THE EVOLUTION OF MORAL PROGRESS

A BIOCULTURAL THEORY

ALLEN BUCHANAN
AND
RUSSELL POWELL

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unifies current biological and social scientific understandings of moral psychology and culture.

This chapter has articulated both the evoconservative view and the evolutionary account of the origins of human morality on which it is premised. The next chapter argues that evolutionary explanations of morality are limited in certain crucial respects that make the pessimistic inferences that evoconservatives draw from it invalid. More specifically, it argues that the received evolutionary explanation of morality cannot account for robustly inclusivist features of contemporary human morality and that this "inclusivist anomaly" indicates that the strong evolutionary moral constraints view is mistaken.

CHAPTER 5

The Inclusivist Anomaly and the Limits of Evolutionary Explanation

One major flaw in the evoconservative appeal to evolutionary theory is that contemporary morality, as experienced and exhibited by significant numbers of people and embodied in social practices and institutions, is strikingly more inclusive than one would expect if selectionist explanations were the whole story, or even most of it. In other words, from a selectionist perspective, inclusivity is highly anomalous. This chapter will first highlight four aspects of this inclusivity, drawing upon empirical evidence that strongly suggests that inclusivist morality is not a rare, exceptional, or merely academic phenomenon. It will then show that none of these aspects can be explained by the received selectionist account of the origins of morality or by alternative evolutionary accounts.

The Inclusivist Anomaly

The first feature of contemporary human morality that is anomalous from the standpoint of the received evolutionary account of morality is that significant numbers of people now regard at least some non-human animals as proper subjects of moral consideration; that is, they believe that there are moral constraints on how we are to treat animals, constraints that do not derive

from contingent human interests or sensitivities. There remains, of course, much disagreement over precisely what treatment is due certain non-human animals and from what moral principles such obligations are derived. However, there is an increasingly broad-based consensus in developed countries that animal cruelty is a wrong to animals qua moral subjects in their own right[1]—a moral judgment that is increasingly enshrined in the laws of developed nations. Animal blood sports are widely illegal and seriously punishable, and there are significant, institutionalized constraints on the use of certain non-human animals in medical experimentation—with some uses, such as research on great apes, having been prohibited categorically because of the high subject-centered moral status that is attributed to these animals. Further, considerable efforts, involving significant financial costs, have been made toward reducing the pain, fear, and anxiety to which food animals are subjected during the process of killing them.[2] The best explanation of such laws is that they reflect a relatively recent sea change in the moral commitments of significant numbers of people—enough people to ensure that they were enacted and implemented in spite of the opposition to them on the part of those whose economic or other interests they adversely affect and in spite of the fact that they do not serve the nonmoral interests of those who support them. The financial cost of enforcing laws for the better treatment of non-human animals is considerable, and the willingness of the public to bear it cannot be explained in terms of strategic self-interest.

Second, many people regard valid moral norms as universalizable; that is, they believe it is incorrect to say, for example, that X is permissible for me but not for you, for blacks but not for whites, or for men but not for women—without adducing

[1] David DeGrazia (2009), "Moral Vegetarianism from a Very Broad Basis," *Journal of Moral Philosophy* 6: 143–165.

[2] See, e.g., U.S. Department of Agriculture, Agricultural Library, *Humane Slaughter Act* (2014).

a morally relevant difference-making feature. Importantly, belonging to or identifying with a particular group, such as a race, gender, religion, or ethnicity, is widely and increasingly held not to be an acceptable difference-maker when it comes to ascriptions of moral status, including political and civil rights.[3] In the United States, for example, there is "near universal endorsement of the principle of racial equality as a core cultural value,"[4] even if implicit forms of prejudice and stereotype remain pervasive and explicitly racist attitudes are still prevalent in certain subpopulations. One psychological review of the shift toward egalitarian norms concludes: "the single clearest trend in studies of racial attitudes has involved a steady and sweeping movement toward general endorsement of the principles of racial equality and integration."[5] Furthermore, this commitment to equality is widely institutionalized in laws and policies prohibiting racial, ethnic, and gender discrimination; and here, too, the social resources devoted to enforcement are substantial.

Third, there is the culture of human rights: many people now recognize that all human beings ought morally to be treated in certain ways by their own governments, irrespective of whether there are local laws in place that protect their rights and irrespective of the contingent strategic properties that people possess. This is the foundation of "cosmopolitan moral principles," that is, principles that accord an equal basic moral status to all human beings, irrespective of group membership and strategic capacities.

[3] For a discussion, see Steven Pinker, *The Better Angels of Our Nature* (Viking, 2011, chapter 7).

[4] A. Pearson, J. F. Dovidio, and S. L. Gaertner (2009), "The Nature of Contemporary Prejudice: Insights from Aversive Racism," *Social and Personality Psychology Compass* 3: 314–338, p. 314; see also J. F. Dovidio and S. L. Gaertner, "Aversive Racism," in M. P. Zanna (ed.), *Advances in Experimental Social Psychology*, v. 36 (Academic Press, 2004, pp. 1–51).

[5] Lawrence Bobo, "Racial Attitudes and Relations at the Close of the Twentieth Century," in N. J. Smelser, W. J. Wilson, and F. M. Mitchell (eds.), *Racial Trends and Their Consequences*, v. 1 (National Academy Press, 2001, pp. 264–301, 269).

