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.

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Does moral action depend on reasoning?

Not entirely.

No monicausal account of moral reasoning and its relation to moral action suffices. This is especially true of the overly rigid explanations that often prevail today. From the side of “external” determinism, we are told that moral action depends entirely on the social, economic, and political worlds that we inhabit. We reason and act the way that we do strictly in response to the environment in which we find ourselves. How so? Because most of the time, given our socialization into a particular cultural matrix, certain situations prompt us to act in anticipated and predictable ways. Culture sets norms for how we behave as members of families, tribes, workplaces, and polities.

Those who instead advocate what we might call “internal” determinism take a different view. They emphasize that human beings are complex, embodied organisms; that much of what goes on within us is outside our conscious power; and that many mysteries remain as to how hormones, brain patterns, and deeply buried, primordial psychic mechanisms affect us. Moral reasoning (to the extent that we can even call it that) is not something that we control but rather the end point of internal processes (whether neurological, physiological, or psychological) of which we are unaware.

There are important insights in both of these deterministic explanations, but they fail as exhaustive accounts. If moral action were indeed completely context-dependent, we would have no way to account for those who, over the centuries, have defied the oppressive contexts in which they found themselves, like the dissidents and rescuers who confronted the totalitarian regimes of the 20th century. And if moral action flows more or less automatically from internal processes of which we are largely or wholly unaware, it is difficult to explain why human beings have struggled for so long to create complex philosophical and theological accounts of moral action and moral failing.

What, then, is missing from these deterministic explanations? In response to the limits that they describe, how are we to preserve space for rational moral agency and to explain moral continuity and moral change?

First, any plausible account of moral reason and its relation to moral action must never forget that we are embodied creatures, not blithe spirits floating above it all. We are born helpless and entirely dependent. We inevitably suffer, and we die. Our finitude is a constitutive feature of who and what we are as moral beings. We are embodied creatures who think — and who ponder our own existences.

Second, any plausible account of moral reason and its relation to moral action must emphasize the fact that our moral lives are an intricate compound of “conscious” and “preconscious” factors. One might even call some of this “premoral.” Our evidence comes from observations of children and the fact that one appeals to their moral senses initially through strong feelings: “It hurts the puppy to twist its tail.” The child identifies with other creatures who feel pain and comes to understand a kind of Golden Rule: “Even as I would not have pain inflicted on me, so I should not inflict it on others.

There is no doubt in my mind that much of this capacity is part of our genetic and evolutionary inheritance as creatures that are not only embodied but intrinsically social. No social beings could long survive if they behaved in asocial or unsocial ways. We are “programmed,” in a sense, for forms of reason and action that recognize and reinforce our relations with others.

Third, any account of the relationship between moral reasoning and moral action must be clear about the nature of that reasoning. Too often, accounts of the moral life leap very quickly to abstract universals and insist that the moral life must take a certain form or it is no moral life at all. Here I think of Kantian and neo-Kantian accounts that downplay or even reject our moral intuitions concerning strong particular relationships, relationships that weigh more heavily upon us, and should, than an entirely abstract account of our moral duties toward all persons without distinction. In fact, the evidence strongly suggests that we can identify with persons unknown to us, and care about what is happening to them, only because of our primary, deep relationships to particular others.
It makes no sense, therefore, to reject “the particular” and its commitments as a barrier to the moral life.

The reasoning that prompts, shapes, and helps to determine moral action, then, is nuanced and fluid. It may begin from particular and concrete relations, but it is capable of moving into less familiar contexts and linking us to “brothers and sisters” in other places far away. It is here that the religious life and religious commitments are so central. I recall a hymn we sang in Sunday school: “Jesus loves the little children/All the children of the world/Red and yellow, black and white/They are precious in his sight/Jesus loves the little children of the world.” What I learned from this is that, if Jesus loves all the little children, I should not be prejudiced against any other child no matter where he or she hails from or the color of his or her skin. To the extent that religious belief of this sort weakens, we can expect a diminution in the grounds for moral action in the world.

