	Busy	Calm	Capable	Friendly
Fun	Caring	Cutting Edge	Efficient	Familiar	Functional	Honorable
Impressive	Intense	**Modern** (clean)	No-nonsense	**Playful**	Powerful	**Quirky**
Reliable	Revolutionary	Clever	Inspiring	Cheerful	Collaborative	**Fresh**
Classic	Sophisticated	Strong	Trustworthy	Unconventional	Versatile	
Accessible (Consumer)		Analytical	Archaic	Influential	Forward-thinking	Authoritative
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AROUND NOAA //

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Quick links to applications and tools.

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(?) Patent basics >
Trademark basics >
Find help in your area >

The patented boat that won the war
How a New Orleans inventor helped defeat the Nazis. FULL STORY >

Scott Boalick appointed Chief Judge for PTAB

Occupational Safety and Health Administration

Summer Job Safety for Young Workers

Learn about OSHA's resources on protecting young workers hired for summer jobs. Read the blog. #MySafeSummerJob

● ● ●

TAKE ACTION

Contact OSHA

NEWS   More News

May 13, 2019
U.S. Department of Labor Cites Iowa U.S. Postal Office For Blocked Exits and Failing to Train on Emergency Plan
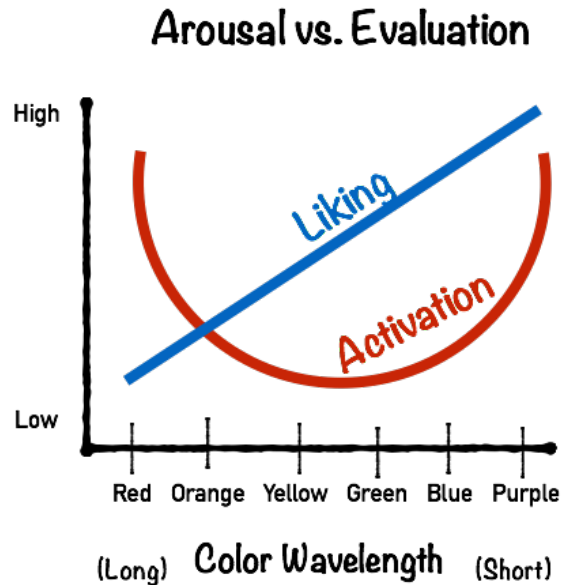
TIP OF THE WEEK

History

Fulfilling the Promise

Home
ABOUT

The ideal college experience, two

Color has meaning culturally, but also by how it is perceived

Arousal vs. Evaluation

The Hue and Intensity of a color affect the users reaction

BRAND TRAITS	HUE										VALUE		CHROMA	
	Red	Orange	Yellow	Green	Blue	Purple	Pink	Brown	Black	White	Low	High	Low	High
Competence					✓				✓					✓
Excitement	✓	✓	✓								✓			✓
Ruggedness				✓				✓			✓			✓
Sincerity			✓				✓			✓		✓	✓	
Sophisticated						✓				✓		✓		

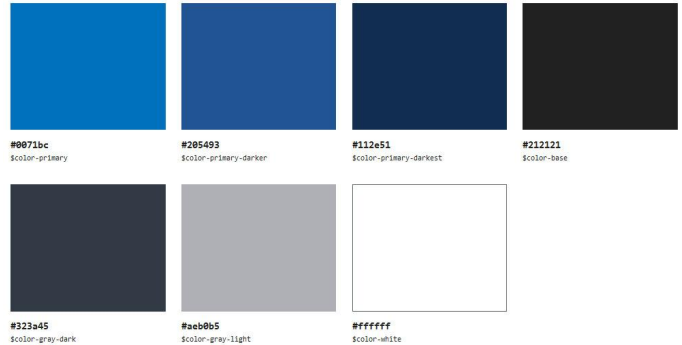https://www.nickkolenda.com/wp-content/uploads/2015/10/color-brand-personality.png

The Hue and Intensity of a color affect the users reaction
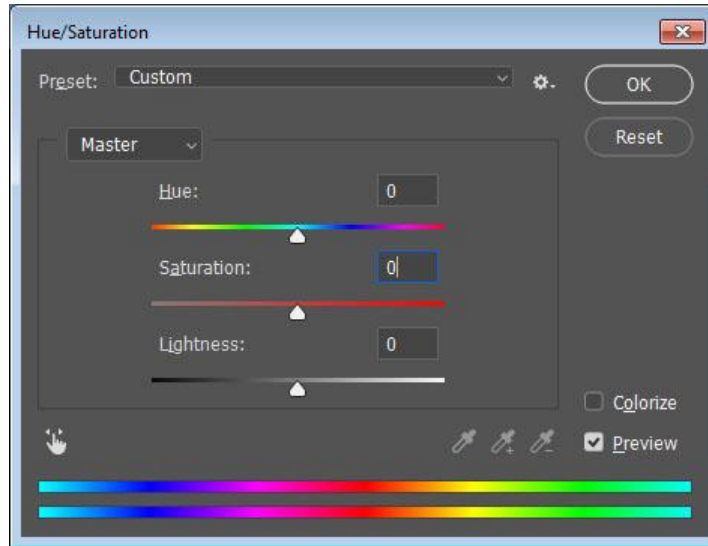
The American Spirit, Trust & Responsibility

