

Asperger's in the therapy room – 3

In the third of his series of articles about working with clients who have been, or may be, diagnosed with Asperger syndrome, **PETER FLOWERDEW** looks at the psychology of Asperger's.

THERE ARE FIVE major theories used to understand the behaviour and psychological profile of people with autism and Asperger's [Baron-Cohen 2008:51ff]. Three of them, considered here, give a framework to understand almost all of the social problems that Aspies experience, and indicate where TA may be able to help.

Weak central coherence

I am going to suggest a different name for this feature, but 'weak central coherence' is the designation widely used in the literature. As usual in medical models it focuses on deficit, whereas I think it useful to identify a difference. I call it: Detail vs context.

The postulation is that people with Asperger syndrome have problems integrating information to make a coherent global picture. Instead, they are said to focus on the small local details in a scene.

The Neurotypical (NT) mind is more likely to attend to gist rather than the nitty-gritty, the AS mind is more likely to attend to the detail than to the overview. These tendencies are described as 'strong central coherence' and 'weak central coherence' respectively.

One of the tests for this characteristic is called the 'Embedded Figures Test' (see Figure 1). Aspies tend to spot the embedded shape quicker than NTs.

As I do not have copies of this these formal tests I

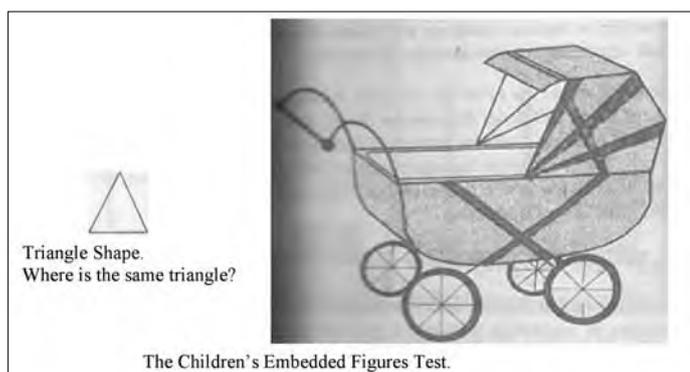


Figure 1: The Children's Embedded Figures Test

explore the same talent using the more available 'Where's Wally?' cartoons. The little book that I keep handy is: M Handford's (2011) *The Phenomenal Postcard Book*. London. Walker Books.

Neurotypicals usually take several minutes to find the hidden figure, Wally. Almost without their being aware of it, their attention is diverted by the humour in the many little scenes in the picture.

Aspie clients flip through the pages – 'there he is; there he is' – usually with no comment on the scenes depicted. Their brain is engaged in pure pattern recognition without any distraction from finding social meaning in the scenes.

Attention to detail

This ability to 'spot the difference', usually applied in life as 'spot the defect' has provided Aspie clients with employment as varied as:

- a plasterer: the client produced perfect walls; when I asked 'what do you do that is different?' he pointed out a number of defects in the plastering in the room we were in, none of which I had noticed before
- a tiler: the client produced perfectly regular tiling in a sports centre and in the homes of aristocracy
- a bricklayer: the client produced perfect brickwork for millionaire homes
- engineering: several clients were employed debugging and improving safety-critical software
- record keeping: working administratively in a variety of situations from the NHS to archaeological digs.

These examples, particularly the last two, also relate to an Aspie tendency to become absorbed in a 'special interest' and a very common need, a drive, to create order and predictability.

Bottom up vs top down

Aspies and NTs also tend to perform differently to The Navon Test of local versus global perception. In this test large letters are formed from small letters, for example a one large letter 'A' would be formed from a number of

‘Children with autism and Asperger syndrome are slow to understand deception.’

small letters for example ‘Hs’.

Aspies tend to register the small letter first, and then ‘see’ that this makes a larger letter. NTs tend to do it the other way around.

Aspie clients might notice a tree, then another (different) one, and another – and then register that this is a wood, where an NT would see a wood, then look at the trees.

Researchers refer to this tendency to focus on detail as local bias, and it seems to have a neurological basis. The Connectivity Theory (Baron-Cohen 2008) claims that in autism and Asperger’s syndrome there is short-range over-connectivity – more nerve cells or neurons making lots of local connections in the brain – but long-range under-connectivity, that is, fewer neurons making connections between more distant brain areas.

Mindblindness

Imagine living in a world where you could see and understand physical things but were ‘blind’ to the existence of: thoughts; beliefs; knowledge; desires; intentions.

You may experience these things yourself, but not detect them in or attribute them to others – you would exist inside a social bubble, cut off from the information that gives meaning and context to social life.

The significance of the loss of ‘why?’

Imagine you are watching a short video. It shows someone walk into a bedroom, walk around while looking around, and walk out.

Now, write down what you imagine might be the reason for him doing this:

- maybe he was *looking* for something he *wanted* to find, and he *thought* it was in the bedroom
- maybe he *heard* something in the bedroom, and *wanted to know* what had made the noise

‘While the typical 9-year-old can interpret another person’s expressions from their eyes, to figure out what they might be thinking or feeling, children with Asperger syndrome tend to find such tests far more difficult.’

– maybe he *forgot* where he was going: maybe he really *intended* to go downstairs.

A mindreader can generate a longish list of such ‘maybes’ to explain this behaviour – and it is a safe bet that most of them will be based on projecting or attributing mental states.

In the examples above, the mental-state words are printed in italics to make it easy to pick them out.