If a culture has been dependent on a particular religious and moral tradition, as the West has been dependent on its Jewish and Christian inheritance, the abandonment or hollowing out of that heritage necessarily depletes the resources available for moral reasoning and action. At that juncture, we fall into nihilism or cynicism; hard fundamentalisms that reject reasoning in favor of strict pietism; or, alternatively, a type of behavior we call “moral” but which demands nothing from us. I refer to those who believe that we can assimilate all forms of moral life simply by establishing public policies that are somehow “just.”

But this misconceives the moral life. Much as it might be desirable to establish policies that would, for instance, create more and better hospital care, there is no comparing such an abstract good to the ordinary mother who spends days and nights with a sick child and reckons that this is her primary moral duty. We must never lose sight of the fact that the realm of moral action has real consequences for particular people, not for all people in general. Moral reasoning must remain tethered to the concrete, or it loses its moral voice.

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It depends... on what is meant by “depends” and “reasoning.” If the question is “Do those who make moral decisions have reasons at the ready when asked to justify them?,” the answer is “sometimes yes, sometimes no.” Many people report that they come to a decision without engaging in any self-conscious reasoning; they just feel instinctively that a certain action is the right one. One might reply that behind what they experience as instinct is a web of reasons that could be brought to the surface by the kinds of questions Socrates poses in Plato’s dialogues. It could be said that a resolve to do this rather than that because it is the right thing to do always rests on a base of reasons, even when those who are prompted by them could not rehearse them on demand.

Let us, for the sake of argument, assume that this is so and grant that moral action depends on the having and/or giving of reasons. But this does not, I think, get us very far, for there is another question waiting for us, and it is the crucial one: Where do the reasons moral action depends on come from? And the answer to that question is that they do not come from something called Reason, which can be identified independently of the situations in which it is invoked (as in “Why won’t you listen to Reason?”).

What is or is not a reason — what will be heard as a reason and not as something flying in from left field — will be a function of an ongoing conversation or tradition of inquiry in which certain propositions, but not others, count as weighty arguments in the process of decision-making.

There is no a priori list of reasons that count in this way, and there is no master formula or algorithm that will allow you to identify the reasons that should count in this or that context. Nor is there any need for such a list or algorithm. If you inhabit a situation or practice and have internalized its goals, norms, and rules of thumb, you don’t have to think self-consciously about what those goals, norms, and rules of thumb are (although it would be possible for you to do so should the occasion call for it). You just operate within them, not unconsciously but with a consciousness formed by the very system of thought and action upon which it reflects.

The legal and social theorist Gunther Teubner (following Niklas Luhmann and others) calls this “autopoiesis,” the admittedly “circular relationship between purpose and norm.” On this view, purposes are not imported from the outside; they are presupposed and structure the environment in which purposeful agents live and move and have their being in response to norms given by those same purposes.

There are two obvious objections to this picture. One is that it seems to leave no room for change. The other is that it leaves no room for outside correction by a norm independent of the system.

The first objection can be met by pointing out that an autopoietic system is not static. Though its purposes — to establish the fact of a matter, to do justice, to achieve equality — are given, they take shape within and are altered by the circumstances they order. When new circumstances emerge (like technological developments that no one could have anticipated), the purposive project will extend itself in an effort to deal with them; and when that happens, the project will have changed. The change will not have been provoked by external norms, by norms foreign to the enterprise, but by enterprise-specific norms that are in the act of reconfiguring themselves in the face of unanticipated particulars.

This does not mean that those particulars are driving change from the outside, for they only become particulars worth taking note of when they are identified as such by the norms that now stretch themselves in the act of accommodating them. (Even when the system interacts with the world, the world it interacts with is configured by the system’s purposes and imperatives.) Rather than being a problem for autopoietic systems, change is a feature of them, because they are at once self-contained and self-transfomring.