The intent of the palette is to convey a warm and open American spirit, with bright saturated tints of blue and red, grounded in sophisticated deeper shades of cool blues and grays. These colors ... should leave users feeling welcomed and in good hands.

Blue is commonly associated with trust, confidence, and sincerity; it is also used to represent calmness and responsibility.

#0071bc
$color-primary

#205493
$color-primary-darker

#112e51
$color-primary-darkest

#212121
$color-base

#323a45
$color-gray-dark

#aeb0b5
$color-gray-light

#ffffff
$color-white

UX is not about testing shades of blue

Yes, it's true that a team at Google couldn't decide between two blues, so they're [testing 41 shades between each blue](#) to see which one performs better. ...I can't operate in an environment like that. I've grown tired of debating such minuscule design decisions. There are more exciting design problems in this world to tackle. ~ Doug Bowman, @stop
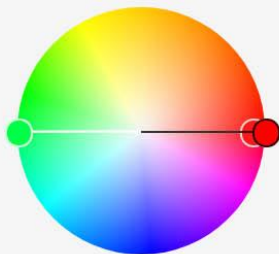
https://stopdesign.com/archive/2009/03/20/goodbye-google.html

See also:
https://www.nytimes.com/2009/03/01/business/01marissa.html

CREATE   EXPLORE   TRENDS   MY THEMES   Sign In

Color Wheel   Extract from an Image

Apply Color Harmony ⓘ
Rule

○ Analogous
● Monochromatic
○ Triad
○ Complementary
○ Compound
○ Shades
○ Custom

Sign into Creative Cloud to save this Color Theme.
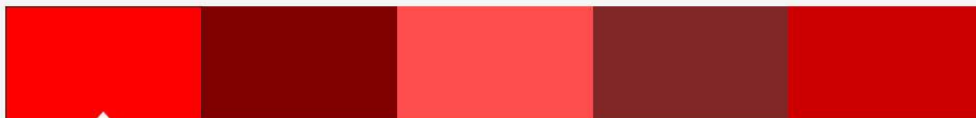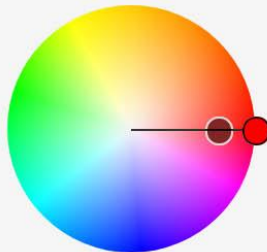
Save

Color Mode

RGB ⌄

#FF0000	#800000	#FF4D4D	#802626	#CC0000
255	128	255	128	204
0	0	77	38	0
0	0	77	38	0

Color Wheel   Extract from an Image

Apply Color Harmony (?)
Rule

- Analogous
- Monochromatic
- Triad
- Complementary
- Compound
- Shades
- Custom

Sign into Creative Cloud to save this Color Theme.
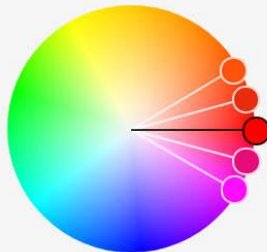
Save

Color Mode

RGB ⌄

#FF0000	#FF530D	#E82C0C	#E80C7A	#FF0DFF
255	255	232	232	255
0	83	44	12	13
0	13	12	122	255

Color Wheel   Extract from an Image

Apply Color Harmony ⓘ
Rule

○ Analogous
○ Monochromatic
● Triad
○ Complementary
○ Compound
○ Shades
○ Custom

Sign into Creative Cloud to save this Color Theme.
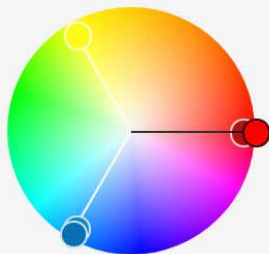
Save

Color Mode

RGB ⌄

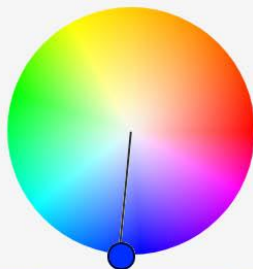| #FF0000	#B31212	#FFFC19	#1485CC	#0971B3
255	179	255	20	9
0	18	252	133	113
0	18	25	204	179

Color Wheel   Extract from an Image

Apply Color Harmony ⓘ
Rule

○ Analogous

○ Monochromatic

○ Triad

○ Complementary

○ Compound

● Shades

○ Custom

Sign into Creative Cloud to save this Color Theme.