Mindreaders have the capacity to imagine or represent states of mind that we or others might hold.

A mindreader’s thinking about mental states is prefixed by ‘maybe’ because we are never 100 percent sure what we or others are thinking (since mental states are to some extent hidden from view).

Nevertheless we find it easy to imagine what others may be thinking.

Developmental difficulties

A typical 14-month-old child shows joint attention (such as pointing or following another person’s gaze), during which they not only look at another person’s face and eyes, but pay attention to what the other person is interested in. Children with autism and Asperger syndrome show reduced frequency of joint attention, in toddlerhood. They point less, look up at faces less and do not turn to follow another person’s gaze as much as a typical child.

The typical 24-month-old child can engage in pretend play. When they interact with someone else who is pretending, they need to use their mind-reading skills to be able to understand that in the other person’s mind, they are just pretending. Children with autism and Asperger syndrome show less pretend play, or their pretence is limited to more rule-based formats. For example, they may simply follow a make-believe script from a movie, or science fiction, where the pretend world is specified in terms of a set of ‘facts’ about that pretend universe.

The typical 3-year-old child can pass ‘the seeing leads to knowing test’ (see Figure 2). To pass the test question,

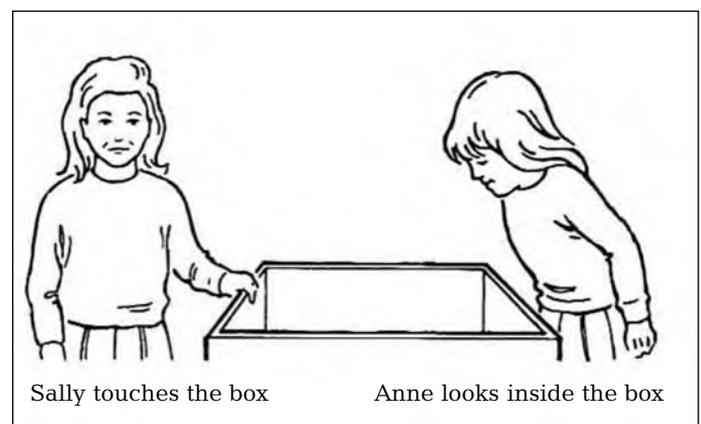


Figure 2: The ‘seeing leads to knowing’ test

Deception

The Snow White story also reminds us that mindreading is not only important when it comes to making sense of and predicting other people's behaviour, but it is also key to deception.

Deception is easily understood by the typical 4-year-old child. While this may be socially discouraged, the fact that typical children understand deception and may attempt to deceive others is a sign of a normal Theory of Mind(ToM). This is because deception is nothing other than making someone else believe that something is true when in fact it is false. It is the process of manipulating another person's mind. Children with autism and Asperger syndrome are slow to understand deception, again a sign of a delay in the development of ToM. This means they are more at risk of being exploited for their gullibility. They tend to assume everyone is telling the truth, and may be shocked by the idea that other people may not say what they mean.

This makes them vulnerable to a particular form of bullying, involving misdirection and misinformation.

A second limitation of this theory is that while mindreading is one component of empathy, empathy also requires an emotional response to another person's state of mind. Many people on the autistic spectrum also report that they are puzzled by how to respond to another person's emotions.

This second limitation is addressed by the biaxial diagnostic tool associated with the systemising empathising theory, which allows us to identify different kinds of minds, and answer the question – so what is the opposite of an Aspie?

That will be in the next part published in the winter 2016/17 issue of *the Transactional Analyst*.

References

Baron-Cohen, S. (2008) Autism and Asperger syndrome. Oxford. Oxford University Press.
M Handford's (2011) The Phenomenal Postcard Book. London. Walker Books.

the child needs to notice that while Sally touched the box, Anne actually looked into it, and since seeing is one way to get knowledge, Anne is the one who must know what's in the box. Children with autism and Asperger syndrome are delayed in passing this test.

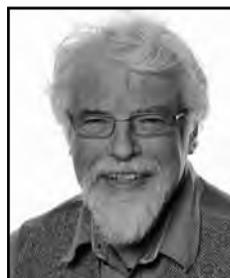
The typical 4-year-old child can understand the existence of a 'false belief': the child can understand that, in the story of Snow White, the girl is being deceived by her wicked stepmother who wants her to believe the apple is tasty, while all the while it contains poison.

The typical 9-year-old child is capable of figuring out what might hurt another's feelings and what might therefore be better left unspoken, ie they can recognise faux pas. Children with Asperger syndrome are delayed by around 3 years in this skill, such that it is only when they are about 12 years old that they perform at the level of a typical 9-year-old, despite their normal IQ.

While the typical 9-year-old can interpret another person's expressions from their eyes, to figure out what they might be thinking or feeling, children with Asperger syndrome tend to find such tests far more difficult. This persists into adulthood.

Conclusion

A strength of the mindblindness theory is that it can make sense of the social and communication difficulties in autism and Asperger syndrome, and that it is universal in applying to all individuals on the autistic spectrum. Its shortcoming is that it cannot account for the non-social features, such as sensory sensitivity and synaesthesia.



Peter Flowerdew PhD, CTA(P), PTSTA(P), has a private practice in Bristol. He is principal trainer at Contact Point an RTE based in Bristol; and executive director of Help! Counselling, a charity providing counselling and psychotherapy to young people.
 peter_flowerdew@hotmail.com