

SYNESTHESIA

Can you see a *painting* of my energy?



Alexandra Dyalee
for *Introduction to Cognitive Science*

WHAT IS IT?

Synesthesia is a rare condition that is characterized by the **conscious experience of stimulus attributes that are not present in a particular physical stimulus** (Meier, 2022).

✿ numbers may evoke colors

✿ words may trigger tastes

✿ silent movement of an object may elicit a sound

„A NEUROLOGICAL CONDITION“

X ICD CLASSIFICATION

PLEASANT
EXPERIENCES...

VIEWS ON SYNESTHESIA

Meier (2022)

NEURAL LEVEL: hyperconnectivity

COGNITIVE LEVEL: memory performance, creativity

PSYCHOLOGY: openness, (schizotypy)

CLINICAL PSYCHOLOGY: genetic link with disorders

a CONGENITAL condition

TYPES OF SYNESTHESIA

Cleveland Clinic, Hubbard & Gosavi (2020)

DAY-COLOR SYNESTHESIA:

days of the week → colors

SOUND-COLOR SYNESTHESIA:

sounds → colors

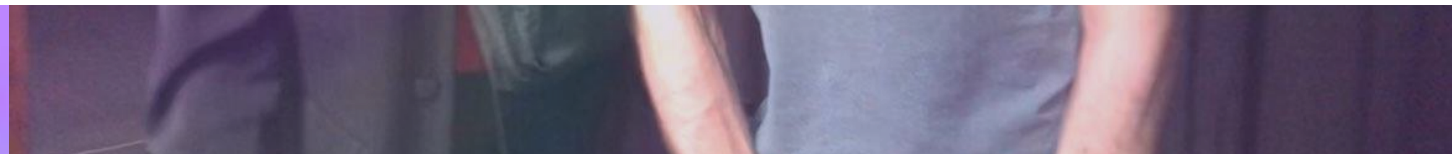
MIRROR-TOUCH SYNESTHESIA:

something happen to someone else → PHYSICALLY feel it, too



...or **Daniel Tammet** : sequence of digits → a story

me : human energy → colorful visualisation



IT IS BEING NEURODIVERSE

OR HAVING A BRAIN DAMAGE OR BEING DRUGGED 😊

NEURODIVERSITY

→ more connections ⇒ people with ASD is at least triple the rate in people without ASD
(*Cleveland Clinic*)

BRAIN DAMAGE

→ change and evolve of connections

High **prevalence rate** in patients with **psychiatric conditions** (ASD, schizophrenia, anxiety disorders).

MY PERSONAL SYNESTHESIA

PEOPLE'S ENERGY → COLORFUL VISUALISATIONS

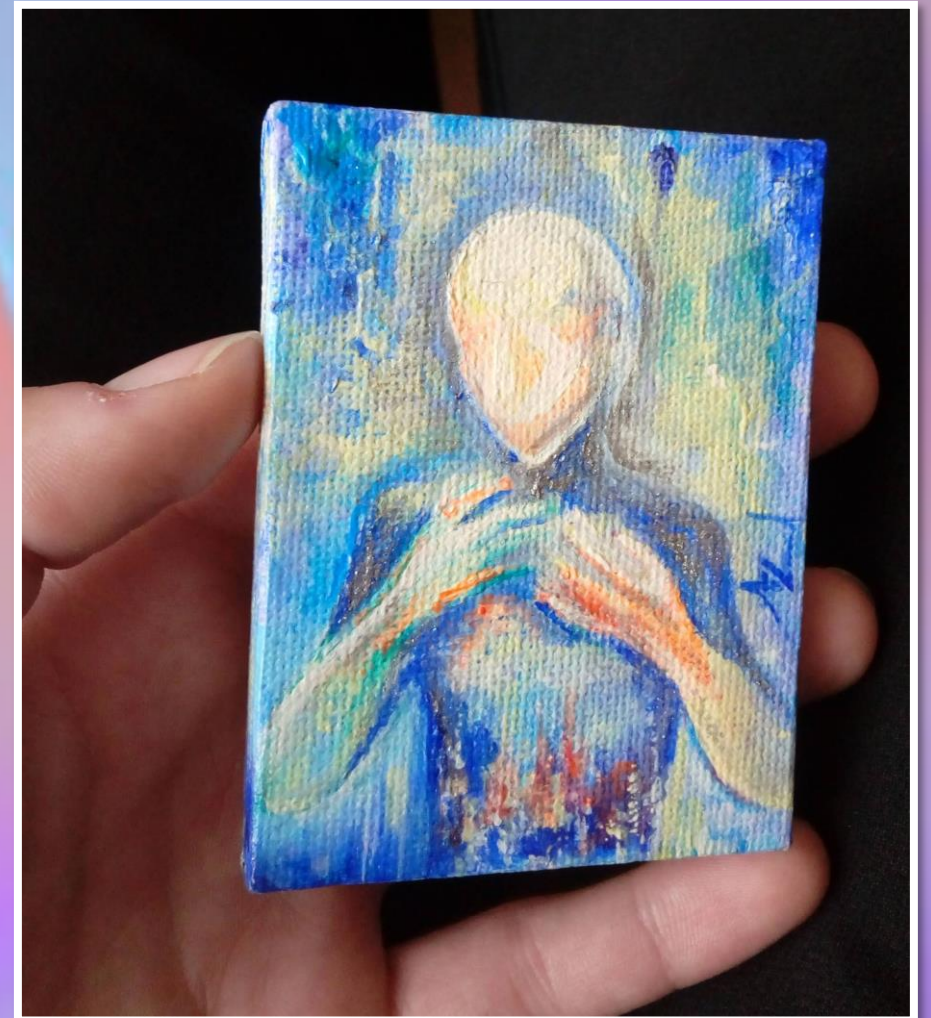
SOUNDS → 3D DYNAMIC SHAPES

GRAPHEME → COLOR

EMOTIONS → COLOR, BRIGHTNESS, SHARPNESS



TIME OF THE DAY



REFERENCES

- Meier, B. : Synesthesia (2022). Encyclopedia of Behavioral Neuroscience, 2nd edition (Second Edition). *Elsevier*. Pages 561-569.
<https://doi.org/10.1016/B978-0-12-819641-0.00134-1>
- Cleveland Clinic : Synesthesia (2023).
<https://my.clevelandclinic.org/health/symptoms/24995-synesthesia>
- Ward, J., Simmer, J. : Multisensory perception (Chapter 13). *Academic Press*. Pages 283-300.
<https://doi.org/10.1016/B978-0-12-812492-5.00013-9>
- Gosavi R.S., Hubbard E.M.: Multisensory Perception (Chapter 14). *Academic Press*. Pages 301-317.
<https://doi.org/10.1016/B978-0-12-812492-5.00014-0>
- Introspection of author's neurodivergence.