22 Factor of 7, Black effects

Wednesday, March 22, 2023   10:51 PM

START ZOOM recording

Play Aesthetics Game

Today:
Magic Factor of 7
Universal Principles of Design
      Finish Supernormal Stimuli
      Black, White effects
Friday Color Nomenclature
      Digital, photoshop
      Pantone https://en.wikipedia.org/wiki/Pantone
Additive/subtractive physics

India Johnson	Coco Chanel

Sh!t you know
Sh!t you know you don't know
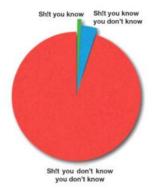Sh!t you don't know you don't know

Diagram from Nathan Seidle, founder of Sparkfun

Magic Factor of 7

Here is some advice I got from Larry Talbot, my PhD advisor:
      "In research, tasks will take you 7 times longer than you think they should"
You may think that you are a reasonably good project planner, that things may take longer than you plan by a factor or 2 or 3, but a factor of 7? Really? Why?

Everyone acknowledges the difficulty of planning when there are many unknowns. Used in project planning and risk assessment. You must consider

- **Known knowns**: things we know we know. You can make reasonable estimates of time regarding these issues. For example, how long it will take to order a material you need, or carry out an assembly step you have done before.
- **Known unknowns**: things we know that we don't know. For example you may know that you will need to learn to use a 3D printer for your projects. 'How to use a 3D printer' is a known unknown.
- **Unknown unknowns**. Things you have no way to predict for.
    - Examples from previous years: A family emergency. A catastrophic laser cutter failure that will take months to repair. A nationwide shortage and backorder of a widget you need. Your friend who was going to help you with 3D printing falls in love and has no more time for you, and there are no more workshops offered this semester.
    - Example from last spring: Coronavirus.

This is a type of epistemology, knowledge about knowledge. "Epistemology is the investigation of what distinguishes justified belief from opinion."
https://www.google.com/search?q=epistemology&ie=utf-8&oe=utf-8
Very topical given recent controversies around national news! Rabbit holes, anybody?

There is a fourth category sometimes added: unknown knowns, things we deny knowing. Unconscious bias, for example.

"Unknown unknowns" was made famous in 2002 by Donald Rumsfeld during the Iraqi War w.r.t WMDs, but has been used by NASA and others since the 1950's.
https://en.wikipedia.org/wiki/There_are_known_knowns

For time management and planning, some use a time order-of-magnitude safety factor:

if it should take 1 second, it will take 1 minute
if it should take 1 minute, it will take 1 hour
If it should take 1 hour, it will take 1 day
and etc, for days, weeks, months, years.

Factors of 60, 60, 24, 7, 30 etc. Perhaps excessive.

This may work, but I have found the Magic Factor of 7 to be remarkably accurate for doing anything new, in research or design.

Universal Principles of Design (UPDes)

Last time we saw video on
Supernormal Stimuli
https://www.linkedin.com/learning/universal-principles-of-design/supernormal-stimuli?autoplay=true&resume=false&u=42275329

Instinctual likings/ or dislikes; responses to essential triggers that exceed responses to natural triggers.

Students in pre-course survey "I want to learn how to make appealing things". This is one very direct way.

In groups, 5 minutes
1) list other examples of supernormal stimuli. What is wildly popular, and what instinct might be triggered?
2) Is there a supernormal stimulus that could apply to your main project? Can you identify one from your inspiration? Or from somebody else's?

AI: makes people crazy - triggered by curiosity and fear - uncanny valley
Colored lighting on fruit - triggers color response
Exaggerated food and sounds in commercials - Hunger and water desire
Video game clip below real video - orienting instinct
Professional sports, - tribalism?
Pests in homes spiders - fear of poison? Number of legs, alien,
Horror movies - fear triggers; the unseen
Porn - triggers you know what.
Round is cuter - contour bias   Brighter colors attract attention, pastel will be soothing.
Last year:
Extra bright colors on sports jerseys: Oregon, bright green
Moving water, water installations. Sparkle, glitter
Big fluffy coats, nesting? For comfort, even if not warm.
Shiny things. Matt vs shiny; shiny is more attractive. Texture and feel. Velvety soft smooth more attractive than rough, pointy, painful.
Video games, horror movies, roller coasters - fear response but is attractive, pleasurable, after the fact
Teacup dogs. Small is cute. Miniature features are attractive.

Color in Design

Black Effects

https://www.linkedin.com/learning/universal-principles-of-design/black-effects?autoplay=true&resume=false&u=42275329

The Black Effect is no excuse for racism. Instead, we should all be aware of a potential unconscious/implicit biases, and guard against being influenced by them.
https://implicit.harvard.edu/implicit/takeatest.html