

Psychologists are trying to understand the brutal behaviour this Rwandan genocide survivor endured.

The empathy gap

Malfunctioning brain networks only partly explain why some people act cruelly, finds **Stephanie Preston**.

In his 2007 book *Musicophilia*, psychiatrist Oliver Sacks warned that although neuroscience offers exciting insights, "there is always a certain danger that the simple art of observation may be lost, that clinical description may become perfunctory, and the richness of the human context ignored". Simon Baron-Cohen, director of the Autism Research Centre in Cambridge, UK, rises to the challenge in his latest book by combining basic science and clinical observation in an attempt to explain human cruelty.

In Zero Degrees of Empathy, Baron-Cohen reconstrues "evil" as the product of a failure to empathize, caused by malfunction in an empathy network within the brain. Most of the book focuses on detailed case studies of disorders of empathy: psychopathic personality disorder (Type P), borderline personality disorder (Type B), narcissistic personality disorder (Type N), and the autism spectrum disorders (ASD). Filling the gap that Sachs notes, Baron-Cohen's rich descriptions of the patients' social and emotional lives force us to rethink common beliefs about the nature of these disorders.

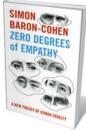
He splits the four types into two forms of "zero degrees of empathy". Types P, B, and N are dubbed "Zero Negative" because their lack of empathy is considered to be solely detrimental. Individuals with ASD are "Zero Positive", as they lack empathy but also have "systematizing" natures, which are valued because their focus on detail and patterns are key components of advanced processes such as hypothesis testing.

Baron-Cohen then attributes these traits to dysfunction in the brain's "empathy circuit", genetic abnormalities and poor developmental conditions. These preclude the forging of an emotionally-resilient "internal pot of gold" — a robust psychology that is normally developed through secure attachment.

Baron-Cohen's introduction of these abstract terms is understandable, since they

allow a complex topic to be understood by a broad audience. They reflect some truth about the world, yet allow him to incorporate his empirical work into a broad social theme. And he should be lauded for approaching the problem head-on, which is rarely done in neuroscience.

However, his terminology also makes it difficult to judge exactly how his model advances our understanding of human cruelty. Empathy was already understood



Zero Degrees of Empathy: A New Theory of Human Cruelty/The Science of Evil: On Empathy and the Origins of Cruelty SIMON BARON-COHEN Allen Lane/Basic Books: 2011. 208 pp./256 pp. £20/\$25.99

as a (statistically) normally distributed phenomenon that arises in interconnected neural regions that are dysfunctional in these disorders. Terms such as "empathy circuit" may lead people to incorrectly infer that these neural regions are solely associated with empathy, when in reality they participate in a range of domains including language, action selection, decision-making, emotion, attention, and general social behaviour.

Nevertheless, the disturbing examples of cruel behaviour in the book, including the seemingly gratuitous levels of humiliation of victims in genocides and massacres, should be used to inform our scientific theories. Humiliation can be used to establish status, to signal collaboration with a dominant person or to respond to one's own perceived oppression. Additionally, dehumanization may arise when perpetrators have to side-step their intact empathy mechanisms in order to permit murder via indirect methods — such as henchmen, technology or by forcing victims to kill one another.

An interdisciplinary framework that combines our neuroscientific knowledge with findings from social and political science may allow us to capture the 'richness of the human context' in such a consequential topic.

Understanding our simultaneous capacity for great compassion and cruelty is no easy feat. We should take Baron-Cohen's accessible book as an invitation to leave the comforts of our smaller, more tractable problems in a genuine attempt to address larger social issues.

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