These principles have been codified in international human rights law, which has been incorporated into the domestic law of, and legally binds, over two hundred nations. Although enforcement of human rights by international institutions is weak, there is substantial enforcement through domestic courts in a growing number of countries.

Further, there are substantial pressures for compliance with cosmopolitan moral principles other than the threat of enforcement—from the "naming and shaming" of governments concerned with their reputations to making membership in desirable trade regimes and military alliances as well as access to loans and credits conditional on human rights performance. There is now a large, growing, and methodologically sophisticated literature showing that the contemporary international human rights regime has significant, measurable positive effects on the behavior of some states.[6] The concept of basic inalienable rights, which not only has been at the core of modern human rights practice since its inception but also has served as the bedrock of modern constitutional democracy as well as the motivation for the anti-torture, abolitionist, and decolonization movements,[7] is an affirmation of the equal status of all people regardless of their group membership and independent of any benefits they confer or threats they pose to cooperation—and thus constitutes an explicit rejection of cooperative group reciprocity-based theories of morality.

Fourth is the emergence of a subject-centered morality that compels us to recognize the moral standing of individuals who

[6] See, e.g., R. Goodman and D. Jinks, *Socializing States: Promoting Human Rights Through International Law* (Oxford University Press, 2013); K. Alter, *The New Terrain of International Law: Courts, Politics, Rights* (Princeton University Press, 2014); B. Simmons, *Mobilizing for Human Rights: International Law in Domestic Politics* (Cambridge University Press, 2009); T. Risse, S. Ropp, and K. Sikkink, eds., *The Power of Human Rights: International Norms and Domestic Change* (Cambridge University Press, 1999).

[7] See Allen Buchanan (2012), "The Egalitarianism of Human Rights," *Ethics* 120(4): 679–710.

pose no threat to us or who do not contribute to cooperative goods. Even if a vulnerable minority group or gender can safely be exploited or oppressed without incurring any long-term risks to the majority group, it is widely held that such treatment is inconsistent with the moral status of those individuals. Likewise, it is widely held that persons who lack strategic capacities, such as severely disabled individuals, may not justly be denied access to social resources or excluded from the class of beings that are proper subjects of moral concern. Here, too, the change is not merely in professed beliefs but also in behavior: in many countries there is a considerable expenditure of resources to implement the legal rights of people with intellectual and developmental disabilities, the elderly, and other vulnerable persons, even in the face of significant economic strains.[8]

There is another type of evidence that indicates that inclusivist morality actually exists: data showing significant voluntary efforts by private (nongovernmental) organizations and individuals to improve the condition of the world's neediest people, notwithstanding a slumping global economy[9]—with average global rates of individuals aiding strangers approaching 50 percent.[10] Although government-to-government humanitarian aid may often be motivated by perceived state interest (in reputation or more tangible geopolitical or economic gains), private giving to strangers is much more likely to be a genuine expression of noninstrumental concern. Subject-centered moral consideration for strangers and non-human animals also fuels the growing demand

[8] For figures, see United Cerebral Palsy Report, *The Case for Inclusion* (2014), http://ucp.org/the-case-for-inclusion/past-reports/Case_For_Inclusion_Report_2014.pdf.

[9] See Gallup News Service, *Gallup Poll Social Series: Lifestyle* (Princeton, 2013); Chronicle of Philanthropy, *How America Gives* (Washington, DC, 2012), https://www.philanthropy.com/specialreport/special-report-how-america-gi/154.

[10] Charities Aid Foundation. *World Giving Index: A Global View of Giving Trends* (2013), https://www.cafonline.org/about-us/publications/2013-publications/world-giving-index-2013.

for "ethically sourced" goods and services, with a level of support that is sufficient to prompt a global corporate response to meet these non-instrumental consumer concerns.

The best explanation for the constellation of considered judgments that underlie all of these social changes is that substantial numbers of people now believe that the moral worth of human beings and some non-human animals derives from properties other than their strategic capacities. The third feature—the emergence of human rights culture—can be seen as an explicit shift from a cooperative group reciprocity morality to subject-centered morality. As we will explore more fully in Chapter 9, the preambles of some human rights treaties state that these rights are grounded in the "dignity" of the human individual; but some human rights theorists find the notion of dignity fuzzy or uninformative and opt instead for practical rationality or responsiveness to reasons, or the capacity to participate in an interpersonal process of giving and accepting reasons for conduct. What these different approaches have in common is a rejection of the idea that moral status and more specifically the possession of human rights depends upon the possession of strategic properties or membership in some particular human group.

Morality Is Not Like a Moth's Proboscis

Recall that the received adaptationist explanation takes morality to be straightforwardly functional. According to the prevailing evolutionary account, morality evolved in order to solve a social coordination problem, just as a pollinating moth's proboscis was "engineered" by natural selection to solve a flower nectar extraction problem. We think that none of the above inclusivist features of contemporary morality can plausibly be explained in standard selectionist terms, that is, as adaptations or predictable expressions of adaptive features that arose in the environment of evolutionary adaptation (EEA) and that were designed to solve a particular ecological design problem.

