Darwin is rightly acknowledged as the founder of modern evolutionary biology and one of the greatest scientists of all time. We know that he got some things wrong—particularly, because he had no knowledge of the genetic mechanisms of inheritance. Of course, Darwin also got many things right, but some of his good ideas have been ignored or belittled by biologists or social scientists. Perhaps the most important—at least for social scientists—is Darwin’s conception and evolutionary theory of morality, which appears in his Descent of Man (1871). I wish to outline this theory and discuss why it has been overlooked and why it should be rehabilitated.

Morality is complex and controversial. In Darwin’s (1871) account, morality results from a combination of emotional impulses and thoughtful deliberation. He argues that although primitive moral feelings have evolved for millions of years among “the progenitors of man” (p. 162), humans alone have a developed sense of morality:

A moral being is one who is capable of comparing his past and future actions or motives and of approving or disapproving of them. We have no reason to suppose that any of the lower animals have this capacity. … Man… alone can, with certainty, be ranked as a moral being.

pp. 88–89

For Darwin, morality emerged in humans from a long-evolved foundation of instinct and impulse. Among these feelings are sympathy for others and obeisance of authority. He explained the evolution of primitive moral feelings in terms of the survival advantages of groups that achieve coherence and solidarity through shared norms and social rules. But to modern readers, this evolutionary explanation requires elaboration, and the role of genetic factors such as inclusive fitness and the role of culture must be taken into account. Recent scholarship suggests that a more complete and robust evolutionary explanation is in sight (De Waal 2006, Joyce 2006, Hodgson 2013). It seems that Darwin was broadly right, although he missed out on crucial details.

Moral motivation depends on conscious deliberations (which are apparently unique to humans) and on inherited impulses, but biologists have a much broader agenda than Homo sapiens. Biologists often simplify by assuming, given the environment, that there is a close correspondence between genes and behavior. The influence of culture and any conscious deliberation is generally downplayed, because it is negligible with most species. Therefore, human morality gets sidelined.

Moral motivation is also neglected in the social sciences but for different reasons. Intellectual changes during the First World War led to the rise of behaviorism, as well as the rejection of instinct psychology and the exclusion of evolutionary reasoning from sociology and anthropology. In the 1930s, economics redefined itself as the science of choice, in which choices are made on the basis of a given preference function. Moral motivation was ignored or assumed to be incorporated in this function.

In the last decade or so, there has been within several disciplines—including biology, psychology, economics, and anthropology—an explosion of interest on the problem of explaining human cooperation and altruistic behavior, but much of the work by economists in this area conflates issues of morality with altruism or cooperation under the description of “social” or “other-regarding” preferences. The assumption of “other-regarding” preferences contrasts with the previously prominent idea that economic man was entirely selfish, but someone with “other-regarding” preferences is still maximizing his or her own utility and may also be regarded as selfish (Hodgson 2013).

As economics Nobel Laureate Amartya Sen argued (1987), what is missing in a preference function is a distinctive dimension of morality. The philosopher Richard Joyce (2006) proposed that morality has most or all of the following characteristics: (a) Moral judgments express attitudes (such as approval or contempt) and beliefs. (b) The emotion of guilt is an important mechanism for regulating moral conduct. (c) Moral judgments transcend the interests or intentions of those concerned. (d) Moral judgments imply notions of desert and justice. (e) Moral judgments are inescapable. (f) Moral judgments transcend human conventions. (g) Moral judgments govern interpersonal relationships and counter self-regarding individualism.

These characteristics do not establish a valid morality; they, instead, help us identify what is a moral judgment, whether that is acceptable or otherwise. We are concerned with descriptive rather than normative ethics: There is no attempt here to identify the “right” morality but, instead, to identify the basic nature of a moral claim. Most religions uphold moral claims, but that does not make them all right or just.

As Darwin did, Joyce (2006) emphasized the role of both emotions and deliberation. His first point establishes that a moral judgment must involve both beliefs and sentiments, that it is not reducible to either alone. If an
action is impelled purely by emotion, as Darwin understood, it cannot amount to moral motivation. Deliberations and beliefs are also vital but are, themselves, insufficient, because they must be backed by sentiments or emotions: Acting morally is more than calculated conformity to moral rules.

Joyce’s (2006) last four points reveal the limitations of typical utilitarian or preference-based approaches. Moral judgments are not simply expressions of an individual’s interests, preferences, sentiments, or beliefs. They are also claims to universality in their context, which would apply irrespective of the interests, preferences, sentiments, or beliefs of those to whom they are supposed to apply. People make clear that they expect moral behavior from others as well as from themselves, which may influence others’ behavior.

Morality surpasses questions of preference. It is a matter of right or wrong or of duty, of doing the right thing, irrespective of whether we like it. This is part of what makes us human: We are capable of considering moral rules and of understanding that their observance is more than a matter of personal whim or satisfaction.

From an evolutionary perspective, studies show a significant number of common features of moralities across cultures, notwithstanding important cultural variations. All cultures regard many acts of harm against others as immoral and invest many acts of reciprocity and fairness with moral virtue. Moral codes restraining individual selfishness are also commonplace. As well as sustaining enormous cultural diversity, genetic and cultural coevolution has ensured that some specific types of prosocial moral rules have endured.

In summary, a moral judgment involves attitudes, beliefs, and emotions but is also subject to deliberation of its fairness or justice. In contrast to standard utilitarian approaches, a moral judgment is more than mere convention. The person judging holds that the judgment is inescapable and transcends individual preferences or interests.

Why does all this matter? Simple heuristic, agent-based models show that once we take moral motivation into account, we can have more robust explanations of the evolution of altruism. In these models, there is no longer a one-to-one mapping between genes and behavior. To different degrees, individual decisions are also influenced by the level of moral culture in the group. In turn, the group moral culture can shift up and down incrementally as behavior becomes more or less moral. Positive feedback loops can therefore help sustain group morality. This enhanced understanding of human motivation, inspired by Darwin, leads to very different conclusions on policy matters, such as how to increase productivity within a firm, how to design incentives for health service systems, or how to develop policies to combat global warming (Hodgson 2013).

The rapid development of the life sciences in the last half-century has already had a major impact on the social sciences; a number of scholars now argue that our genetically programmed dispositions have to be taken into account. Evolutionary anthropologists have shown that this insight can dovetail with a complementary appreciation of the additional role of culture.

That is not the end of the story. Darwin’s insights on the nature of morality also promise to have a major impact on the social sciences. There is work to be done to develop and test a more complete and robust explanation of the evolution of morality, but there is now enough evidence to suggest that Darwin is broadly vindicated.

These exciting advances combine with another closely related research agenda. Darwin himself conjectured that his core evolutionary principles—of variation, selection, and inheritance—would also apply to systems of replication above the biological level. After much toying with vague and unsatisfactory words such as meme, we are now closer to a rigorous account of what these generalized Darwinian principles would mean when they are applied to evolutionary processes at the social level (Hodgson and Knudsen 2010).

Interaction between the social sciences and biology has a long history. Darwin was inspired by economists Thomas Robert Malthus and Adam Smith. It is now possible for social scientists to share in some of the excitement that biologists have been enjoying in recent decades, and we can all learn still more from Darwin.

References cited