NAVIGATING THE SOCIAL WORLD

What Infants, Children, and Other Species Can Teach Us

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4.2

Empathy Deficits in Autism and Psychopaths

Mirror Opposites?

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Empathy can be defined as having two separable components: a cognitive component (the ability to recognize someone else's thoughts, intentions, and feelings) and an affective component (the drive to respond to someone else's thoughts and feelings with an appropriate emotion) (Baron-Cohen, 2003; Davis, 1994). Two different neurodevelopmental conditions involve empathy deficits: autism (Baron-Cohen, 1995; Frith, 1989) and psychopathy (Blair et al., 2005). So why do they not result in a similar outcome? If they both share low empathy, why do people with autism tend to avoid other people, struggle with relationships, and show a commitment to honesty and truth (Baron-Cohen, 2008b), whereas psychopaths often hurt other people, and manipulate and deceive others (Baron-Cohen, 2011)?

The answer to this riddle may lie in the two "fractions" of empathy. The thesis is that while people with autism have well-established difficulties in theory of mind (the cognitive component of empathy) alongside intact affective empathy, psychopaths have intact theory of mind but impaired affective empathy (Blair, 1999; Blair et al., 1996). Put otherwise, people with autism have trouble keeping track of others' intentions, beliefs, knowledge, desires, and emotions but still get upset when they hear of *someone's* suffering, while psychopaths find it easy to mind read others and do so to their own advantage but do not *care* about others' thoughts and feelings.

So if in psychopaths cognitive empathy is intact while affective empathy is impaired, and if in autism the profile is the opposite way around, could this explain the differences we observe in their behavior? Certainly it is a parsimonious explanation for why "zero degrees of empathy" can result in cruelty in psychopaths on the one hand, and social withdrawal and confusion in people with autism. But can it explain the other big difference between these two groups: that people with autism often show high levels of morality, while psychopaths are by and large amoral?

The psychologist Jon Haidt (2012) has a valuable analysis of morality. He identifies five universal, foundational principles that guide our judgment of good and bad, and therefore our behavior in relation to how to treat others. These are (1) caring for others, (2) fairness and justice, (3) loyalty toward one's group, (4) respect for authority, and (5) purity. These he argues are the evolved foundations of morality because some of these can be observed in other primates and even mammals. For example, monkeys and apes who care for dependent infants act in ways to protect the vulnerable, just like humans do (the "care" principle); wolves and other "pack" animals act in ways to keep the group cohesive (the "loyalty principle), and primates who live in social hierarchies show a keen sensitivity for how to treat those in a higher social rank to themselves (the "authority/respect" principle).

But back to people with autism and psychopaths: Why do the former often show high levels of morality—to the point of becoming whistleblowers when they perceive others as breaking the rules—while the latter show high levels of amorality? Is this difference too a consequence of their empathy fractionates? I will argue that four out of five of Haidt's moral principles seem to presuppose intact affective empathy, independent of whether cognitive empathy is intact or impaired. First, consider the summary chart in Figure 4.1.

How might a psychopath fare on Haidt's moral principles? We know it is almost dogma that a psychopath would be able to hurt another person (so no "care" principle), cheat someone out of their fair share (so no "justice" prin-

Haidt's 5 Moral Foundations	Psychopath	Conduct Disorder	Autism
1. Care			√
2. Fairness/Justice			√
3. In-			√
4. Respect for Authority			√
5. Purity	√	√	√
[illegible]	√		x
Affective Empathy	x	x	√
			√

FIGURE 4.2.1: Why people with autism are moral and caring, and psychopaths are not. √ = clearly present; x = clearly impaired.

and even be willing to pretend to be loyal to the company while making a deal with their competitor (so no "loyalty" principle). We also know they would not give a damn about respect for elders or those who have spent their lives working to get to a higher position (so no "respect" principle) (Cleckley, 1976; Hare et al., 1990). Indeed, the only moral principle that may be intact in psychopaths is the "purity" one. Like all of us, they may feel certain foods or actions are clean and pure, and others are dirty and disgusting. How have psychopaths ended up lacking four out of five of Haidt's universal moral foundations?

Before we answer this question, let's just work through the same moral checklist with someone with autism or Asperger syndrome in mind. For some people it will come as a surprise—given the "mindblindness" theory of autism—that many people with Asperger syndrome show high levels of care for others (Attwood, 1997). They look after their ageing parents, their pets (some even take in dozens of lost or injured animals), and many are devoted parents to their own children and show care toward the sick in their community. In addition, they give to or work for charities that provide care to those less fortunate than themselves. So the "care" principle is often well developed in autism and Asperger syndrome. Equally, many people with Asperger syndrome become passionate lobbyists for social change toward greater social justice, campaigning and protesting and marshaling their ethical arguments for concepts such as equality, fairness, and justice, feeling outrage for those who are unjustly interned, for example, and compassion for their plight (Baron-Cohen, 2008a). This tests the "fairness/justice" principle is also well developed in autism spectrum conditions.