The survival of human groups in the late Pleistocene and early Holocene depended crucially on the exploitation of animals, which clearly lack strategic capacities. Early human groups that treated non-human animals as subjects of moral worth would have paid a high fitness price, for this would have placed severe restrictions on the exploitation of animals for protein and other valuable materials like skin and bone, as well as for their working capacities, including their use as beasts of burden. This would have been particularly true for nomadic hunter–pastoralist tribes and other post-Neolithic populations that relied increasingly on domesticated animals for their subsistence. Competition among these groups would have placed a fitness premium on maximizing control over animal domesticates and their life cycles.

Similarly, the tendency to universalize moral judgments may have been adaptive if it were restricted to members of one's own group, along the lines discussed above; but it is hard to see how the tendency to universalize would have contributed to a group's survival if it were extended to out-group individuals *regardless of their strategic capacities*. Doing so would have had two negative consequences: first, it would have made the group vulnerable to predation by groups that did not acknowledge that moral judgments or norms should be universalizable and, second, it would have limited the group's ability to exploit other vulnerable groups in fitness-enhancing ways.

Nor is the core commitment of human rights culture—the belief that every human being has certain basic moral entitlements—something that is explainable in terms of morality as cooperative group reciprocity. Especially in cases of armed conflict, but in many other kinds of interactions as well, groups that honor the commitment to human rights (which prohibits a no-holds-barred approach to conflict) may be disadvantaged, rather than advantaged, in fitness terms. The fact that nations could enhance their overall productivity by oppressing certain groups or by withdrawing basic measures of support for, say, certain disabled individuals or children is not considered a morally acceptable

reason for doing so. Thus, unlike morality in the form of cooperative group reciprocity, which fits quite naturally with evolutionary theory, subject-centered morality comes with attendant fitness costs that are difficult to explain on standard evolutionary accounts.

So far we have shown that inclusivist moral commitments cannot plausibly be explained as adaptations derived *in the EEA*. Could they instead be explained as cultural adaptations to design problems posed by *more recent human ecological environments*? Consider, for instance, the view that the social environment has changed so profoundly, due to the increasing interconnectedness of human communities, that a more inclusive morality is actually a group-beneficial trait and, further, that the spread of inclusivist moralities in recent human populations is due to the advantages or fitness benefits they conferred. If that were true, then the inclusivist anomaly would vanish.

Philip Kitcher appears to favor such a view.[11] As we saw in Chapter 2, Kitcher holds that the function of ethics is to replace altruism failures with behavioral altruism and that this replacement is constitutive of moral progress. We and other scholars have interpreted this to mean that moral progress occurs when altruism problems are solved in ways that are mutually beneficial to the parties whose interests are in conflict.[12] Thus, Kitcher apparently believes that moral progress is achieved only when morality as cooperative group reciprocity enables humans to expand the circle of cooperators to include previously excluded strategic partners.[13] It is important to note that on this interpretation of Kitcher many of the putative achievements of subject-centered morality, such as basic rights for persons with disabilities or very young children, will not count as instances of moral progress.

[11] Philip Kitcher, *The Ethical Project* (Harvard University Press, 2011).

[12] E.g., William FitzPatrick (2012), "Review of Philip Kitcher's *The Ethical Project*," *Ethics* 123(1): 167–174.

[13] Kitcher, *The Ethical Project*, supra note 11, pp. 236, 307.

This is because such moral inclusions do not avoid fitness costs or involve mutual benefits as they do not implicate a group of persons who would, if treated well, contribute to the net cooperative good or, if treated poorly, undermine it.

Our claim that Kitcher's account of moral progress is focused problematically on morality as cooperative group reciprocity is bolstered by the fact that he argues that in the current environment the costs that arise from social practices and institutions that disregard the interests of some of the world's population are so severe that a more cosmopolitan morality is actually prudential. Emphasizing the strategic capacities of oppressed and marginalized groups, he contends that inegalitarian distributions cannot be long maintained "given the technological possibilities for violent retaliation now increasingly available to the poor and oppressed."[14] Kitcher thus appears to argue that recent expansions of our moral circle are due to the presence of ecological conditions that make such expansions fitness-enhancing or otherwise advantageous.

There are two problems with this view. First, it clearly cannot account for one dramatic departure from morality as cooperative group reciprocity: the growing recognition that there are moral constraints on our treatment of non-human animals that lack strategic capacities and whose unrestrained exploitation continues to have advantages (e.g., economic). Indeed, Kitcher recognizes the difficulty that the animal ethics movement poses for his functionalist account of moral progress,[15] and he attempts to resolve this difficulty by suggesting that animal domestication has created an expanded, cooperative society that now includes non-human animals whose interests we have come to endorse. All of this suggests that Kitcher's conception of the "ethical project" is more closely bound to cooperative groups than he has acknowledged.

[14] Ibid., p. 311.

[15] Ibid., pp. 306–307.

Second, under present and foreseeable conditions, the costs of social practices and institutions that discount or disregard the interests of the world's worst-off people fall disproportionately on the world's worst-off. It hardly seems likely that the richest societies are suffering any major disadvantages or a loss of reproductive fitness (whether biological or cultural) because of their support for the deeply inegalitarian global order. One might argue that the exploitation of vulnerable populations could lead to terrorism and other forms of "blowback" against powerful nations—and that this gives powerful nations a wholly self-interested reason not to exploit vulnerable peoples but rather to bring them into the cooperative fold. But the empirical linkages here are too dubious and contingent to ground a global expansion of the moral circle. As we noted earlier, it is a sad fact that exploited groups often are unable to make life for the exploiters unpleasant enough to effect change.

