Visual perception in autism

What is an agnosia?

Agnosia is a co-occurring condition that some autistic people have. It is an inability to recognise the input of sensory information. The varieties correspond with several senses and are distinguished as:

- auditory (acoustic)
- gustatory (taste)
- olfactory (smell)
- tactile (touch)
- visual

In this article I will be focusing on types of visual agnosia, also known as visual blindness.

Simultagnosia (object blindness)

An inability to recognise multiple elements in a visual presentation, i.e. one object or some elements of a scene can be appreciated but not the display as a whole.

Not all people on the autism spectrum are visual thinkers or “see in pictures” within their mind. For people with object blindness, multiple visual representation whether in fact (the real world) or in fiction (visual representation) may be a problem. If someone is seeing in “fragments” they find it hard to piece together objects, people, foreground and background. They focus on one thing and neglect something else as a result.

Semantic agnosia (meaning blindness)

This is an agnosia that is a loss of the ability to visually recognise an object. In order to recognise the object they may need to use other non-visual sensory systems with it, such as:
• feeling
• tapping
• smelling
• rocking
• flicking the object.

Some people on the spectrum may experience problems seeing with “meaning” within their visual surroundings and environment. This means they may use other sensory inputs to gain meaning because they cannot internally mentalise the image, visuals or see the significance they hold.

The behaviours displayed may well be compensatory - for example when I was child I would “sculpt” my father’s face to know it was “him”, and would sniff and touch my mother’s hair to know it was “her”.

**Prosopagnosia (face blindness)**

A form of visual agnosia characterised by an inability to recognise faces.

Some people on the spectrum have problems recognising faces. This can create problems with seeing faces as “socially connecting”, and can at times cause misunderstandings. Context is very important - some people rely on hairs styles, codes of dress, glasses or facial particularities.

From my own personal experience, I rely on patterns of movement and the person’s voice in order to make the connection that I know them.

**The importance of seeing autism as a “fruit salad”** ¹

In this article I have focused on visual perception issues (visual agnosia) in the context of the word “autism”. The definition is very specific - not all people on the autism spectrum are a carbon copy collective with the same set of “traits”.

In truth autism should be seen as a fruit salad - a stacking, or set, of pre-existing conditions that have existed in biology and neurobiology for many years. How the stacking appears in the person will affect presentation, and will in turn affect what interventions should be made in that person’s life.

There are many factors that affect the presentation of the “autism”:

• environment and self-identity
• mental health issues
• personality types and disordered extremes

¹ © Donna Williams “Fruit Salad” analogy
differing types, variants and stacking of information processing issues, both neurological and biological.

My hope is that by focusing on the mechanics of a person’s profile we will erode the stereotypes that have become popular and the “norm”. Looking at peoples profiles in the context of this model, and seeing them for what they are, will not only help the person in question but also family members, parents, guardians, siblings and friends.

**Recommended reading**


Isaacs, P., (2014) *Living with visual agnosias*

Isaacs, P., (2015) *Sensory perception and supermarkets*


Isaacs, P., (2015) *Why I have autism (rather than Asperger’s syndrome) and the importance in the differences*

Williams, D., (2012) *Differences between Asperger’s and autism "Fruit Salads"*


Williams, D., (2014) *What is autism? (Fruit Salad)*