The second objection — that the invocation of internal norms as a moral justification of action leaves no room for correction by a higher, independent norm — cannot be met. There are no independent norms (that is, norms that yield reasons that...
apply in any and all circumstances), and therefore the reasons that count in local practices cannot be trumped by more general, universal reasons. In *The Structure of Scientific Revolutions*, Thomas Kuhn draws the (for many, unhappy) moral. The “circular argument” characteristic of systems (he calls them “paradigms”) “cannot be made logically or even probabilistically compelling for those who refuse to step into the circle. . . . As in political revolutions, so in paradigm choice—there is no standard higher than the assent of the relevant community.”

This does not mean, Kuhn hastens to say, “that there are no good reasons,” only that the reasons will be good only for those who already “honor” them, those who work inside the paradigm that marks them as relevant and even obvious. It follows that someone who remains on the outside cannot be convinced by inside reasons. Conviction, however, is assured once the former outsider becomes an insider and the reasons become his and are, in his eyes, good.

How does this happen? Not by recourse to a universal epistemological/moral logic (there isn’t any) or by recourse to force (that’s not the way minds change). Kuhn’s (necessarily) weak answer is that it happens through a “conversion experience” that might be “likened to a gestalt switch.”

Conversion is, of course, a theological term, denoting the sudden, unprepared-for movement from one set of beliefs to another, a movement that brings along with it new imperatives, purposes, canons of evidence, and reasons for taking this action rather than that.

It is often said that religious reasons are defective because they refuse judgment by norms that are not nominated by, and already included in, the faith. But the same is true, if Kuhn is right, of all reasons—political, scientific, medical, educational, etc. They are good reasons, reasons for right or moral action, only within the faith that gives them life and to which they return a continual homage.

So does moral action depend on reasoning? Yes. Does knowing that help you make moral decisions? No. You are at once on your own and always already owned.

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Not really.

What if most humans, regardless of their culture or religious beliefs or age or sex, chose the same option when faced with a moral conflict? What if those same people gave wildly different reasons for why they made their particular choices?

This, in fact, is the state of affairs for much of our moral behavior. Recent research in human brain science and ancillary fields has shown that multiple factors feed into the largely automatic and deterministic processes that drive our moral decisions. Some theorists think that our brains possess a finite number of moral modules that have certain response biases. These unconscious biases explain the reliability and predictability of our moral behavior, even though experimental subjects, when queried, will make up various stories about why they did one thing over another. These inherent moral modules are thought to be the product of evolution and to represent optimal responses, from the point of view of natural selection, to matters dealing with purity, cheating, killing, and the like.

Other theorists argue that it is through experience and culture that we learn how to play by the rules of our social group. As we accumulate this conscious knowledge, the decision networks in our brains learn the various costs and benefits of different actions, and our moral behavior emerges through a traditional learning pattern. Adherents to this view see our social environment as the dominant factor in the development of our moral behavior.

Still others, opting for the classic view of morality (in the work of, say, Aristotle or Kant), maintain that our morals are all derived from reason. As they see it, there is an inherent schema in our minds, and how to do the right thing becomes clear if we properly think through a problem. Some rationalists thus claim that, if one thinks about punishment, one will see that governments should punish criminals in proportion to their crimes or their just deserts. Needless to say, the history of these rival ideas is rich and complex, and their advocates often discuss them with passionate belief and mutual disdain.

In recent years, researchers in brain science have attempted to test these competing claims by examining such concepts as reciprocity, justice, and morality. Starting with the simple observation that humans do react largely the same to many moral challenges, and fail to react the same in other situations, how does the human brain sort this all out? How do moral behavior and thought actually work? The aim of this effort has been, in a sense, to start fresh, unburdened by eons of thought based on ad hoc assertions about the nature of human moral behavior. Thanks to a number of new methodologies to measure what is going on in the brain during a variety of carefully crafted tasks, we have made headway in our understanding of which moral behavior is natural and universal and which is not.

The largely unquestioned modern scientific view is that the brain enables the mind—that is, the physical organ gives rise to the hard-to-define collection of mental mechanisms governing our cognitive existence. On this view, the brain is widely believed to be a deterministic system, with millions of interacting parts that produce reliable and automatic responses to environmental challenges. Moral judgments and choices are mental phenomena that fit this general pattern. Armed with new brain-imaging technologies, we have been able to gain what seem to be four fundamental insights about the nature of moral judgments and what guides them.