And the same is true of their feelings of loyalty. They are often described as the most loyal of employees, recognizing that betrayal is immoral and the importance of sticking with your team, whether as a football supporter or as a member of a group. So the "group/loyalty" seems to be intact, too. People with Asperger syndrome also show keen attention to social hierarchy, not just their own position within it but a close scrutiny of those at the top, wanting their leaders to prove they deserve our respect by behaving consistently, honestly, and ethically (Baron-Cohen, 2003). So the "respect for authority" moral principle is intact, too. Finally, people with autism spectrum conditions can be as picky as anyone about what they consider is "pure" enough to put into their bodies or what in their mind constitutes spiritual purity. In that respect, the "purity" principle is a fundamental part of their morality.

What immediately strikes one, looking at Figure 4.2.1, is that an impairment in cognitive empathy does not seem to affect one's capacity to be a good moral citizen (providing affective empathy is intact), whereas an impairment in affective empathy appears to be able to wipe out four out of five of our moral principles (irrespective of whether cognitive empathy is intact). How could this be?

The answer comes from looking at a third medical condition, that of borderline personality disorder. Some 80% of patients with this disorder tragically suffered abuse or neglect in early childhood, such that they missed out on the opportunity to experience affection and a secure attachment relationship with a caregiver (Fonagy, 2000). As adults they find it hard to trust others in intimate relationships and can break off relationships impulsively and within seconds as their anger flares up. They can lash out at others in a way that suggests they do not care what the impact of their actions and words are on others. During one of these rages, their affective empathy shuts down, although they appear to have intact

cognitive empathy in terms of being able to recognize facial expressions, for example. Patients with borderline personality disorder illustrate that one way in which affective empathy can fail to develop normally is after a lack of the *experience of care* in infancy and early childhood (Bowlby, 1969). They contrast with psychopaths whose callousness seems to have a strong genetic element (Viding et al., 2005) and who may *not* have suffered neglect or abuse in childhood. Like psychopaths, however, patients with borderline personality disorder may lose four of the five moral foundations: During an angry outburst they may stop caring for their children (the "care" principle), for others less fortunate than themselves (the "justice/fairness" principle), or for the needs of their group (the "group/loyalty" principle), and they may not respect their elders/seniors (the "respect/authority" principle). Like all human beings, they are likely to nevertheless have views on what constitutes purity in terms of actions, thoughts, foods, and so on (the "purity" principle).

This suggests that whether one loses one's affective empathy as a result of early neglect/abuse, as a result of genetic influences, or both, the loss of affective empathy can erode four out of five fundamental moral foundations. And it helps answer the puzzle as to why people with autism (who typically have experienced a caring environment and who do not have the genetic makeup of psychopaths) can end up both as caring and moral, despite their difficulties in cognitive empathy/mind reading.

For people with autism, their intact morality has a second cast iron platform: their strong systemizing. Systemizing is the drive to analyze or build a system, defined as anything that is lawful (Baron-Cohen, 2003). Systems include machines (which operate on mechanical rules) or natural phenomena such as plants (which follow the laws of biology and ecology), but systems can also be abstract (such as music or math), collectible (e.g., a system for how to organize your DVDs at home), or even social (like a legal system). People with autism are strong systemizers, typically becoming highly focused ("obsessed") with particular systems (Baron-Cohen, 2008b). Perhaps because of their difficulties with cognitive empathy, they rely even more on systemizing to understand the social world, wanting people to be consistent and to follow rules. These can include rules of morality. This drive to understand the system in all its exquisite detail, and in a black-and-white, binary fashion, is not just an advantage when it comes to figuring out gadgets, building Lego structures, and piecing together train timetables or the names of every dinosaur (just some of the "obsessions" that develop in autism) but can also lead to a strong moral code.[1]

This leads to several conclusions. First, low empathy comes in at least two varieties: low cognitive empathy and low affective empathy. People with autism show the former and psychopaths show the latter.[2] Second, low affective empathy can leave the person capable of hurting another person, while low cognitive empathy typically just leaves the person confused by others and needing to avoid others. Third, low cognitive empathy alone does not leave the person uncaring or unemotional towards the plight of others, and nor does it affect their moral development. In contrast, low affective empathy (whether for genetic and/or environmental reasons) can undermine a person's moral development. Finally, fourth, people with autism are likely to end up with an intact moral code not just because they have intact affective empathy, but also because they have a strong drive to systemize. The study of atypical groups in the population can teach us about the importance of different factors in typical development, and vice versa (Cicchetti, 1984).

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[1] As an aside, some women with Asperger syndrome sometimes argue they are not strong systemizers because they were awful at math. But the systemizing theory does not propose that people with autism or Asperger syndrome should be good at or understand *all* systems, since it is the nature of systemizing that one latches onto just one system at a time to understand it deeply. For some people it may be math, but for others it may be physics, horse riding, cooking, map collecting, or any other system.

[2] I claim that people with Asperger syndrome or autism have intact affective empathy, and like all generalizations, this should be qualified with the phrase "on average." That means there may be some individuals with Asperger syndrome or autism who have both impaired cognitive and affective empathy. The prediction would then be that this subgroup alone might be at risk of hurting others. But my clinical experience of adults with Asperger syndrome is that the majority of them have intact affective empathy and a strong moral compass. It should also be borne in mind that individuals may have more than one diagnosis, and certainly I have seen people with both Asperger syndrome and borderline personality disorder.

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