Thus, inclusivist morality is not merely a "scaled up" contemporary version of the strategic, cooperative group–restricted morality that arose in the EEA. While some types of cooperation may be explained as the result of stable, self-interested solutions to coordination problems, much of human morality, in particular the putatively progressive changes that we have pointed to, cannot plausibly be explained in this way. Inclusivist shifts do not amount to moving from a suboptimal Nash equilibrium to a universally preferred one. Game theoretic work on morality is operating, like much of the evolutionary literature, with the very strategic conception of morality that represents an impoverished view of what morality can and now does encompass.

It is important to note that even if inclusivist morality could be explained as a cultural adaptation to more recent social environments, this would do little to support the evoconservative argument, for it would imply that moral inclusivity is limited not by a rigid, evolved moral psychology but rather by ecological circumstances that make it beneficial—which leaves open the possibility of further expansions of the moral circle when the right sorts of

ecological conditions are "naturally" present or can be engineered with moral goals in mind. In sum, standard selectionist explanations of morality not only fail to cite ecological conditions and selection pressures that can explain these inclusivist features of modern morality; they also render them inexplicable.[16]

Morality Is Not Like a Peacock's Tail

Another potential, if highly implausible, adaptationist explanation of inclusivist moral features appeals to principles of mate selection, especially the so-called evolutionary handicap principle.[17] The theory underlying the handicap principle is that certain "ornamental" traits and behaviors—such as a peacock's tail or a bowerbird's elaborate constructions—can be explained as hard-to-fake signals of vigor. Such traits necessarily handicap their bearer's chance of survival by, for example, increasing the chances that they will be spotted by predators or reducing the time they can allocate to foraging. The fact that the trait's bearer can thrive despite the handicap indicates exceptional survival and reproductive capacities, and thus the trait evolves in tandem with mate preferences of the opposite sex, in some cases to morphological extremes.

Applied here, the sexual selection theory would postulate that inclusivist moral behavior amounts to hard-to-fake signals of vigor (akin to a peacock's tail) that are appealing to the opposite sex and that spread through the population due to their effects on mating success. In what way does inclusivist morality handicap its bearers? The idea would be that inclusivist moral response entails doling out "excessive" doses of altruism in a way that is analogous to conspicuous consumption, which, like the bowerbird's

[16] Cf. K. D. Lazari-Radek and Peter Singer (2012), "The Objectivity of Ethics and the Unity of Practical Reason," *Ethics* 123: 9–31.

[17] A. Zahavi and A. Zahavi, *The Handicap Principle: A Missing Piece of Darwin's Puzzle* (Oxford University Press, 1997).

bower and some types of helping behavior in birds, indicates that the individuals' survival and reproductive capacities are so formidable that they have altruism to spare. To make this case, one would need to show that (1) culturally acquiring inclusivist moral traits supplies an advantage in sexual competition that outweighs its straightforward costs to fitness outside of the mating context and (2) this advantage has resulted in the proliferation of these traits in human populations. It is difficult enough to demonstrate these effects in the context of Veblen or positional goods[18]—in the case of inclusivist moral norms, neither of these extravagant claims seems plausible enough to warrant serious consideration.

Morality Is Not Like a Hyena's Clitoris

Even if standard selectionist explanations of inclusivist morality fail, the latter could still be afforded an evolutionary explanation if it can be shown to be a byproduct of other adaptive features. For instance, some theorists argue that cultural moral norms, such as the incest taboo, are not objects of selection in their own right but incidental byproducts of disgust reactions and other moral sentiments.[19] In this section we will consider whether inclusivist morality can be given an evolutionary byproduct explanation and, if so, whether this might have any evoconservative implications.

We will consider three types of byproduct explanation that might be put forward to account for inclusivist morality. The paradigmatic byproduct explanation is what may be called a "causal byproduct explanation." This describes the scenario in which one trait is causally linked to another trait that is selected for, thereby

[18] Geoffrey Miller (2007), "Sex Selection for Moral Virtues," *Quarterly Review of Biology* 82(2): 97–125.

[19] Ibid.

"hitchhiking" its way to populational prominence. Functionless trait X is an evolutionary causal byproduct of adaptive feature Y only if X is causally related to Y such that when Y is selected for, X reliably accompanies it. The term "byproduct" is often used in the evolutionary psychological literature as a catchall for any trait that cannot be given a plausible selectionist explanation,[20] such as art, music, and science. However, a *causal byproduct explanation* must do more than simply show that some other type of explanation is implausible; it must provide a positive account that meets the standards of adequacy for scientific explanation.

In their famous architectural spandrel analogy, Gould and Lewontin compared (initially) functionless byproducts to the unavoidable, roughly triangular, geometric space created by resting a dome on top of contiguous arches.[21] A "spandrel" in the evolutionary sense is any necessary, predictable side consequence of selection for another trait, be it genetic, structural, physiological, cognitive, or behavioral.[22] A classic example relates to the large and fully erectile clitoris of the female spotted hyena, which is comparable in size to the male counterpart's penis and is explained as a byproduct of selection for increased aggression.[23] The causal pathway from adaptation to byproduct is postulated to run as follows: female hyenas that are more aggressive tend to be socially dominant and thus able to commandeer more resources for their offspring; consequently, hyena populations experienced selection for increased female aggression; increased aggression in mammals is typically produced by increasing levels of testosterone; and a

[20] See David Buss et al. (1998), "Adaptations, Exaptations, and Spandrels," *American Psychologist* 53(5): 533–548.

