



ANGELS AND MONSTERS

Babies and children are soft behavioral clay. They are loving, ingenuous, innocent and empathic—and they are heedless, greedy, demanding and even violent. That tension—and how it's resolved—stays with us for life

BY SONIA WEISER

FRESH FROM THE WOMB AND UNTAINTED BY THE cruel realities of the world, babies embody innocence. Too young to fathom a difference between right and wrong, good and evil, they are granted cherubic status until proven otherwise.

It's a sweet take—but an incomplete one. Babies are in fact a swirl of conflicting impulses: selfish and giving, narcissistic and sympathetic, aggressive and gentle. In other words, they're just like adults—if the 1.0 version, before life downloads all the upgrades.

As with adults, almost everything in a baby's prosocial or antisocial behavior begins with empathy, “our natural ability for sharing emotions, coupled with a motivation to care for their well-being,” as Jean Decety, a professor of psychology and psychiatry at the University of Chicago, put it via email. Director of the Child NeuroSuite, Decety, along with his colleagues, studies the development not just of empathy but also of morality, social decision-making and more among toddlers and children, relying on a combination of interactive tasks and games as well as eye-tracking and EEG readings of brain activity.

Among Decety's findings is that children even as young as age 1 can recognize distress in another person and attempt to offer comfort, while those between 14 and 18 months exhibit unrewarded and unprompted helping behaviors. That said, kids—and adults—don't show the same level of empathy toward everyone. Family members and, to a lesser extent, other people with whom children are familiar will always get more attention and aid than people we know less well. That sometimes puts empathy in conflict with morality: a close playmate is no less worthy of concern than a less close one, and yet from babyhood on, we look out for our tribe first.

“Empathy can bias our judgments, and influence decision-making in ways that directly conflict with moral principles such as fairness,” writes Decety.

His own studies back this up. In a 2014 paper in *Trends in Cognitive Science*, Decety found that the neural network involved in processing empathy is significantly strengthened when people see their loved ones in pain, and less so in response to strangers' distress.

Says Nancy Eisenberg, a Regents' Professor in the department of psychology at Arizona State University, “There's a difference between empathy for people like yourself—your family, your friends, people who look like you—and empathy for people who are different somehow. That's harder.”

And yet, over time, the bias comes back into balance. We're not born with the sophisticated empathy we develop as we grow older—“affective empathy”—or the true ability to experience another's pain or joy or sorrow. Rather, we experience what's known as empathic arousal. Babies “catch” the emotions of people around them—rather than sitting peacefully while the baby in a nearby crib begins to cry, they'll join the chorus of wailing and howling.

“The problem is, of course, if you start crying and I start crying, it's not very helpful,” says Carolien Rieffe, a professor of social and emotional development of children with auditory or communication impairments at Leiden University's Institute of Psychology. As months go by, children begin to understand the need to self-regulate in order to attend to the needs of another. “I need to understand that it's not me, it's you,” continues Rieffe.

At the age of 4, children may display yet another form of empathy, known as “cognitive empathy,” the ability to understand on a purely intellectual level another person's feelings by identifying unique motives, desires or perspectives. Psychopaths with a keen cognitive empathy can harness their ability to read others in order to manipulate them; without affective empathy, they know they are causing pain but feel nothing in response.

Unlike affective empathy, cognitive empathy is learned primarily through observation and social interactions. Rieffe has found that children with autism spectrum disorder as well as those who are prelingually deaf or have language-development problems may lack the same level of cognitive empathy as their typically developing counterparts, not because they cannot feel for others but because they have less exposure to the social experiences needed to adopt and exercise these skills.

Morality develops on another, eventually intersecting track. In a study conducted by neuroscientists including Decety at the Child NeuroSuite, 73 infants and toddlers were shown animations of characters engaging in prosocial behaviors such as sharing as well as antisocial behaviors such as hitting. As the kids watched, the scientists observed their eye movements and EEG readings. While all the children exhibited larger brain waves while watching the “good” scenes and focused more attention on the morally sound characters, the extent of the neural differentiations varied among participants.

After the films, the children were offered a toy—



Until the empathy software boots up, kids can inflict suffering on others and not feel a thing themselves.

they could pick one identical to the prosocial character or one that looked like the antisocial character; the toddlers with the stronger neural differentiations were more likely to choose the “good” toy.

Though infants seem to favor prosocial behaviors and recognize situations that require an altruistic response, they seem unable to act out this understanding until they're 3½ to 4½ years old. “While infants expect adults to comfort a baby in distress, they themselves do not show any affective concern to a crying infant or to an adult simulating pain after slamming a finger in a door,” writes Decety.

What's more, children under 1 year old even appear to understand that sometimes people deserve a little suffering. In a study conducted at the Infant Cognition Center at Yale University, a team of researchers showed 8-month-olds a series of scenes enacted by puppets and then asked the babies to choose one puppet to play with. In the first scene, the puppet who was previously established as a helper was treated nicely by one puppet and badly by another. These children opted to play with the benevolent puppet. In the next scene, the cruel puppet was rewarded by

one puppet and punished by another. Here, the babies chose the punisher; somehow they recognized that the character who had previously displayed antisocial behavior warranted negative treatment. Still, infants are likely to dole out the punches to both good and evil—their apparent attraction to justice is limited to situations in which they have no role.

Of course, morality is also subjective—there's no universal definition for basic terms like “mean” and “nice” or “good” and “evil,” nor is there a single in-group and out-group. So could explicitly teaching empathy from a young age be the solution to society's biggest prejudices? According to Eisenberg, the answer lies in reconsidering the qualifications for our in-groups and broadening them to be more inclusive. “If you have people of other races in preschool, they're not going to seem so different,” she says.

Although we may never reach a point at which learning to show empathy to all overpowers our innate preferences, with enough time we may use what we know about childhood development to make the world a gentler place. The key is to teach the kids those lessons as well as ourselves. □