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, January 16, 2011 [<http://howtonotsuckatgamedesign.com/?p=1702>] by Anjin Anhut.

This tweet is filed under [game semantics](#).

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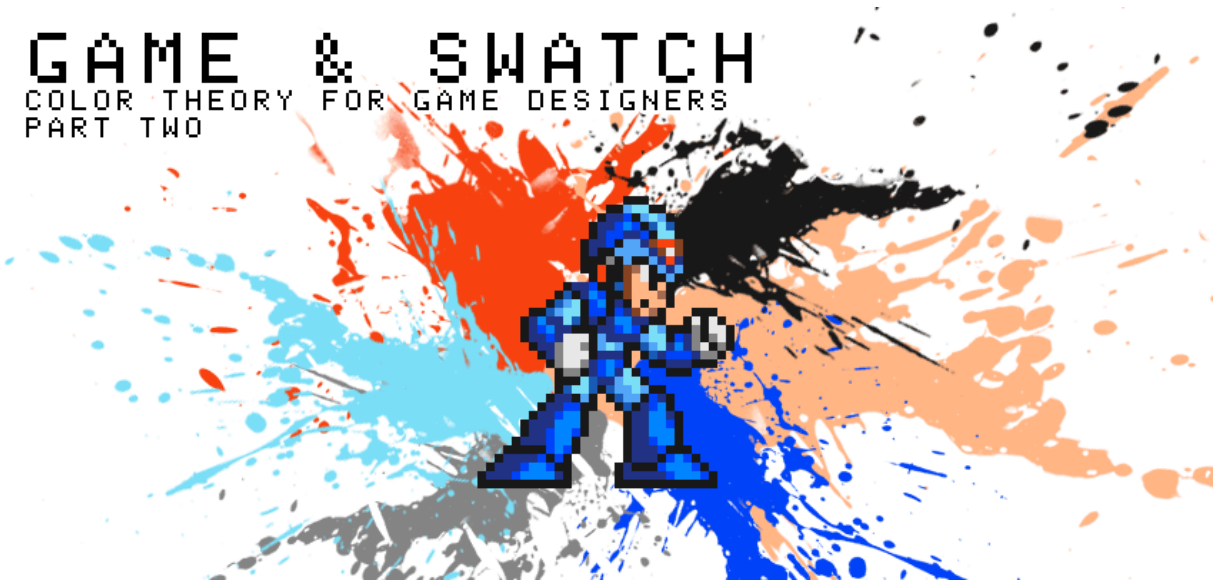
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## GAME & SWATCH

### COLOR THEORY FOR GAME DESIGNERS

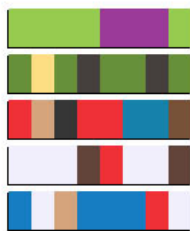
#### PART TWO



This is a follow-up to [part one](#). I established some terminology and principles in part one, building up to this article. So read it. No, honestly, do it. Let's check out a few of thousand ways to use color situations and distinct colors to your advantage.

#### Iconic Colors

Use a limited selection of distinct colors to make your characters recognizable. Just as it is with company logos, corporate identities, simple combinations of distinct colors are easy to remember and quickly to grasp. Back in the days where few pixels needed to flesh out a character, clear distinct colors were necessary to make sprites readable and recognizable (think Mario and Luigi). Nowadays those technical limitations don't exists. But AAA characters still maximize their own and their franchise's value of brand recognition by betting on distinct colors. Marketing win.



HULK  
MASTERCHIEF  
MARIO  
ALTAIR  
SONIC



RYU  
KEN  
BLANKA  
LARA CROFT  
KRATOS

RECOGNIZABLE  
COMBINATIONS  
OF DISTINCT  
COLORS MAKE  
CHARACTERS  
RECOGNIZABLE  
AND ICONIC

#### Puzzle Solving

The player connects objects and elements colored in the same distinct color and is even able to bring distinct colors in order. This he learned from baby age on and later needs no explanation anymore. This helps create instantly understandable gameplay situations.

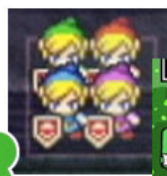


WE KNOW HOW TO  
SORT, GROUP AND  
ORDER COLORS AND  
INSTINCTIVELY  
CONNECT ELEMENTS  
COLORED WITH THE  
SAME DISTINCT  
COLOR