[21] Stephen Jay Gould and Richard Lewontin (1979), "The Spandrels of St. Marcos and the Panglossian Paradigm: A Critique of the Adaptationist Programme," *Proceeding of the Royal Society of London B* 205: 581–598.

[22] Stephen Jay Gould (1997), "The Exaptive Excellence of Spandrels as a Term and Prototype," *Proceedings of the National Academy of Sciences USA* 94: 10750–10755.

[23] Stephen Jay Gould, *Hen's Teeth and Horse's Toes* (W.W. Norton & Co., 1983).

direct side effect of increased levels of testosterone in females is an enlarged clitoris. Here, the same reasonably well-understood proximate mechanisms that produce the underlying adaptation (aggression dominance) are also shown to reliably produce the byproduct (a hypertrophied clitoris).

So far as we are aware, no one has so much as sketched in the broadest of outlines such a causal pathway in the case of any dimension of inclusivist morality. Just as altruism is not an unavoidable byproduct of nepotism (altruism is rare in the animal world, but nepotism is common), inclusivist morality is not an unavoidable byproduct of exclusivist (group-restricted) morality. Indeed, humans were perfectly capable, for hundreds of thousands of years, of restricting the universalizability of their moral judgments to members of their own group. In the absence of such a description of the relevant causal connections, there is no basis to reach any evoconservative conclusions about the durability or potential scope of moral inclusivity.

More importantly, even if we set aside the matter of causal linkages, inclusivist moral features are not plausible candidates for byproduct explanation because they have not reliably accompanied any of the putatively relevant adaptations thought to have arisen in the EEA. For tens or hundreds of thousands of years, human beings possessed the whole suite of cognitive and emotional adaptations that plausibly underpin morality—such as capacities for norm-following, perspective-taking, preference for consistency in belief, and the parochial altruism characteristic of group-restricted morality. And yet very few human beings exhibited anything approaching the full suite of inclusivist moral features that now characterize morality for many people today until *very recently* in human history. Further, there are still many people, and even entire cultural groups, whose morality lacks one or more of the above inclusivist features. This time lag problem is fatal to the causal byproduct explanation, for it shows that inclusivist morality is not a "necessary," "inevitable," "predictable," "enjoined," or even "highly likely" result

of selection for group-restricted morality or any other adaptation listed above, and thus is not amenable to the causal byproduct explanation. Just imagine a similar pattern in the context of a paradigmatic byproduct explanation, such as the hyena's clitoris discussed above: if there was a 100,000-year temporal gap between increased hyena aggression and clitoral enlargement, this would completely vitiate the byproduct explanation as selection for increased aggression would no longer be sufficient for, or confer a high probability on, the hypertrophied clitoris.

That said, a time lag between the origin of a trait and the emergence of its putative byproduct is not inherently fatal to byproduct explanation. It is perfectly plausible that cases could be identified in which a change in some environmental variable (e.g., temperature or atmospheric oxygen levels) is necessary before the byproduct can emerge. Such causal patterns are actually common in macroevolution, where innovations arise and are often present for some time in a lineage before they have major evolutionary effects. Nevertheless, the onus is on the proponent of the time lag byproduct explanation to provide a plausible, evidenced account of what the lagging environmental factor is—and no such mechanism has been proposed to explain the origin of inclusivist morality. Later, we will argue that it is not an accident that some of the most dramatic instances of moral progress occurred relatively recently in human history, but our account will not show the capacities that enabled them to be causal byproducts of adaptations.

Accounts of evolutionary explanation that advert to difference-making causes fare no better. Events may have many causes, but only certain causes are "difference-makers"—causes that explain some particular variation across a population of outcomes. In the present context, we want to ask: why do humans increasingly exhibit inclusivist morality rather than more truncated forms of morality? The evolution of basic moral capacities may be a precondition for the more recent emergence of inclusivist moral features in the human lineage, but this is a far cry from an explanation. The existence of basic moral adaptations may help to

explain why humans exhibit inclusivist moral features while, say, chimps (assuming they lack basic moral adaptations) do not; but this does not explain why some behaviorally modern humans exhibit inclusivist moral features while other behaviorally modern humans do not since both possess basic moral adaptations. Whatever the crucial difference-makers here might be, they will not be evolved psychological capacities..

A second type of byproduct explanation involves selection for some generic or overarching capacity, which in turn enables the development of some lower-level or nested capacity. For instance, one might describe astrophysics as a byproduct of selection for symbolic thought (which is often thought to be associated with the evolution of language). In the case of inclusivist morality, the claim would be that a range of generic adaptive capacities, such as reasoning, theory of mind, norm-following, and so on, in conjunction with as-yet-unspecified sociocultural circumstances, combine to produce inclusivist morality as a byproduct.