First, most scientific research shows that morality is largely universal, which is to say, cross-cultural. It is also easily revealed to be present in young infants. It has a fixed sequence of development and is not flexible or subject to exceptions like social rules. Indeed, recent brain-imaging studies have found that a host of moral judgments seem to be more or less universally held and reflect identifiable underlying brain networks. From deciding on fairness in a monetary exchange to rendering levels of punishment to wrongdoers, the repertoire of common responses for all members of our species is growing into a rich list.
Second, there are many moral judgments that are widely believed not to fall into a universal category. These appear to be highly influenced by local culture and learning.

Third (and perhaps most surprising to everyday experience), all decision processes resulting in behaviors, no matter what their category, are carried out before one becomes consciously aware of them. Whether driven by internally determined and evolved structures or by learning and experience, these behaviors are executed by the brain in an orderly and automatic way. Given this uniformity in moral choices and in brain processes, why, then, do experimental subjects supply such a diverse set of reasons for their behavior?

This question is answered by the fourth discovery. There is a special device, usually in the brain’s left hemisphere, which seeks to understand the rationale behind the pattern of behavior observed in others and/or oneself. It is called the “interpreter” and concocts a story that appears to fit the variable behaviors in question. It follows from this that, since everyone has widely different experiences upon which to draw, the interpretation one comes up with will vary widely as well.

Knowing that the brain carries out its work before we are consciously aware of an action does not and should not lead one to conclude that we are not to be held personally responsible for our behavior. The very concept of personal responsibility implies that one is participating in a social group whose rules can be learned. When our brains integrate the myriad information that goes into a decision to act, prior learned rules of behavior are part of that information flow. In the vast number of decisions that a brain makes, playing by the rules usually pays off.

These recent advances in understanding how the brain works in producing moral behavior do not challenge or make obsolete the value of holding people in a society accountable for their actions. Though it does suggest that the endless historical discussion of free will and the like has little or no meaning, it does not suggest in any way that we, as mental agents, are merely accessory to our brain activity. Indeed, in beginning to understand how the mind emerges from the brain, we are also realizing how the mind constrains the brain.

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Yes, by nature.

At the foundation of our moral thinking is our understanding that some things are worth doing or pursuing for their own sake. It makes sense to act on them even when we expect no further benefit from doing so. When we see the point of performing a friendly act, for example, or when we see the point of someone’s studying Shakespeare or the structure of distant galaxies, we understand the intrinsic value of such activities. We grasp the worth of friendship and knowledge not merely as means to other ends but as ends in themselves. Unlike money or insurance coverage, these goods are not valuable only because they facilitate or protect other goods. They are themselves constitutive aspects of our own and others’ fulfillment as human persons.

Of course, feelings and emotions can and do motivate our actions. But the point here is that certain intrinsically worthwhile ends or purposes appeal not merely to our emotions but also to our understanding (what Aristotle called our “practical reason”). A complete account of human action cannot leave out the motivating role of reasons provided by these ends or purposes, which are sometimes called “basic human goods.”

It is this truth that the brilliant 18th-century philosopher David Hume spectacularly missed in proclaiming that “reason is, and ought only to be, the slave of the passions, and may pretend to no office other than to serve and obey them.” For Hume, our brute desires specify our ultimate goals (like survival), and the most that reason can do is to tell us how to achieve those goals (eat this, refrain from eating that). But human deliberation and action are a great deal more complex (and interesting) than Hume allows in his reduction of reason to the role of emotion’s ingenious servant.

If someone performs a friendly act just for the sake of friendship itself, and not solely for some ulterior motive, we are not left baffled by it, as we would be left baffled by, for example, someone who for no reason beyond the act itself spent time repeatedly opening and closing a closet door. Indeed, we grasp the intelligible point of an act of friendship even if we judge the particular act, though motivated by friendship, to be morally forbidden. (Consider, for example, someone’s telling a lie to protect the reputation of a friend who has done something disgraceful.) We understand friendship as an irreducible aspect of our own and other people’s well-being and fulfillment.