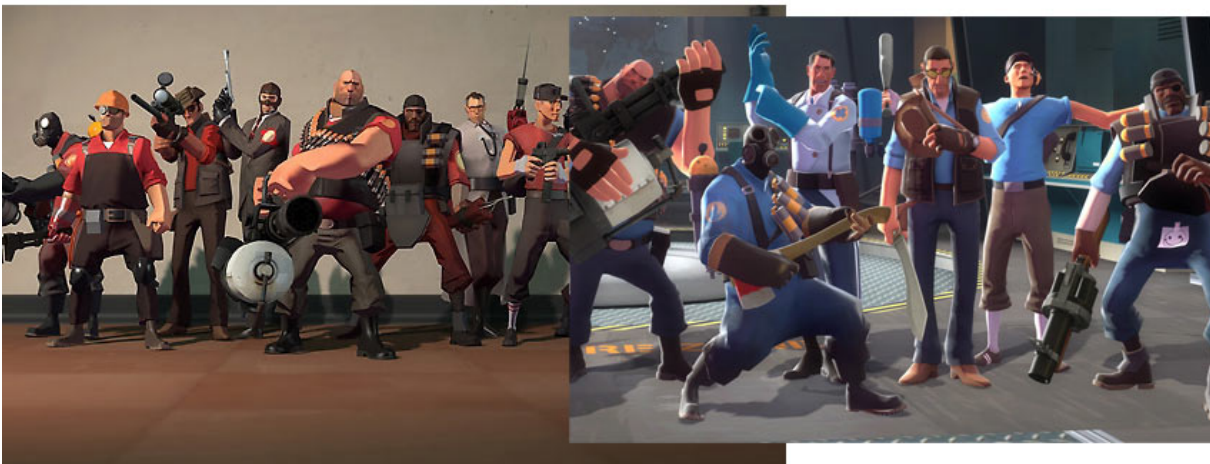
#### Separation And Affiliation

From boardgames, over sports, companies and nations to political parties and back to the days of tribes and caves, color labels are used to mark group affiliation. A clear and consistent color language helps the player separate friend from foe. For a player to know his own distinct game color gives any game a sense of competition, even when the gameplay is not centered around conflict. The classic red blue green yellow combo used in New Super Mario Bros. Wii, allows every player to identify with a color on screen and recognize the other players to be from a different party/team/faction, just like he learned when playing board games and sports.

ADDING DISTINCT COLORS  
TO GAME CHARACTERS  
DISPLAYS THE  
COMPETITIVENESS OF THE  
GAME SITUATION CLEARLY  
AND SEPERATES FACTIONS.



DISTINCT REDS AND BLUES SHOW THE GROUP AFFILIATIONS  
OF VERY INDIVIDUAL CHARACTERS AND SEPERATE THEM INTO  
TWO OPPOSED FACTIONS IN TEAM FORTRESS 2



### Color Information And Conventions

The player can understand previously learned conventional meanings of colors. You can take from real life, by using the commonly known conventions of your target audience. For that you need to provide the necessary context. Red in and out of itself can have many meanings, so the right context is needed to trigger the correct interpretation. In western cultures, a red cross on any sort of container = medical supplies, a red traffic light = stop, a red light blinking on a machine = danger or malfunction of a red drop = blood. A red lit room can be a bordello or a photograph's dark room. So check on the culture and common knowledge of your target gamer and provide context. You can of course establish your own meanings for distinct colors, but if you want to do this you have to be consistent with your distinct colors and give the player time and guidance (maybe even verbal explanations) to learn.

A WIDELY UNDERSTOOD BUT KINDA SILENT CONVENTION ESTABLISHED IN FICTION IS TO EQUAL RED WITH EVIL AND BLUE WITH GOOD. A HEAVEN VS HELL ANALOGY, MAYBE?



PROGRAMS LOYAL TO THE OPPRESSIVE MCP WERE GLOWING RED. FREE PROGRAMS WERE BLUE. INDOCTRINATION BY THE MCP WOULD HAVE PROGRAMS SWITCH COLORS.  
- Tron



IN MANY GAMES FEATURING BINARY MORAL GAMEPLAY, RED AND BLUE ARE USED TO COMMUNICATE GOOD VERSUS EVIL IN A CLEAR AND READABLE WAY.  
- Mass Effect 2 // Dantes Inferno



EVEN ELECTRICITY TURNS RED, WHEN USED FOR EVIL PURPOSES.  
- Infamous



ANAKIN, ALREADY WEARING BLACK LEATHER, SCARRED AND WITH A GRIM EXPRESSION ONLY NEEDS A STYLISH DEATH HELMET AND A RED LIGHTSABER TO REALLY LOOK THE PART.  
- Star Wars



GEARS OF WAR IS JUST ONE OF MANY GAMES WHERE ARE MORE SUBTLE BUT STILL CONSISTENT USE OF RED AND BLUE IS USED TO SEPARATE TO GOOD GUYS FROM THE BAD BOYS.  
- Gears Of War

## Focus

When the player recognizes a distinct color, he will always give it more importance and attention over the overall color situation. This can be used to direct the attention and focus of the player towards certain elements. This is why so many bosses have distinct color weak spots.

SHOOT  
THE  
RED  
THING  
- VANQUISH



HIT  
THE  
BLUE  
THING  
- DMC4



SHOOT  
THE  
RED  
THING  
- SUPER  
CONTRA



## Tactile Sensations

Color situations are a very effective way to suggest tactile sensations. The human brain is wired to attribute certain feelings and even the taste of things to certain colors. This is mostly based on memory and conditioning. Reds and oranges are associated with warmth and heat, while blues suggest coldness. This can simply be backtracked to the sensations of fire and water. In color theory we even talk of color temperature and infrared view uses the same system to mark warm and cold objects. Whites and light grays, like early morning fog, suggest freshness. Another way to suggest temperature is warm brightness, referencing sunlight.