In *The Descent of Man*, Darwin not only offered a proto–group selectionist account of the origins of altruism and moral virtue, which presupposed an environment of intergroup conflict,[24] but also advanced what appears to be a generic byproduct theory of expansive other-regard:

> As man advances in civilization, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to the men of all nations and races.[25]

[24] Charles Darwin, *The Descent of Man and Selection in Relation to Sex* (John Murray, 1871, pp. 155–156).

[25] Ibid., p. 122.

On Darwin's account, sympathy for one's kin and kith may be adaptive, but the expansion of moral sentiments beyond the group to all human beings is a product not of selection but of logical extension. Notice that there is no suggestion of a causal byproduct explanation in Darwin's remark. Instead, he suggests that the extension of regard beyond the narrow confines of the tribe is a result of the operation of reason combined with the human capacity to reflect on the norms we now follow, conclude that their scope is arbitrarily restricted, and then be motivated to act on less restrictive norms.

The first thing to note about this type of byproduct explanation is that, unlike its paradigmatic counterpart, it is not much of an explanation at all. In hinting at the open-ended nature of morality, Darwin may be gesturing in the right direction; but without filling in the crucial social, historical, and psychological details, the proposed generic capacities only make the explanandum possible but not likely and fail to pick out causal difference-makers (evolutionary or otherwise) that explain why some human populations developed inclusivist moral features while others did not. But even if one finds this type of byproduct explanation adequate, the generic capacities that it features are consistent with an indefinite disjunction of lower-level capacities and behaviors, including a durable and dramatically expanded inclusivist morality—and thus it offers no succor to the evoconservative.[26]

[26] Some evolutionary psychologists (e.g., Jonathan Haidt, *The Righteous Mind* [Pantheon, 2012]) have proposed that human morality clusters along innate, content-specific foundational attractors, such as justice, harm, in-group loyalty, sanctity, authority, and so on. Other moral nativists argue that certain regions of moral morphospace (such as a wholly strict liability moral system in which mental states are irrelevant to ascriptions of culpability) are psychologically inaccessible. See John Mikhail, "Moral Grammar and Human Rights: Some Reflections on Cognitive Science and Enlightenment Rationalism," in Ryan Goodman, Derek Jinks, and Andrew Woods (eds.), *Understanding Social Action, Promoting Human Rights* (Oxford University Press, 2012, pp. 160–202). Even if something along these lines were true, if there are significant differences between the relative weights placed on these foundations across cultures (as there seems to be) and if innate constraints impose

A third type of byproduct explanation, one that promises to be more explanatory and perhaps more constraining, attempts to account for some phenomenon by showing that a certain adaptive capacity is "misfiring" or operating outside of its selected domain. "Misfire" explanations will first specify the range of stimuli that trigger the proximate mechanisms underlying a given adaptive capacity and then show that modern ecological circumstances are configured such that they trigger this capacity in a non-fitness-enhancing context. For instance, the fact that marriage rates among unrelated children raised together on Israeli kibbutzim are unusually low, despite social pressures to marry, is attributed to the misfiring of an incest avoidance mechanism that produces a sexual aversion between individuals who are in regular physical proximity for their first few years of life.

One might assert that we can account for inclusivist morality by showing that humans have an innate, adaptive empathy response: a moral aversion to causing harm and an inclination to alleviate suffering, when these are up close and personal. In the EEA, this empathy response would have been limited to interactions with one's immediate group members, and thus would have benefited primarily kin and cooperating group members. Modern technology, however, bombards contemporary humans with images and information that familiarize strangers and their plight, triggering the misfire of an ancient empathy response outside of its selected domain. This cannot be the whole story, however; as the record of intergroup conflict makes clear, humans have little difficulty acting on truncated sympathies at close range. (Most of the victims of the Rwandan genocide were killed

only broad structural rules on moral trait acquisition (such as the perceived relevance of intentional states to moral culpability), then this will not have any obvious evoconservative implications. Nevertheless, even basic conceptions of moral responsibility have changed significantly over time (see Appendix), which bespeaks a substantial degree of flexibility in even very basic aspects of human moral thought and behavior and indicates a more substantial role for institutions than many evolutionary theorists of morality have acknowledged.

within arm's reach, with machetes, and in many cases by their neighbors). Neuropsychological data show that empathy is significantly modulated by kin relations and group identification, can have relatively minor effects on moral behavior, and in some cases will exacerbate intergroup conflict by enhancing in-group/out-group effects.[27]

There will be more to say about the link between empathy and inclusivist/exclusivist morality in Chapter 11, where we consider the possibility of moral enhancement through the application of biomedical technologies to human beings. For now, we simply want to argue that the shift to subject-centered morality and its associated expansions of the moral circle cannot be explained as the result of manipulating sympathies that were evolutionarily "designed" for small-group living. Arguably more important than any "misfiring" empathy is that we have developed institutions and cultural practices that encourage us to treat strangers as if they warrant moral consideration, even if the empathy or love we feel toward them is limited.