Save

Color Mode

RGB ⌄
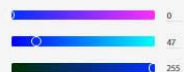
#002FFF	#0023BF	#001780	#000C40	#002AE6
0	0	0	0	0
47	35	23	12	42
255	191	128	64	230

Color Wheel   Extract from an Image

Apply Color Harmony ?
Rule

- ○ Analogous
- ○ Monochromatic
- ○ Triad
- ● Complementary
- ○ Compound
- ○ Shades
- ○ Custom

Sign into Creative Cloud to save this Color Theme.
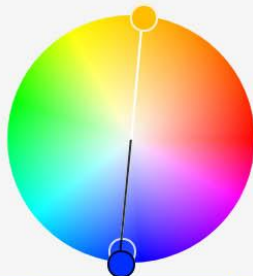
Save

Color Mode

RGB ⌄

#002FFF	#0021B3	#1944FF	#B38600	#FFBF00
0	0	25	179	255
47	33	68	134	191
255	179	255	0	0

Color Wheel   Extract from an Image

Apply Color Harmony Rule ⑦

- ● Analogous
- ○ Monochromatic
- ○ Triad
- ○ Complementary
- ○ Compound
- ○ Shades
- ○ Custom

Sign into Creative Cloud to save this Color Theme.
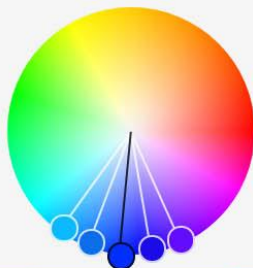
Save

Color Mode

RGB ⌄

#002FFF	#630DFF	#1E0CE8	#0C6EE8	#0DB9FF
0	99	30	12	13
47	13	12	110	185
255	255	232	232	255

CREATE   EXPLORE   TRENDS   MY THEMES

Sign In
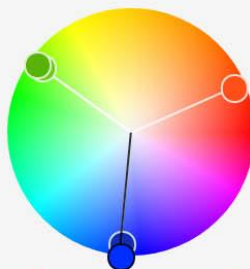
Color Wheel   Extract from an Image

Apply Color Harmony
Rule

○ Analogous
○ Monochromatic
● Triad
○ Complementary
○ Compound
○ Shades
○ Custom

Sign into Creative Cloud to save this Color Theme.

Save

Color Mode

RGB ∨

#002FFF	#122FB3	#FF5019	#6CCC14	#5AB309
0	18	255	108	90
47	47	80	204	179
255	179	25	20	9

Cheating Color

Color is fluid. It interacts and changes based on its surroundings. Some colors can appear lighter or darker based on what color they appear on or next to.

On a light background, when you have a large element of a light color, a small element of the *same color* will appear lighter.

Conversely, when you have a large element of a dark color, a small element of the *same color* will appear darker.

https://24ways.org/2006/cheating-color/, @jasonsantamaria
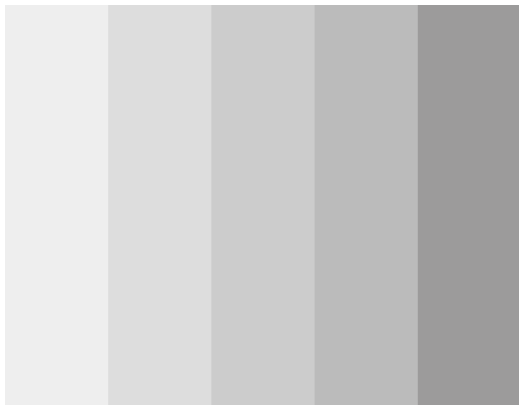
Cheating Color

Cheating Color

Working with Backgrounds and Neutral space

vs.