You can also convey tactile sensation by using distinct colors. A water tap for example is marked with red and blue for hot and cold water. You can use red and blue, commonly used to indicate burning hot and cooling cold water, to indicate a similar ideas of pain and relief on screen.

RELIEF  
OFTEN IS  
DISPLAYED  
IN BLUE



WHILE  
PAIN IS  
OFTEN  
SHOWN IN  
RED



THIS IS ANALOG TO WHAT  
WE WOULD EXPECT FROM  
SIMILAR MARKINGS ON  
WATER TABS



### Environments

Color situations play an important role in determining if an environment is hostile or friendly. Humans are evolutionary primed to feel most secure in fertile areas, which are indicated by strong greens (plant life), strong blues (water) or both. Now adding hints of red, purple, orange or pink, anything warm and you have a very comforting color scheme for your environment. Not so fertile and life friendly environments, like deserts, burned areas, rock, dead wood, rust, rotten plant life come in a mix of blacks, grays, browns, and pale greens. Red adds an idea of threat, heat and danger here. Just keep in mind, what overall color situations our ancestors were searching for or avoiding, when picking a place to stay.



THE LUSH AND RICH GREEN  
AND BLUE WORLD OF  
ENSLAVED IS A PLACE WORTH  
FIGHTING FOR.



IN THE COLD, EMPTY  
AND GREY TOWN OF  
SILENT HILL YOU ONLY FIGHT  
FOR OWN NAKED SURVIVAL.

### Monochromatic Sequences

Due to the qualities of vintage photography, old film, drawings and low-tech print, placing a sequence in monochromatic colors makes the player look at the sequence from the outside. Instead of being in the sequence, the player feels like looking at some sort of media depicting the sequence. This is often used in movies and comics to illustrate a flashback or exposition sequence, sometimes supported by additional film grain, flickering, washed out areas or fake old paper effects. I'm kind of confused, that there are so little games letting us play monochromatic flashbacks, regarding that black-and-white and sepia are so commonly understood. Monochromatic color situations can of course also be used to give a sequence a unique edge or baseline emotional tone.

MONOCHROMATIC  
COLOR SITUATIONS  
ANALOG TO MEDIA  
OF THE PAST,  
ARE INSTANT  
INDICATORS FOR  
FLASHBACK  
SEQUENCES.



MONOCHROMATIC  
COLOR  
SITUATION TO  
CREATE AN  
EMOTIONAL BASE  
FOR A COMBAT  
SEQUENCE  
- WET

### Playfulness

The bright, vibrant and oh so random colorfulness of children's clothing, kindergartens, kid's drawing utensils, candy and

heaps of toys are one of the many things that make Super Mario games instantly appear to be fun. While you fight in the hostile gray-brown environments of Dead Space, explore in the lush green jungles of Tomb Raider, you play in the toy-colored mushroom kingdom. The key here is not to just spread around colors, so that they blob together into one homogenic mix. Playfulness, this childlike feeling, gets triggered by a lot of recognizable objects with distinct colors, so we get the appearance of many fun or tasty things to interact with.

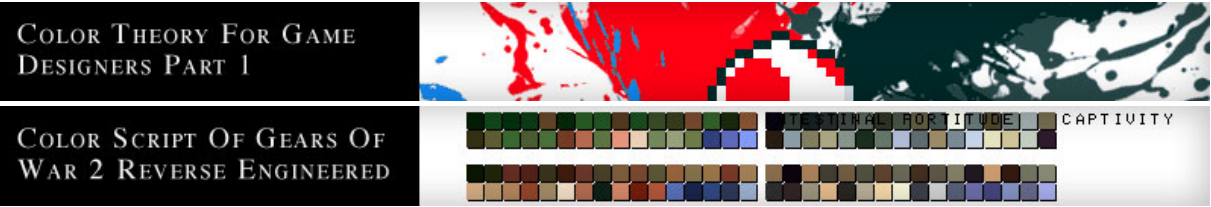
CANDY STORES, TOY BOXES AND MUSHROOM KINGDOMS.  
PLAYFULNESS



Conclusion Part Two

Like I said, there are a 1001 more observations to make and tricks to note. The many more ways in which colors affect us emotionally, are conventionally used or culturally understood. One could write a whole book about this subject (and some probably already have). But I hope, that you can extract some inspiration from this write down. If you can, you should check part three, where I share some cool tools and tricks to work with color on a game concept level.

Related posts:



ONE THOUGHT ON “GAME AND SWATCH ,ÄÖ/Ñ/” COLOR THEORY FOR GAME

DESIGNERS PART 2”



designer wannabe  
on **September 1, 2012 at 4:18 pm** said:

BLUE AND ORANGE! HELLZ YUE