But friendship and knowledge are just two aspects of our well-being and fulfillment. We human beings are complex creatures. We can flourish (or decline) in relation to various aspects of our nature: our physical health, our intellectual vigor, our character. Although we are individuals, relationships with others in a variety of forms are also intrinsic aspects of our flourishing and not merely means to the fuller or more efficient realization of common individual goals. The list could go on. My point is that there are many basic human goods, many irreducible (and irreducibly different) aspects of human well-being and fulfillment.

The variegated nature of human flourishing and the fact that basic human goods can be instantiated in an unlimited number of ways means that we must make choices. Of course, many of our choices, including some serious and even tragic ones, are choices between or among morally acceptable options. No moral norm narrows the possibilities to a single uniquely correct option. But moral norms often do exclude some possible options, sometimes even narrowing them to one. How can that be?

Among those who share the view that morality is, in a deep sense, about human flourishing, there are two main schools of thought. The first, known as utilitarianism (or, more broadly, as consequentialism), proposes that people ought always to adopt whichever option offers the best proportion of benefit to harm overall and in the long run. There are many problems with this idea, but the most fundamental is that it presupposes, quite implausibly, that different human goods (this human life, that friendship, this part of someone’s knowledge, those aesthetic or religious experiences) can be aggregated in such a way as to render the idea of “the net best proportion of benefit to harm” coherent and workable.
This is a mistake. To say, for example, that friendship and knowledge are both basic human goods is not to say that friendship and knowledge are constituted by the same substance (“goodness”) manifested in different (but fully replaceable) ways or to different degrees. They are, rather, two different things, reducible neither to each other nor to some common factor. To say that friendship and knowledge are basic human goods is merely to say that they have this, and only this, in common: Each can provide us with a reason for acting whose intelligibility is dependent neither on some further or deeper reason nor on some subrational motivating factor to which it is a means.

The alternative to utilitarianism, at least for those who believe that ethical thinking proceeds from a concern for human well-being and fulfillment, is what is sometimes called “natural law” ethics. Its first principle of moral judgment is that one ought to choose those options, and only those options, that are compatible with the human good considered integrally—that is to say, with an open-hearted love of the good of human persons considered in all of its variegated dimensions.

The specifications of this abstract master principle are the familiar moral precepts that most people, even today, seek to live by and to teach their children to respect, such as the Golden Rule (“do unto others as you would have them do unto you”), the Pauline Principle (“never do evil that good may come of it”), and Kant’s categorical imperative (stated most vividly in the maxim that one ought to “treat humanity, whether in the person of yourself or others, always as an end, and never as a means only”). However one formulates these precepts and the more concrete norms of conduct that derive from them, they are alike in depending fundamentally, and decisively, on the work of reason.

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Does moral action depend on reasoning?

Yes and no, happily.

Evolution has endowed us with certain emotions, without which morality could have no purchase on us. But these emotions, though necessary to develop a moral sense, are not sufficient, and it is our capacity for reason that carries us forth into the moral life.

Morality paradigmatically concerns our obligations toward others, and moral struggles typically demand that we resist favoring ourselves to the exclusion of others. It is easy to see why we have evolved a preferential attitude toward our own lives. The bulk of our emotions can be understood as the affective concomitants of our lifelong project of persisting on this earth as long and as well as we can.

Among these emotions is the sentiment of outrage, particularly outrage on our own behalf. Even outrage of this self-regarding sort is a proto-moral emotion. It refers to how one person (someone other than myself) ought to behave toward another person (myself). Making reference to the *ought* of a situation is a distinguishing mark of morality, and in self-regarding outrage we have the rudiments of morality.

