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Not Noble Savages after all: Limits to early altruism

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Abstract

Many scholars draw on evidence from evolutionary biology, behavioral economics, and infant research to argue that humans are "noble savages", endowed with indiscriminate kindness. We believe this is mistaken. While there is evidence for an early-emerging moral sense – even infants recognize and favor instances of fairness and kindness amongst third parties – altruistic behaviors are selective from the start. Babies and young children favor those who have been kind to them in the past, and favor familiar individuals over strangers. They hold strong biases for ingroup over outgroup and for self over other, and indeed are more unequivocally selfish than older children and adults. Much of what is most impressive about adult morality arises not through inborn capacities, but a fraught developmental process that involves exposure to culture and the exercise of rationality.

Keywords

morality; development; altruism

1. Introduction

In *Leviathan*, published in 1651, Thomas Hobbes famously claimed that humans are born selfish and vicious—in the absence of cultural rules and societal restraints, life is "solitary, poor, nasty, brutish, and short." This view was echoed and developed by psychologists such as Freud, Piaget, and Kohlberg, who argued that kindness and morality do not come naturally to us.

While there are still some Hobbesians left in psychology, the balance has shifted over the last few decades Many scholars instead endorse the position of Hobbes' critic, Jean-Jacques Rousseau, who defended the notion of the Noble Savage. For Rousseau, the state of nature would not be total war; rather, "uncorrupted morals" would prevail.

This kinder view is grounded in findings from many fields. Evolutionary biologists have discovered the adaptive logic behind altruistic behavior towards relatives (kin selection) and those with whom we frequently interact (reciprocal altruism) (e.g., Axelrod, 1987). Social psychologists and social neuroscientists have identified specialized neural systems that underlie compassion and altruism (e.g., Zaki, Lopez, and Mitchell, 2013). And behavioral

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economists have shown that people are motivated by concerns such as fairness and reciprocity (see Starmans, Sheskin, and Bloom, 2017 for review).

Much of the swing from Hobbes to Rousseau has been driven by findings from developmental psychology. Human babies are sensitive to the pain of others, and, as soon as they are able, they often attempt to assuage suffering—1-year-olds soothe others in distress by stroking and touching or by handing over a bottle or toy (see Hoffman, 2001 for review). Warneken and Tomsello (2006) find that toddlers who witness an adult struggling to do something (like open a cabinet door when his hands are full) tend spontaneously to help. Explicitly rewarding them for doing so *reduces* this tendency, suggesting that helping is inherently rewarding. Warneken and Tomasello (2009) conclude that we begin our lives as "rather indiscriminate altruists"—our kindness begins as a general orientation towards all. They suggest that as children's understanding develops and they acquire more experience, they become better able to act altruistically—"but this should not just blindly lead to more helping, but more selective helping."

In the remainder of this brief article, we swing the pendulum back a bit towards Hobbes. Although young humans possess a surprisingly rich moral sense (as reviewed in the following section), our initial sociality and morality are selective. We naturally favor those whom we see as good individuals and who fall into our social groups, and we wrestle with prejudice and self-interest. Babies and young children are, at best, *selective* altruists.

2. Evidence for a moral sense

There are two general ways in which bias can manifest itself. One is in the choice as to whether and how to interact with a single individual (so-called "partner fidelity" or "partner control"); the other is in the choice of who to interact with from a group of two or more individuals ("partner choice"). Many of the anti-Hobbesian findings reviewed above focus on partner fidelity; many of the findings we discuss below—on moral cognition in general and on moral biases in particular—look at partner choice.

Across many studies, we have demonstrated that infants prefer those who are kind to others, all else being equal (e.g., Hamlin, Wynn, & Bloom, 2007; Hamlin & Wynn, 2011; see Wynn & Bloom, 2013 for review). In these studies, infants repeatedly witness a puppet protagonist attempting to complete a task (e.g., climb a hill, open a box, etc.). On some trials, a helper facilitates the protagonist's efforts; on other trials, a hinderer thwarts the protagonists' efforts. When then given a choice between the two, infants demonstrate a robust reaching preference for the helper. And even 3-month-old infants, not yet capable of reliable reaching, visually orient strongly towards the helper (Hamlin, Wynn & Bloom, 2010). Further work shows the strength of infants' preference for nice over mean characters. Infants willingly incur material costs to interact with the former rather than the latter, accepting small offerings from nice characters in favor of larger offerings from mean ones (though they will accept the latter if the difference in offerings is extreme; Tasimi & Wynn, 2016).

