

Tekst 6

An unusual approach to autism

Animals in Translation: Using the Mysteries of Autism to Decode Animal Behaviour

by Temple Grandin and Catherine Johnson

Simon Baron-Cohen

1 This magisterial book on animal behaviour is unique and, for me, is gripping reading. It is written by Temple Grandin, perhaps the best-known woman with autism on the planet, and co-authored by Catherine Johnson, a mother of two children with autism.

2 Grandin is famous because she lectures tirelessly on what it is like to have autism. She is unusual because she is a woman with autism (most people with autism are male). She was one of the first people with considerable professional qualifications (she is an associate professor of animal science at Colorado State University) to go public about her diagnosis of autism.

3 In this fascinating book, Grandin attempts two ambitious projects. First, to explain animal behaviour. Linked to this, she aims to show how problems in animal behaviour can be easily remedied if you understand the causes of the behaviour. To this end, she has analysed animal behaviour down to its smallest details, so that she can predict what an animal will do.

4 Her second big focus is a new theory of autism. She argues that the autistic mind is closer to the animal mind than it is to the typical human mind when it comes to perception of detail. This last thesis will be most

controversial, but it opens up a whole new way of understanding autism.

5 Some readers may wonder why a person with autism, who readily recognises she has difficulties understanding the social lives of people, can have such an intuitive and accurate understanding of other animals. Surely a person with autism would be more likely to choose an inanimate domain, such as mathematics, or music, or computers? Aren't animals and their social lives just as confusing as other humans to a person with autism?

6 We know there are autistic "savants" who can identify a prime number with lightning speed, or can perform calculations such as multiplying two six-digit numbers together faster than a hand-calculator, or can listen to a piece of music just once and then reproduce it, or can tell you on what day of the week any date will fall. In all of these instances, the individual has systemised an inanimate system. They have analysed how the calendar works, as a system. Or they have analysed how music works, as a system. Or how numbers work, as a system.

7 When we systemise, we try to identify the rules that govern the system so that we can predict the system. And to identify the system's laws you have to analyse the system down to its smallest details, to spot regularities of the kind "If A, then B" or "If I do X, then Y occurs". Put formally, systemising involves piecing together "input-operation-output". According to the theory I advanced in *The Essential Difference*

- (Penguin/Basic Books), people with autism are hyper-systemisers.
- 8 Grandin has successfully systemised animal behaviour. She notes that the behaviourist psychologist BF Skinner tried to do this in the 1950. In my opinion Grandin has done a better job than Skinner did. This is because Skinner did not spend all his waking life trying to imagine how animals see, how they feel and how they think. Indeed, he famously argued that one should not speculate about an animal's emotions, thoughts, perceptions and drives, and instead recommended an exclusive focus on the environmental factors that either reward the animal's behaviour (leading to it being repeated) or punish it (leading to it not being repeated).
- 9 Grandin, in contrast, asked such questions as: what kinds of stimuli might make an animal frightened? What kinds of stimuli might make an animal angry? What do we know about the neuroscience of animal drives that might help us predict its behaviour? Grandin's incredibly patient, thorough, fine-grained analysis of animal behaviour results in her understanding it to the point of being able to predict it, fix it, control it and explain it. Her book almost stands as a manual for animal behaviour.
- 10 She readily recognises that human behaviour is much harder to systemise than is animal behaviour, not least because animal emotions are few in number. She estimates there are four primal emotions in animals (rage, prey-chase, fear and curiosity) and four primary social emotions in animals (sexual attraction, separation distress, attachment and playfulness). In contrast, our recent count of discrete human emotions listed 412 (see www.jkp.com/mindreading). The non-autistic person effortlessly makes sense of other people's behaviour despite this complexity not by trying to systemise people, but by using a different approach (empathising).
- 11 What of Grandin's theory of autism: that people with autism are closer to animals than they are to humans? Such a theory could be taken as offensive (suggesting people with autism are somehow sub-human).
- 23, Grandin's claim is that animals have superior perception of detail, and so do people with autism, and she backs up these claims with evidence. So, far from offending people with autism, she is if anything suggesting that non-autistic people have less sharp perception. We are, if you like, sub-autistic.
- 12 She links the two themes of her book by arguing that a person with autism will have a greater affinity for animals than will a person without autism, because the same sorts of unexpected flickering lights or sudden small movements or sounds that might startle an animal might also startle a person with autism. She goes further to argue that understanding animal perception might help us understand autistic perception.
- 13 Grandin is the modern day Doctor Dolittle who does not have any mystical telepathy with animals – she is simply an extremely experienced, sharp observer and careful scientist who has isolated the principles that govern animal behaviour. We owe her a huge debt for having used her autistic obsession (into animals) and her autistic perception (for accurate details) to teach us so much.

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- 1p 17 How does the writer present Temple Grandin in paragraphs 1-2?
As someone who
- A has done groundbreaking research on the origins of autism.
 - B has not let her autism stand in the way of an academic career.
 - C sees it as her mission to make people understand autism.
- “This last thesis will be most controversial” (alinea 4)
- 1p 18 Welke alinea gaat nader in op het controversiële karakter van deze “last thesis”?
- 2p 19 Geef van elk van de volgende beweringen aan of deze juist of onjuist is met betrekking tot alinea 5.
In paragraph 5 the writer
- 1 assumes animals do not have social lives in the way humans do.
 - 2 states his appreciation of Grandin’s theory of autism in animals.
 - 3 suggests Grandin should have focused on researching an inanimate domain.
- Noteer het nummer van elke bewering, gevolgd door “juist” of “onjuist”.
- 1p 20 Which of the following is true of paragraphs 6 and 7?
- A They demonstrate the necessity of fixed systems for people with autism.
 - B They make clear how autistic people are able to make sense of the world around them.
 - C They prove that an autistic person generally compensates for a poor intuition by systematic behaviour.
 - D They show the gap between Grandin’s theory on animals and Baron-Cohen’s theory on autism.
- 2p 21 Bepaal, op grond van de alinea’s 8 en 9, bij elk van de onderstaande beweringen aan wie deze toegeschreven moet worden: Skinner, Grandin, of geen van beiden.
- 1 Animals do not respond to behaviour based on emotion.
 - 2 Animals learn how to behave by means of external stimuli.
 - 3 Understanding animals’ perception is central to understanding their behaviour.
 - 4 When left to themselves, animals behave better.
- Noteer het nummer van elke bewering, gevolgd door “Skinner”, “Grandin”, of “geen van beiden”.
- 1p 22 Which of the following can be concluded from paragraph 10?
- A All 412 human emotions can be traced back to eight main categories of emotion in animals.
 - B Autistic people respond to the emotions common to both man and animal.
 - C Understanding the full range of human emotions comes naturally to most people.

- 1p **23** Which of the following fits the gap in paragraph 11?
- A** After all
 - B** Besides
 - C** Even so
 - D** In fact
- 1p **24** Which of the following is true of Grandin's book, judging from the final paragraph?
- A** It is based on painstaking scientific work that few others would have been able to complete.
 - B** It raises awareness of what is fundamental in all animal interaction.
 - C** It took Grandin's special gift of communication with animals to accomplish this unique project.