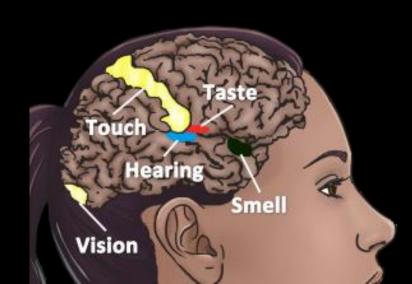
# HEARING COLORS, SEEING SOUNDS: SYNESTHESIA

By: Jenna Messer

#### WHAT IS SYNESTHESIA?

- Neural condition
- Sensory pathways are interconnected
- Can join any five senses together
- Synthetic perception



# HISTORY OF SYNESTHESIA

#### WHEN WAS SYNESTHESIA DISCOVERED?

- First reported in 1812 by Georg Tobias Ludwig Sachs
- Interest peaked 1860-1930
- Often considered 'taboo' or 'crazy'
- Regained attention in 1980s
- Still is being studied today

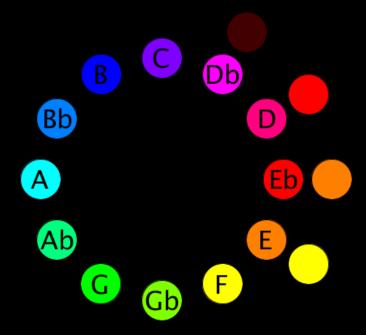


Georg Tobias Ludwig Sachs

## FORMS OF SYNESTHESIA

#### **CHROMESTHESIA**

- Sound and color
- Higher-pitched sounds = brighter colors
- Can effect all sounds and music



#### GRAPHEME-COLOR SYNESTHESIA

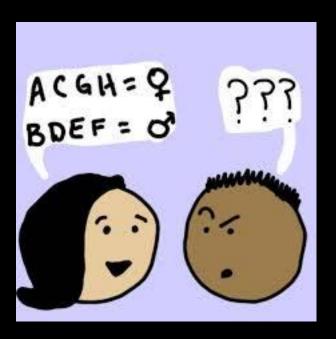
- Written letters/numbers and color
- Unique to each person
- Surrounding numbers effect colors



via r/Synesthesia on Reddit

# ORDINAL LINGUISTIC PERSONIFICATION SYNESTHESIA

- Ordered sequences with personality traits/genders
- Sometimes relationships form
- Commonly occurs with other forms of synesthesia



#### AUDITORY-TACTILE SYNESTHESIA

- Sound and touch
- Any sounds: music, human voices, cars honking
- From "being brushed with a feather" to "electric pulses"



#### LEXICAL-GUSTATORY SYNESTHESIA

- Spoken/written word and taste
- Theories suggest forms in early childhood
- In some cases effects everyday sounds



# SYNESTHESIA FUN FACTS

#### SYNESTHESIA FUN FACTS

- $\sim$ 2% 4% of people have it
- Many people are unaware of their condition
- More common in women than men
- Genetic
- Helps memorization, creativity, and artistry

### CELEBRITIES WITH SYNESTHESIA

#### SYNESTHESETE MUSICIANS



Billy Joel

- Musical genres have different colors
- Sees color to letters



Tori Amos

- Sound produce different images of light
- Kaleidoscopic images



Kanye West

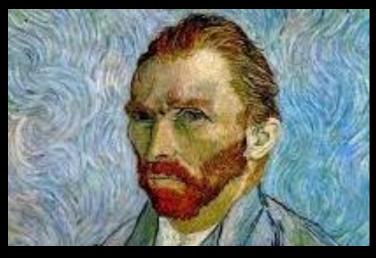
- Envisions every musical note as color
- Everything he makes is "a painting"

#### MISCELLANEOUS SYNESTHESETES



Marilyn Monroe

- Felt vibrations when she heard sounds
- Thought she was just "extraordinarily sensitive"



Vincent Van Gogh

- Associated colors with sounds
- Yellows and blues sounded "like fireworks"



Virginia Woolf

- Theorized words with colors
- Wrote "those are white words like stones one picks up from the seashore"

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