In addition to recognizing both nice and mean social actions, young humans recognize and value fair actions over unfair ones. Toddlers as young as 15 months expect others to

distribute resources equitably to third parties (Sommerville, Schmidt, Yun, & Burns, 2013; Sloane, Baillargeon, & Premack, 2012), and prefer fair to unfair sharers (Geraci & Surian, 2011). Although younger infants don't show these patterns (Geraci & Surian, 2011; Sommerville et al., 2013), their presence in still-largely-preverbal toddlers suggests that fairness is a concept ready to be activated by experience.

Interestingly, young children are not *categorically* opposed to harm; they approve of harmful acts directed towards characters who have acted badly. Toddlers will mete out rewards and punishments appropriately, preferentially giving treats to helpful characters and taking treats away from harmful characters (Hamlin, Wynn, Bloom, & Mahajan, 2011). Six-year-old children willingly incur costs to punish selfish out-group members, and 8-year-olds punish antisocial actions, even those committed by in-group members (Jordan, McAuliffe, & Warneken, 2014).

3. Selective helping

Developmental psychologists have long been fascinated by altruism in toddlers and young children, and over the last several decades there have been many anecdotes and studies showing spontaneous helping (see Bloom, 2013 for review). Interestingly, though, this helping is selective in important ways.

First, helping is influenced by the past behavior of the other individual. In one set of studies, 21-month-olds sat across from two experimenters, each of whom held out a toy. Neither toy got to the toddler, however, because one of the experimenters was teasing and refused to release it, while the other experimenter tried to give it to the child but dropped it. When toddlers subsequently got their own toy, the two experimenters simultaneously requested it; toddlers preferentially gave it to the trier, not the teaser (Dunfield & Kuhlmeier, 2010). And 3-year-olds are more likely to help someone who has previously helped someone else, and less likely to help someone who has been cruel to another person (or even who had harmful intentions), suggesting that a toddler's inclination to help someone is contingent on a general moral evaluation, not just personal experience with that person (Vaish, Carpenter, & Tomasello, 2010).[1]

Second, helping is influenced by familiarity. Indeed, before about the age of four, children show little spontaneous kindness toward strangers (see Bloom, 2013 for review). This might be surprising, given the experimental demonstrations in which children do help, but it's critical to realize that the adults in these studies aren't wholly unfamiliar. Before many studies (but not all, see, e.g., Hepach et al., 2017), the child (along with his or her parent) interacts with the experimenter in a "warm-up" session, where they engage in friendly reciprocal activities like rolling a ball back and forth. This makes a difference: Without this sort of reciprocal interaction—just a friendly greeting by the adult and warm thanks for

[1]Much of the research we describe here looks at children's initial responses, and it's worth noting that some studies show these preferences change or disappear on subsequent trials (e.g., Dahl et al., 2013; Vaish et al., 2010). We don't see such shifts as challenging the bias account, however. There are many reasons why a very real preference for A over B could disappear in later trails. These include fairness motivations—having helped one individual on Trial 1, the child might think it's only fair to help the other on Trial 2—as well as concerns about the pragmatics of being repeatedly asked the same question, which tends to push children (and adults) toward changing their answers.

agreeing to participate— the extent of later helping by children drops by about half (Barragan & Dweck, 2015). If there were *no* prior interactions at all—if the adult were a true stranger at the moment that she or he needed help—we suspect there would be little or no spontaneous kindness at all on the part of the child.

4. Discrimination on the basis of group

Perhaps the major finding of all of social psychology—and the human sciences more generally— is our group-mindedness, the extent to which we favor *Us* over *Them*. Developmentally, this begins with a simple preference for the familiar. Babies prefer to look at their mothers' faces over strangers' faces (e.g., Bushnell, 2001) and prefer to look at faces of those who belong to the race they encounter most often (e.g., Bar-Haim, Ziv, Lamy, & Hodes, 2006). Babies prefer individuals who speak their native language over those who speak a foreign language, or who speak with a foreign accent (see Kinzler, Shutts, & Correll, 2010 for review). As they grow older, they prefer to share resources with same-language others (Kinzler et al., 2010).

The most striking example of children's eagerness to engage in Us/Them categorization comes from studies building on Henri Tajfel's classic work on the formation of "minimal groups" in adults (e.g., Tajfel, Billig, Bundy, & Flament, 1971). Children, like adults, favor their own group over others, even when the group is established on the most minimal and arbitrary basis, such as children in a classroom being randomly assigned red vs. blue t-shirts or handed differently colored stickers (e.g., Baron & Duhnam, 2005).