Could the inclusivist anomaly be explained instead as a misfire of the adaptive egalitarian ethos that developed in the EEA? The received view in evolutionary anthropology is that hunter–gatherer egalitarianism, the ancestral state of human morality, is effective in small-scale nomadic groups but is incapable of preventing large, sedentary populations from devolving into vertically complex (hierarchical) societies with high levels of inequality. Even theorists who helped to explode the myth of the peaceful hunter–gather band—a modern version of the "noble savage" discussed in the Introduction—have argued that the shift to modern constitutional democracy and human rights constitutes a partially successful restoration of our prehistoric egalitarian moral psychology.[28] One might argue, therefore, that the egalitarianism

[27] See Pinker, *The Better Angels of Our Nature*, supra note 3, chapter 9.

[28] Chris Boehm, *Moral Origins: The Evolution of Virtue, Altruism, and Shame* (Basic Books, 2012), pp. 96–97.

motivating the inclusivist anomaly is *structurally homologous* to that which underpins hunter–gatherer morality—that they emanate from a single, ancestral evolved capacity. If this is the case, then cosmopolitan morality can be explained as the misfiring of an adaptive ancestral trait in the modern environment.

There are several problems with this misfire explanation. The first is that hunter–gatherer morality is manifestly not subject-centered since it readily excludes from moral consideration similarly situated subjects belonging to other groups. There is now extensive documentation of dehumanizing discourse and treatment between warring hunter–gatherer bands.[29] And despite the limitations of their technologies for killing, rates of intergroup homicide in prehistoric societies were extremely high by modern standards, which is indicative (if not proof) of severely exclusivist attitudes toward out-group members, licensing the inference that there were very weak normative constraints on how out-group members were treated.

A second and related problem is that hunter–gatherer morality is simply not "egalitarian" in the sense that human rights and other inclusivist moralities are egalitarian. In extant hunter–gatherers, egalitarian norms are not only group-restricted but also even within the group apply mainly to interactions between males and are rarely extended to family units.[30] This is precisely what one would expect if hunter–gatherer morality were a strategic evolutionary solution to the ecological problems posed by cooperative hunting, cooperative defense, and intergroup

[29] See, for example, Steven Pinker, *The Better Angels of Our Nature* (Viking, 2011); Bowles, "Did Warfare Among Ancestral Hunter–Gatherers"; Richard Wrangham and Dale Peterson (eds.), *Demonic Males: Apes and the Origins of Human Violence* (Houghton Mifflin, 1996); Lawrence Keeley, *War Before Civilization* (Oxford University Press, 1996); Samuel Bowles and Herbert Gintis, *A Cooperative Species: Human Reciprocity and Its Evolution* (Princeton University Press, 2011); Chris Boehm, *Hierarchy in the Forest: The Evolution of Egalitarian Behavior* (Harvard University Press, 2001).

[30] Boehm, *Hierarchy in the Forest*, supra note 29.

warfare, as the received view hypothesizes. The fact that women have been effectively relegated to a lower moral status in most cultures throughout human history is consistent with the notion that hunter–gatherer moralities are strategic and hence not truly egalitarian in the subject-centered sense of the term. Women have historically been largely institutionally confined to, and biologically specialized for, reproductive and rearing roles; as a result, they lack the strategic capacities that, on prevailing evolutionary views, explain the recognition of full moral status. This makes the shift toward women's rights even more remarkable—and inexplicable—from a simplistic evolutionary standpoint.

Moreover, even if the misfire explanation were *correct*, there is no reason to think that it would support the evoconservative inference since we do not know just how far our hunter–gatherer moral psychology could be stretched beyond its selective domain by altering the conditions under which it is expressed. Finding that a human psychological trait is produced by a misfire of some adaptive capacity tells us little about how flexible that trait can be in diverse social learning environments, just as finding that a psychological trait is an adaptation tells us next to nothing (for reasons adduced earlier) about that trait's developmental malleability.

We are not suggesting that putatively innate adaptive capacities—such as empathy, a sense of fairness, and parochial altruism—are not important *components* of or *preconditions* for inclusivist morality. But we think that the inclusivist trend is too robust to be explained as the simple manipulation of prehistoric moral sentiments evolutionarily configured for small-group living. It is true that in recent years human beings have developed sophisticated methods for producing conditions that broaden the empathy response in the service of inclusivist morality, but this leaves unexplained why it is that many people and governments are committed to doing so—and any plausible answer to this question, we believe, will advert to moral motivations that are not accounted for by evolutionary theory. Of course, this does

not imply that inclusivist features are *inconsistent* with evolutionary theory—only that they are not explained by it.

Finally, could inclusivist morality be explained as an adaptation or byproduct of cultural evolutionary processes, and what would such an explanation look like? To the extent that cultural systems involve heritable variation that is causally connected to the differential survival and reproduction of cultural groups, they are subject to evolution by natural selection. Importantly, however, we cannot assume that any cultural variants that proliferate in a population do so because they are more evolutionarily fit than competing variants—lest natural selection become a tautologous, non-explanatory, non-causal claim that the fittest are simply those which survive. Rather, we must identify what Elliott Sober has called "source laws," or ecological conditions that make some variants relatively more fit than others and thus produce evolutionary forces.[31] As discussed above, no plausible source laws have been offered for the differential reproduction of inclusivist norms, whether the "level of selection" is taken to be cultural groups or cultural variants themselves. If we say that the fitness conditions are determined simply by what human beings have come to desire or endorse, then, again at the pain of tautology, it is incumbent upon the proponent of such an explanation to provide an account of why humans have come to desire or endorse some particular cultural variants over others.