Imagine that I am lying on a beach, blissfully soaking up the rays. A man approaches, his trajectory taking him to the small territory occupied by my supine form. He sees me but does not change his course, and places the full weight of his step upon my belly. The emotion that I direct toward him will go beyond a mere howl of displeasure. It will contain the following accusatory thought (stripped here of the necessary expletives): “How could you? It would have cost you nothing to go around me, but you chose not to, as if avoiding my agony did not merit the slightest effort on your part. What is wrong with you that you did not see a reason to behave differently?” This expression of outrage contains within itself the claim that at least one person’s welfare (my own) provides reasons for how others ought to behave.

Outrage comes naturally to us. It is an expression of the evolutionarily endowed certitude that we matter. If nothing else, we matter to ourselves and never need to be convinced of the fact. What does require convincing—and here reason enters—is that others matter, too. Reason is our capacity for teasing out implications and testing inconsistencies, and an emotion like personal outrage has implications for how we ought to think of others.

Suppose a person who is no stranger to outrage on his own behalf but fails to acknowledge any obligations to others. Reason asks: What makes you so special? Is there something about you, specifically, in virtue of which others ought to show regard for your well-being but you are not obliged to reciprocate? Reason presents such a person with three options: (a) give up, if you can, the self-regarding proto-moral emotions, (b) justify the claim that you inhabit an exclusive moral position in the cosmos, entitling you alone to feel, in your outrage, that others have obligations toward you, or (c) recognize that the obligations you perceive in regard to yourself apply to others as well.

What reason adds to the proto-morality of personal outrage is a sense of perspective about the significance that each person attaches to his own life, just because it is his. Reason prompts us to recognize that if I think I matter, then everyone else must matter, too, unless I can defend the position that I am unique in all the world—a stance frankly suggestive of lunacy.

The reasoning that takes us beyond the self-regard of the proto-moral emotions is not particularly fancy, although in the history of moral philosophy it has been given some fancy formulations. Kant’s categorical imperative, for example, advises us that a moral action is one that we would be prepared to universalize: “Act only according to that maxim whereby you can at the same time will that it should become a universal law.” The gist of Kant’s insight is that a failure to be able to universalize your action reveals that you think it permissible only because it is yours. You are giving undue significance, in the general scheme of things, to your own life precisely because it is yours, which is an unreasonable position.
But reason’s grip can be feeble when set against a person’s visceral attachment to his own life. Fortunately, there are other proto-moral emotions that supplement and fortify reason’s prodding. There are sympathy and empathy, which move us to participate in the emotions of others, to be bothered by their pains and sorrows and cheered by their well-being. Here, too, evolution offers an explanation. We are primates who found security in cooperating with others. If my own well-being depends on how fellow members of my species treat me, and vice-versa, then my ability to feel sympathy with others conduces to my own well-being.

The sympathy that comes most naturally is the sympathy directed to members of the group with which I identify—my kin, my clan, my tribe. In the face of these attachments, reason must work to widen the sphere of sympathetic regard, convincing me that what makes the members of my own group worthy of sympathy applies to members of other groups as well. As with self-regarding outrage, so here, too, reason works in the direction of universality, extending sympathy to all of humankind and minimizing the undue weight I place on my own identity and situation.

Does moral action depend on reasoning?

Less than it should.

My camera has a set of handy, point-and-shoot settings (“portrait,” “action,” “landscape”) that enable a bumbler like me to take decent pictures most of the time. It also has a manual mode that allows me to adjust everything myself, which is great for those rare occasions when I want to try something fancy. A camera with both automatic settings and a manual mode exemplifies an elegant solution to an ubiquitous design problem, namely the trade-off between efficiency and flexibility. The automatic settings are highly efficient, but not very flexible, and the reverse is true of the manual mode. Put them together, however, and you get the best of both worlds, provided that you know when to manually adjust your settings and when to point and shoot.

The human brain employs a similar hybrid design. Our brains have “automatic settings” known as emotions. A fear response, for example, is the activation of an automatic program that recognizes dangerous things and tells us, quickly and forcefully, to back away. Our brains also have a “manual mode,” an integrated set of neural systems that support conscious reasoning, enabling us to respond to life’s challenges in a more flexible way, drawing on situation-specific knowledge: “That’s a deadly snake alright, but it’s in a glass cage. Nothing to fear.” Our automatic settings sometimes get things wrong, but we would be lost without them. Likewise, we need conscious reasoning to solve problems that are too new or nuanced to solve with gut reactions.