Some of our own work suggests that homophily—our love of the similar—is a critical force in this early categorization (see Wynn, 2016, for review). In a number of studies, we gave babies under a year of age a choice between two options (e.g., two colors of mittens). Babies then viewed a show in which two puppets also chose between these items: One chose the same item the baby did and expressed dislike of the other option, and one expressed dislike of the item the baby chose, and a liking for the other item. When encouraged to reach for one of the puppets, over 80% of babies preferred the individual who chose as they themselves had done (Mahajan & Wynn, 2012). Not only do infants prefer those who share their views, they appear actively to dislike those with different views from them, preferring a puppet who harms such an other-minded individual to one who helps (Hamlin, Mahajan, Liberman, & Wynn, 2013). Indeed, further findings suggest that babies are driven more by a desire to see other-minded individuals treated poorly than to see like-minded individuals treated well (Hamlin et al., 2013).

5. Self and other

While one important contrast is between Us and Them, another is between Me and Everyone Else. Altruistic considerations often compete with our self-interests. A child might recognize that giving a toy to another child can increase the other's welfare, but few children will do this with a toy they are enjoying themselves. Similarly, few adults, upon finding a hundred-dollar bill on the street, would hand it over the next person who walked by. With the interesting exception of very close kin, people typically value themselves over others. This is

reflected in a large body of research utilizing various economic games. One example is the Dictator Game, in which participants can split a sum of money with a stranger however they please; a recent meta-analysis found that more than 70% of people keep most of the money for themselves (Engel, 2011; see also Levitt & List, 2017).

Early childhood is a time when the balance is strongly in favor of selfishness. Young children have no theological or philosophical commitments driving them to care about the good of others. Furthermore, because they do not actively engage in collaborative enterprises to the extent that older people do, they gain less than older humans from a good moral reputation and are therefore freer to express self-maximizing motivations (Sheskin, Chevallier, Lambert, & Baumard, 2014). Building on work showing that young children's fairness behavior is slow-emerging (e.g., Benenson, Pascoe, & Radmore, 2007), two recent cross-cultural studies on children's sharing show that across disparate cultures and lifestyles children are self-interested, and the emergence of equitable sharing comes with development and cultural exposure (Rochat et al., 2009; House et al, 2013).

There are sometimes advantages to being at a *relative* advantage over others, even if it does not maximize one's *absolute* welfare (as captured in the joke about the two campers fleeing from a bear: "I don't have to outrun the bear, I just have to outrun you."). Young children seek out relative advantage, as shown in a set of studies we conducted. We gave children a choice between two possible allocations of resources to themselves and another child, a fair allocation ("2 resources each") and an unfair one that put the participant at an advantage ("2 for self and 1 for other"). Children under 7 years of age predominantly choose the latter option (Sheskin, Bloom, & Wynn, 2014). Indeed, this preference for relative advantage was so strong that many children spitefully opted for allocations that gave them a relative advantage over ones that gave them a greater absolute amount (i.e., choosing a distribution of "1 for self and 0 for other" over "2 each"). It is only at older ages that these preferences give way to a robust preference for equal distributions. Older children become more likely to behave fairly as the early-emerging social comparison preference for relative self-advantage are partially counteracted by an increasing endorsement of principles of fairness and generosity (for review, see McAuliffe, Blake, Steinbeis, & Warneken, 2017).

Indeed, even children who choose numerical equality prefer will often look for opportunities to gain a relative advantage. For example, when asked to allocate four toys of varying quality between self and other, 6- to 8-year-olds often allocate them with numerical equality but qualitative inequality, dividing the toys "two each," thus numerically satisfying the social prescription of fairness, but taking both higher-quality toys for themselves (Sheskin et al., 2016). Finally, children's general preference for generous individuals over stingy ones decreases when those individuals outshine the children's own levels of generosity, placing them at a reputational disadvantage (Tasimi, Dominguez, & Wynn, 2015).

5. Conclusion

We are impressed by demonstrations of altruism in babies and toddlers, but this might be because we start off expecting so little. The reality is that their altruism is selective, which shouldn't be surprising as this is also true of adults. Certain moral biases remain stable

across development. But, perhaps more surprisingly, babies and toddlers discriminate in ways that many of us reject as adults (e.g. on the basis of accent), and are also more selfish than adults. These facts illustrate something that many moral nativists miss, which is the extent to which our culture and rationality can—at least some of the time—lead us to transcend our initial biases (see also Bloom, 2016). And this leads to profound changes in our moral understanding and moral actions as we develop.

We agree, then, with the many researchers proposing an innate basis for human morality – indeed, our own research points towards this conclusion. But human nature is multifaceted from the very first, and so we find ourselves agreeing also with the biologist Richard Dawkins, who wrote “Be warned that if you wish, as I do, to build a society in which individuals cooperate generously and unselfishly toward a common good, you can expect little help from biological nature” (Dawkins, 1989). Or as a character in a Kingsley Amis novel (Amis, 2013) once put it, “It was no wonder that people were so horrible when they started life as children.”

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