

19 Black, White and shadows

Monday, March 8, 2021 10:51 PM

Today:

Universal Principles of Design:

Black, White effects

Sketching: shading in 2 point perspective

Friday Color Nomenclature

Digital, photoshop

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

Additive/subtractive physics

Anonymous Mid-Semester Check-In

Very short, 3 questions: What is going well, what needs to change, other comments?

https://cuboulder.qualtrics.com/jfe/form/SV_bBE1W71TkFdDcMt

Volunteer for Interview - Hugh Scribner

Universal Principles of Design (UPDes)

Book and video series, available on Linked In Learning

Universal Principles of Design

Black effects

White effects

Red effects

Reinforced by culture, certainly
White is death in Asian cultures

Tech equipment

Wallets

Furniture, black leather

TVs, screens, black border

Tuxedo, most classy

Social media have dark mode

Or be colorful, more approachable

Sunglasses, authority,

Police uniforms, authority

Firefighter uniforms

Black face masks, more official

White effects

Health = white eyes and teeth

Bones are white, associated with death

Villains in white = Star Wars stormtroopers, although
ubervillains are in black

South America, Santerians wear white. Religion around
spirits, witchcraft

KKK wore white sheets to mimic ghosts

Yes, sports teams use this.

Graphic design: Yes, logos start B/W.

Most electronics are black

Apple tends to use white more

White: Same product effects.

No white superhero costumes X Moon Knight, Emma Frost, Dagger, Princess Leia

White wearing villains more common? To be misleading

<https://www.linkedin.com/learning/universal-principles-of-design/red-effects?u=42275329>

There are also yellow, green and blue effects, but are more culturally situated.

Inappropriate: Red for skin tone

Red is romantic, so inappropriate for condolences.

Red is thought to affect appetite. Food packaging, and fast food restaurants.

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

Not all products want "timeless, high value". Kids products

Don't want to lose them when dropped

Hard to find things in black bags

Black shows pet hair

Color can be more interesting than black or white

Black is not perceived as comfortable; linens for example

Some companies have specific brand colors

CU = silver and gold, but has black in logo

Previous answers

Might want product to seem like a bargain; signals different price

Not everything should be aggressive; toilet paper. Red would also be bad.

Kids love colors, don't care about slim or sleek

Not practical: would absorb all light; Hard to find black things in the dark.

Would be hard to differentiate.

Black lacks personality

Black clothes are hot

Isn't always functional; heat absorption, tracing transparency

Might not be functional. Outdoor equipment can get lost.

Hard to see in the dark

Hard to photograph

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

Black is too common; wear a color to stand out

Water bottles maybe better in blue, other connotations.

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

Signals unapproachability

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

Don't always want to signal power, aggression

Lack of contrast is not appealing; Need other colors for contrast

Other colors can create a tiered pricing structure for broader marketing

Colors can affect other moods, emotions

- Humans like color too
 - Doesn't allow full range of expression
 - Want to portray more fun in a different color. Black is not a loud color
 - Black is depressing
 - Black is the color of death.

Summary:

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

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

Shadow in 2 point perspective

Three levels of rigor:

- 1) Assume diffuse light, and shade undersides. Guess at shadow outline, fade edges of shadow.
- 2) Assume sunlight, parallel light. Draw parallel lines from each corner, guess at intersection with ground plane (Sketching: The Basics method). Violates 2 point perspective, however.

SKETCHING THE BASICS

2.2.3 Shading and Cast Shadow

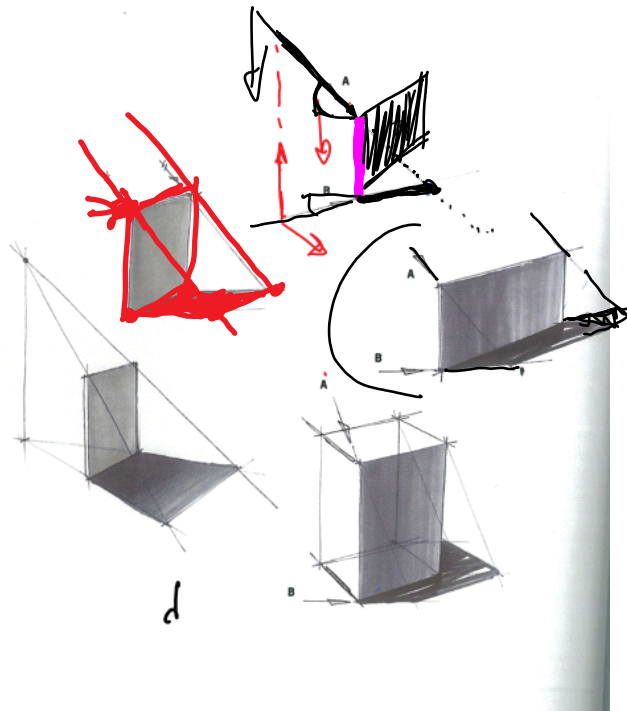
Shading is used to emphasise the volume of an object, and to position it in its surroundings.

Shading refers to the differences in darkness of the object's sides, as related to a light source. Cast shadow is the projected shadow onto a surface.

In general, parallel light (sunlight) creates an effective cast shadow. One point light (lamp light) often does not show an appropriate cast shadow. It can create a shadow that is not related to the object's perspective. It is more difficult to construct and less predictable. Cast shadow from a parallel light source is easier to predict and perceived as realistic.

Choosing a direction of the light source is done by two lines: the actual light direction or 'slope' A, and the projected light direction B. Imagine a parallel light source just over your left shoulder. It will have a relatively steep slope A, and B will point slightly towards the upper right.

All the actual light directions (slopes A) in a drawing can be drawn parallel, and all projected light directions will slightly converge.



1. Construct Shadow Vanishing Point: <https://thevirtualinstructor.com/how-to-draw-paint-cast-shadows.html> However, only works for light behind object