Recent research has shown that moral judgment depends critically on both automatic settings and manual mode. What’s more, we have begun to understand how these distinct cognitive processes operate in the brain. Take, for example, the classic “trolley problem”: A runaway trolley is about to run over and kill five people, but you can save them by hitting a switch that will turn the trolley onto a sidetrack. Unfortunately, there is a person on the sidetrack who will be killed if you do this. Is it morally acceptable to divert the trolley away from the five and toward the one? Most people say “yes.”

Next case: A trolley once again threatens five people, but this time the only way to save them is to push someone into the trolley’s path, killing that person and saving the five. Is it morally acceptable to push this person into the trolley’s path in order to save the five? (Yes, this will definitely work, and, no, you cannot sacrifice yourself.) Here, most people say “no.” Why the difference?

Emotion appears to be the critical factor, as illustrated by neurological patients with damage to the ventromedial prefrontal cortex, a brain region involved in emotion-based decision-making. These patients are about twice as likely as healthy people to say “yes” to pushing one person into the trolley’s path to save five others. The emotional responses that most of us have, and that these patients lack, are surprisingly fickle. For example, ordinary people are about twice as likely to approve of using someone as a trolley-stopper when this is accomplished not by pushing him onto the tracks but by dropping him through a switch-operated trap door.

Emotional reactions clearly play a big role in moral judgment, but they are not the only game in town. The aforementioned patients with emotion-related brain damage do not answer moral questions randomly. Instead, they are unusually “utilitarian,” consistently favoring the “greater good” over “individual rights.” This tendency can also be traced to divisions in the brain.

One experiment that I have conducted shows that a different part of the prefrontal cortex becomes more active when ordinary people make utilitarian judgments, favoring harmful actions that further the greater good. This brain region, the dorsolateral prefrontal cortex, is the seat of cognitive control and remains intact in patients with emotion-related brain damage. It enables us to guide our thoughts and actions in accordance with over-arching goals, as when a dieter forgoes the immediate joys of chocolate cake in favor of the long-term goal of slenderness.
over fruit salad. And, for the same reason, similar distractions selectively interfere with people’s ability to make utilitarian moral judgments.

This research tells us that there is no unified “moral faculty” in the brain. Instead, different moral judgments are driven by different neural systems, which may compete with one another. If I’m right, we have different ways of making moral judgments for the same reason that my camera has different ways of taking photos. Our moral-emotional “gut reactions” are highly efficient, giving us clear and forceful advice that is (presumably) good advice most of the time. (“Don’t be violent!”) These emotions, however, are not very flexible. For example, they may fixate on the inessential features of a situation (pushing someone versus hitting a switch) and may be blind to the broader consequences of our actions. Pushing an innocent person in front of a trolley feels wrong regardless of whether this is done for no good reason, to save five lives, or to save a million lives.

Photographers facing novel photographic challenges can’t rely on their camera’s factory-installed automatic settings. I worry that we often make equivalent mistakes in our moral thinking. For example, as the philosopher Peter Singer observed forty years ago, we are remarkably insensitive to the needs of distant others. You wouldn’t let a child drown before your eyes because you were worried about muddying up your designer clothes. Yet we allow millions of children in the developing world to die because we prefer to spend our disposable incomes on trivial luxuries rather than on international aid. This may just be point-and-shoot morality. We evolved in an environment in which we could help nearby desperate people but not distant strangers. Thus, evolution may have given us heartstrings that are tuggable, but not from afar.

Given the novelty and complexity of our most pressing moral problems—devising policies to prevent global warming, finding a path to peace in the Middle East, providing people with adequate healthcare—it should be no surprise if our “automatic settings” are not up to the job. Fortunately, we are not slavishly bound to rely on them. Perhaps over the next few centuries we will learn to distrust our point-and-shoot morality and to rely more on good, new-fashioned moral reasoning.

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