

# Autism, Agnosia, \$ Apraxia Part |

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# What are apraxia and agnosia?



Apraxia impacts a person's ability to carry out purposeful, coordinated movements, even though they have the physical ability to perform the movements.

Agnosia impacts a person's ability to recognize or accurately interpret sensory information, even though they have the ability to perceive sensory information.

Apraxia and agnosia happen when there is limited or disrupted connectivity between or within parts of the brain that perform specific functions.



Visual agnosia is an inability to recognize and identify objects or visual stimuli despite having intact vision. People with visual agnosia can see objects, but they cannot understand or interpret what they are looking at. They may be able to describe the features of an object, such as its color, shape, or texture, but they cannot identify the object by name or recognize its function.

# Prosopagnosia

Prosopagnosia, also known as "face blindness," is difficulty recognizing faces, even those of familiar people such as family members, friends, or coworkers.



People with prosopagnosia can still see faces, but they have trouble distinguishing between different faces or recognizing the same face in different settings or contexts. They may have a hard time identifying racial or ethnic facial features.

#### Akinetopsia



#### Akinetopsia

Akinetopsia, also known as "motion blindness," is difficulty perceiving motion or movement. People with akinetopsia have difficulty tracking objects in motion and struggle with tasks like catching balls, walking, driving, or following facial expressions and body language.

People with akinetopsia may regularly bump into people or feel disoriented in crowded places.

Hemispatial neglect

# Hemispatial neglect



Hemispatial neglect is difficulty attending to or perceiving one side of the body or the environment.

Hemispatial neglect varies depending on the severity and location of the poor connectivity, but it usually comes with difficulty with selfcare tasks on the neglected side, such as dressing, grooming, or eating. People with hemispatial neglect may also have trouble with navigation, reading, writing, and drawing, as well as a decreased awareness of safety risks on the neglected side.

### Oculomotor apraxia

Oculomotor apraxia is characterized by difficulty with intentionally moving the eyes quickly and accurately in a desired direction, especially during saccades, which are rapid eye movements that allow us to shift our gaze from one object to another.

Oculomotor apraxia can make reading or even following videos extremely difficult. A person may move their head or body to compensate.

Simultagnosia



# Simultagnosia

Simultagnosia is an inability to integrate multiple visual elements into a single, coherent image. People with simultagnosia can only visually attend to one object at a time.

They are unable to recognize multiple objects in their visual field simultaneously. They may see a rug in a room but not notice the grand piano on top of the rug.

# Time agnosia

Time agnosia, or "time blindness," is difficulty perceiving and understanding the passage of time. People with time agnosia have trouble estimating how long something will take and may also struggle remembering in what order events occurred or even knowing what season it is.

Time agnosia makes it hard to feel how long a person has been doing a certain task. People with time blindness tend to have extreme anxiety around schedules, appointments, and planning. They may carve out hours to prepare and still end up running late.

Coming soon

# Apraxia & Agnosia

- are common in autistic and otherwise neurodivergent people but are rarely identified
- can also be caused by brain injury or illness
- are often misunderstood as a lack of intelligence or as a behavior problem
- range from mild to severe
- can sometimes be improved with appropriate therapies
- unrecognized and under-accommodated agnosia can lead to traumatic experiences and low self-esteem
- are responsible for many of the behaviors targeted in intervention therapies
- are often co-occurring with other types of apraxia and/or agnosia
- need appropriate accommodations

#### stay tuned for part 2!

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