

Does moral action depend on reasoning?



Antonio Damasio

Yes and no.

My answer is a strong “yes” because the actions we can truly call moral depend on the work of reason at some stage in the process leading to their execution. But my answer is also “no” because the moment-to-moment execution of actions, moral or

otherwise, is not necessarily under the control of reason, even if reason has a role in the deliberations behind the action and in strengthening the control system that executes it. My answer is an even stronger “no” if the question implies that moral actions are *invented* by reason, springing fully formed from the consorting of knowledge and logic.

Looming large over the question is the issue of the origins of morality. Does reason construct moral intuitions, beliefs, conventions, and rules? Or does morality emerge from prerational processes? On this issue there is growing evidence that many behaviors we designate as moral have forerunners in automated, unconscious, prerational processes, present not only in humans but in many other species. The evidence is quite robust in the case of mammals, especially primates and marine mammals whose brains share a lot with the human brain.

The mechanisms behind such behaviors can be traced to specific brain systems, neuromodulator molecules, and even genes. An illustrative set of examples pertains to behaviors associated with the neuropeptide oxytocin. In one species of rodent (prairie voles), mating induces the pronounced release of oxytocin in affect-related brain regions. This, in turn, is associated with a life-long monogamous attachment between male and female; close bonding and attachment of the mother to her infants; and involvement of the male in the care of the progeny. Experimental suppression of the gene responsible for the production of oxytocin preempts the entire behavioral repertoire.

Obviously, no one will confuse the attachment and concern for others, as exhibited by these intriguing animals, with the moral actions that humans carry out in similar circumstances. And yet, the general resemblance is both undeniable and suggestive. The presence of such complex and sharply targeted

animal behaviors serves notice that human behaviors occurring in comparable circumstances are not being created entirely *de novo* by human reason. They are probably complex variations on antecedents. These antecedents emerged in biological evolution without the guidance of reason, but they have resulted in an optimized regulation of life. Interestingly, the better regulation of life is precisely what reason-based moral systems are meant to achieve.

But let us come closer to human behavior. Several of our emotions, in particular those that are commonly classified as social (compassion, admiration, shame, guilt, contempt, pride, gratitude) embody moral values. Take the deployment of admiration or compassion. Each includes specific behaviors aimed at others, which deliver rewards of varied kinds and grades for actions that those others have performed. The behaviors imply some level of moral judgment. Likewise for the deployment of shame or guilt, which imply judgments regarding oneself, as well as self-punishing actions and thoughts.

The deep-rooted mechanisms for the execution and experience of these emotions recruit human brain structures involved in life regulation. Taken together with the fact that there are forerunners to such emotions in non-human species, this suggests an early evolutionary vintage for the assembling of the necessary brain machinery. I am persuaded that these emotions were selected in evolution because of their contributions to the better management of life via their ability to solve social problems. In general, the behavioral programs that we call emotions prevailed in evolution because they improved the odds of survival prior to the emergence of conscious minds and reasoning. The “moral emotions” are not an exception.

To a first approximation, then, morality does emerge from prerational processes. But that is by no means incompatible with the notion that human creativity and reason make use of prerational emotive behaviors (and the intuitions and beliefs that accompany them) in order to construct moral conventions and rules. No matter how deeply inspired by ancient neurobiological processes, moral conventions and rules are human creations. They are the result of shaping a few forerunner intuitions and beliefs to suit certain goals, and of rejecting some of those intuitions and beliefs.

In short, we should not reduce the edifice of ethics to naturally emerging emotional action programs, even in the thoughtful framework of moral emotions proposed by David Hume or Adam Smith. Nature is careless, unconscionable, and morally indifferent, and imitating nature is no way to create morality. But in the process of selecting behaviors that promoted the life of the organisms in charge of carrying genes over countless generations, nature did engender *some* valuable behaviors that can be incorporated in most moral systems. Kin altruism and reciprocal altruism are good examples.

Human creativity and reason have taken such natural discoveries to new heights. They have extended the reach of biological regulation to varied aspects of the social space, thus inventing what I like to call sociocultural homeostasis. The familiar homeostasis of the human body is automated and operates largely at a non-conscious level, ensuring our physiological health and equilibrium. Sociocultural homeostasis, by contrast, is deliberate and requires high-level consciousness. Morality (along with the laws and jurisprudence that follow from it) is the centerpiece of sociocultural homeostasis.

Neuroscientists are being asked more and more frequently if humans are really capable of consciously controlling their moral behavior. The answer, as I see it, is largely affirmative. Moral behavior is a skill that can be honed to the point of becoming “a second nature,” in a process that begins in early childhood. Practice gradually makes perfect, and as it does, the execution of moral actions becomes more and more automatic, performed to a considerable degree under non-conscious control. But, of course, the decision to practice one’s moral skills is a very conscious, reasoned decision. Likewise, the moral choices one makes in advance of acting in one way or another are the result of conscious, reasoned deliberation.

Despite the ancient origins of some moral behaviors, despite the rampant social and environmental influences on our decisions, and despite the unconscious pressures that permeate our appetites, reason does have a say in moral actions. On occasion, reason even prevails.

Antonio Damasio is the David Dornsife Professor of Neuroscience and the director of the Brain and Creativity Institute at the University of Southern California. He is the author of Descartes' Error and Self Comes to Mind, which will be published later this year.

JOHN TEMPLETON FOUNDATION
SUPPORTING SCIENCE ~ INVESTING IN THE BIG QUESTIONS

THIS IS THE SIXTH IN A SERIES OF CONVERSATIONS AMONG LEADING SCIENTISTS, SCHOLARS, AND PUBLIC FIGURES ABOUT THE “BIG QUESTIONS.”
JOIN THE CONVERSATION AT WWW.TEMPLETON.ORG/REASON.