

2016 - Issue Three

Autistic Insights on Our Fellow Creatures

MELANIE DANNER

Temple Grandin, *Animals in Translation: Using the Mysteries of Autism to Decode Animal Behavior* (Simon & Schuster, 2005).

A friend, along with his two horses, volunteered for decades in a hippotherapy program at a school for children with emotional challenges. Another friend grows teary relating how their dog would alert an adult when it detected that their son, who was suffering from leukemia, was going to lose consciousness. Yet a third friend told me of a new program at her library which has children read aloud to a dog. The dog's schedule rapidly fills with children with crippling shyness, dyslexia or other learning differences, and non-native English speakers. Temple Grandin would be pleased. Her book *Animals in Translation* closes with a plea to cherish the animal/human bond and employ animals in innovative ways to benefit from their various gifts. The book, however, is hardly another sentimental look at animals. Take, for example, Grandin's descriptions of the aberrant behavior of "psycho hens," "rapist roosters," and dolphins which "commit gang rape, brutal killings of dolphin 'children,' and the mass murder of porpoises" (151). In fact, Grandin, who holds a PhD in Animal Behavior and has authored several books and over 300 scientific papers, would be anathema to every vegan on the planet since in her own words, "Half the cattle in the United States and Canada are handled in humane slaughter systems I've designed" (7). For her, despite the apparent contradiction between her love of animals and her job in the meat-packing industry, she is serving cattle, hogs, lambs, poultry, etc. by striving to ensure that these animals that are bred by humans for their utility have a decent life and a decent death.

The uniqueness of Grandin's contribution to this field is alluded to in the subtitle. Her understanding passes through her experience of autism, which she argues, is "a way station on the road from animals to humans, which puts autistic people like me in a perfect position to translate 'animal talk' into English" (67). Despite the countless fascinating observations on animal perception, feelings, aggression, pain, suffering, and genius, ultimately, it is the prism of autism that commands the reader's interest. The path she has taken also lends her work credibility: "Because of my own problems, I've always followed neuroscientific research on the human brain as closely as I've followed my own field. I had to; I'm always looking for answers about how to manage my own life, not just animals' lives. Following both fields at the same time led me to see a connection between human intelligence and animal intelligence the animal sciences have missed" (7). This chain of study (typical human brain—autistic brain—animal brain) has not only provided the multitude of insights gathered in decades of field work and academic study shared in this book, it offers promising angles of inquiry in the future.

One of the greatest similarities between the autistic and animal brains is "thinking in pictures" (the title of another of Grandin's books). She explains that her thought processes are all visual, and language

enters only at the point of judgment at the end. Being a visual thinker allows Grandin to see things to which normal people are oblivious. Animals, unlike normal people and like autistic individuals, are dominated by what comes through their senses, being exceedingly detail-oriented and unable to filter out details in their environment. The normal human brain engages in massive screening before registering details as worthy of interest; much of what does not fit into expectations based on experience does not make the cut and so does not enter the consciousness, a phenomenon called “inattention blindness” (25). For this reason, much of Grandin’s work has revolved around helping managers of slaughterhouses to notice and correct things that were spooking the animals. By necessity, animals, especially prey animals, remain on high alert and constantly scan their environment for dangers. Being unaware can cost them their lives. The autistic brain is likewise detail-oriented and on high alert, which is one reason it is so prone to fear and anxiety.

A particularly important insight that autism has given Grandin in her study of animal behavior and in designing facilities for slaughter is that fear is worse than pain. She believes animals being slaughtered should not only experience a painless death but should be handled during the preceding stages in a way that does not stress them. Having experienced so much fear and anxiety herself (especially before starting medication in her 30s), Grandin is sensitive to the “hyper-fear systems” autistic people and animals share because of their less powerful frontal lobes. The frontal lobes in a normal human brain have two important functions to provide coping mechanisms against excessive fear: 1) they act as brakes on the amygdala, the part of the mid-brain that sends out signals to the pituitary to produce stress hormones, and 2) they are essential in language, which normal people use to process and reduce their fear. Autistic people, who remain much of the time, and (most) animals, which remain all the time, in a sea of raw sensory data unmitigated by language, are far more susceptible to fear. Other factors exacerbate animals’ tendency to fear. For evolutionary reasons, fear is contagious; many more animals would die if each waited around to investigate potential dangers itself. Also, their fears are “hyper-specific” since animals do little generalizing (another of the frontal lobes’ tasks). They perceive differences more than similarities, and seeing particulars rather than forming concepts about those particulars, many more things appear to them as new and potentially threatening. Once a fear is in place, it is much harder to disarm without the analytical and linguistic capacities larger frontal lobes give a normal person. Grandin relates that she was so completely besieged by anxiety and fear in her teen years that every waking hour felt as stressful as defending her PhD dissertation. Then, she had a moment of revelation while visiting her aunt and uncle’s ranch. Watching a panicky cow go into a contraption that squeezed it to calm it for the administration of an injection, she was provoked to build a “squeeze machine” for herself. Her apparatus produced the desired calming effect, and that was her first indication that she shared something important with cattle. In the midst of her terror-filled existence, she reported, “Animals saved me” (4).

Grandin builds a compelling case that human beings need animals not only for food and other products, not only for companionship, but also to help us understand ourselves, whether we are “normal” or not. I cannot help thinking her insights about fear are relevant for people with anxiety disorders, certain brain injuries, and dementia. All people possess the lower instinctive “animal” brain in addition to the upper “human” one, and we sometimes fall back on the lower one (e.g., when we have an amygdala hijack), so it behooves us to understand how the two interact. It is truly wonderful to encounter a book on animal behavior by an autistic person that sheds so much light on the workings of my own brain and the brains of other people, as well as the creatures given to inhabit the planet with us.

Melanie Danner lives on a hobby farm in the Maryland countryside with her husband, children, flock of sheep and paddling of ducks.