MY
VERY
FAVORITE
QUASI-
NEUTRALS
BRANDIGIRL
BLOG.COM

#EFEEEE

#E9CCB1

#D3C4BE

#E4DAC2
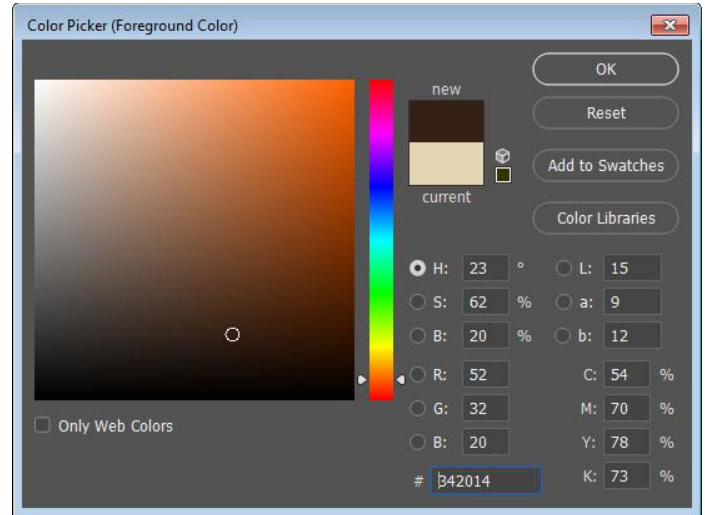
#F4EEE1

#C4BDAC

#EBCFC4

#E8E6D9

#999999

#F3ECE7

Warm it up!!

Consider alternatives to full black text on white background. A dark brown can bring subsconcious warmth to your text.

Warm it up!!
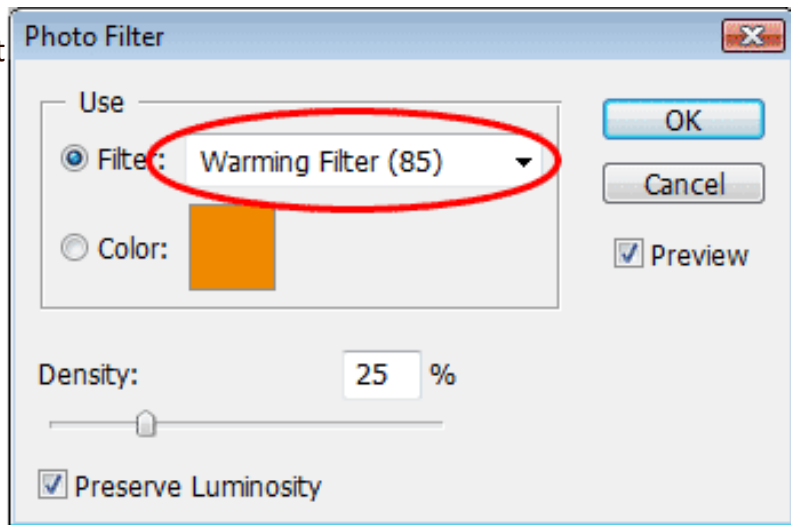
Color correct and warm up those phot
before publishing!

In Photoshop:
Image > Adjust > Photo Filter

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Scientists have discovered that some of the chemicals found in sunscreen and other personal health products threaten the health of coral reefs. How these, and other compounds, affect reef ecosystems remains an active area of research.

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VIDEOS

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Search

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Here's what you need to know
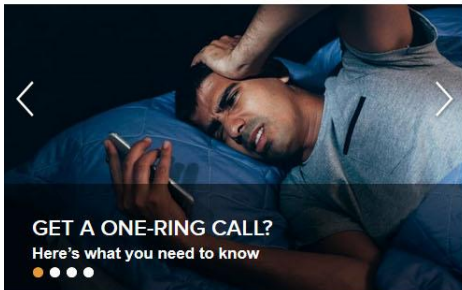
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COMPETITION

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What business goals are driving your aesthetics?

Friendly   Approachable   **Professional**   Experienced
            Conservative
Exclusive   Novel   Scholarly   Detailed
            Contemporary Fashionable   Stylish   Secure
            High-tech   Adventurous
Old   Industrial   Innovative   Formal
            Organic
Appealing   Unique   Upbeat   Hip
            Stimulating   Historic   Bold   Bright
                    Sleek   Smart
Business-like   Busy   Calm   Capable
            Friendly   Fun   Caring   Cutting Edge
            Efficient   Familiar
Functional   Honorable   Impressive   Intense
            Modern (clean)
No-nonsense   Playful   **Powerful**   Quirky
            Reliable
Revolutionary   Clever   Inspiring   Cheerful
            Collaborative   Fresh   Classic
            Sophisticated   Strong   **Trustworthy**
Unconventional   Versatile   Accessible (Consumer)   **Analytical**
            Archaic   Influential   Forward-thinking
                    Authoritative   **Humanistic**   Heart

The More You Know!

Behavioral Science
https://www.nickkolenda.com/color-psychology/

Regular Science https://earthobservatory.nasa.gov/blogs/elegantfigures/2013/08/05/subtleties-of-color-part-1-of-6/

History of working with color in print and on screen
http://theresamarierhyne.com/Theresa-Marie_Rhynes_Viewpoint/Applying_Color_Chapter.html

Nonlinear color, datavisulation, chroma.js
https://www.vis4.net/blog/2013/09/mastering-multi-hued-color-scales/