This brings us to another possibility: could inclusivist norms be explained instead as the result of psychological biases in how culture is acquired and transmitted? Robert Boyd and Peter Richerson have developed a mathematically and empirically rigorous account of how adaptive cultural variation can accumulate and be sustained in human populations, notwithstanding properties of cultural inheritance that make it uniquely susceptible to the spread of maladaptive variants and the loss of adaptive ones.[32]

[31] Elliott Sober, *The Nature of Selection* (University of Chicago Press, 1984).

[32] Robert Boyd and Peter Richerson, *Culture and the Evolutionary Process* (University of Chicago Press, 1985).

Unlike genetic inheritance, which is highly faithful and strictly "vertical" between parents and offspring, cultural inheritance can be "horizontal" or "oblique," with cultural variants transmitted between members of the same generation and across unrelated generations (in a pathogen-like fashion) within the lifetime of a single individual. Given these dynamics, what enables adaptive cultural variants (such as technological industries) to be shaped and sustained in a cultural population? Boyd and Richerson propose, and provide extensive evidence in support of the claim, that cultural copying biases—such as tendencies to copy cultural variants that are sufficiently common in a population, to emulate prestigious individuals, and to copy clearly successful strategies—allow for cumulative cultural adaptation.

However, because these cultural copying biases are imperfect heuristics, they also permit the accumulation of neutral or maladaptive variations. Maladaptive cultural variants can become common in a population, can be adopted by prestigious individuals, and can in some cases be mistaken for successful strategies. Nevertheless, it is difficult to see how an explanation of inclusivist morality as a nonadaptive or maladaptive byproduct of cultural copying biases would go. Goodman and Jinks[33] identify several distinct avenues through which inclusivist human rights norms have spread, including coercion, rational persuasion, and acculturation. Frequency-dependent copying biases, such as conformity bias in relation to a surrounding culture or reference group, could help account for processes of acculturation—but they cannot explain why inclusivist norms rose to sufficiently high frequencies or (relatedly) why they were stabilized through coercion or found to be persuasive by large segments of the population.

[33] Goodman and Jinks, *Socializing States*, supra note 6.

Rebutting the Charge of Utopianism

Consider again the evoconservative claim that because morality is a product of natural selection, or (alternatively) a byproduct of adaptive features, or a case of "misfiring," it is highly constrained as to its content. We have already shown that there are significant limits with respect to the scope of morality that biological and cultural evolutionary theory can plausibly explain. However, those who advance the constraints view might reply that we have not in our discussions of the inclusivist anomaly shown evoconservatism to be mistaken.

At best, they could argue, we have shown that human beings have the capacity to expand their *conception* of duty or their *understanding* of moral status beyond the confines of their group. This does not show, however, that a more inclusive morality *actually exists*. This is because morality is more than a set of beliefs about duty and moral status; it must be realized in behavior, patterning human interactions in meaningful, predictable ways. Human beings will not *live* an inclusivist morality, so the objection goes, even if they possess inclusivist *beliefs* about the content of morality and the scope of the set of beings with moral standing. People may entertain the notion of equal moral worth, but it is clear that they often fail to act in accordance with this commitment, as shown, for example, by the minuscule proportion of GDP dedicated to alleviating global poverty.

This retort fails. It simply begs the question by assuming what is in dispute, namely, whether human beings have the capacity to act on inclusivist moral conceptions, whether they have so acted, and whether they have done so without morally unacceptable costs. It ignores the fact, discussed earlier, that inclusivist morality is not merely an idea—that it is significantly realized in individual behavior, social practices, international and domestic law, and institutions—and at substantial cost in terms of expenditures of resources, both public and private. It is a fact that there have been remarkable changes in attitudes and behavior toward non-human

animals in the last few decades. It is also a fact that there are functioning institutions that implement, though imperfectly of course, cosmopolitan moral norms, the most obvious of which are those that comprise international and regional human rights regimes. Similarly, laws and social practices designed to improve the opportunities of people with disabilities have been enacted, again at considerable cost. And, as we noted earlier, institutions can motivate people to act altruistically even when the affective components of helping behavior are lacking. Furthermore, adhering to egalitarian moral commitments is entirely consistent with making prudential projects an integral part of one's conception of the good life,[34] and hence inclusivist morality is not vulnerable to another version of the "utopianism" critique: namely, the charge that its requirement of impartiality is too demanding of moral agents.

The fact that a moral norm is imperfectly realized does not make it a lofty, unrealistic ideal. Virtually all moral norms are imperfectly realized (consider, for example, "Do not lie"). The key point is that the capacity for critical reflection on moral norms and conceptions of moral standing, combined with our ability to create new social practices and institutions, operating in favorable environments, have substantially transformed human morality for significant numbers of human beings—and have done so without imposing any substantial (let alone prohibitive) social or moral costs. So the first and strongest evoconservative claim—that inclusivist morality is merely aspirational—clearly fails. If inclusivist moral commitments were limited to a small minority of contemporary human beings, such large-scale changes in law, social practice, and individual behavior would be inexplicable.

What about the second evoconservative claim, that even if inclusivist elements somehow manage to emerge, they will not be

[34] Elizabeth Ashford (2000), "Utilitarianism, Integrity, and Partiality," *Journal of Philosophy* 97(8): 421–439.

durable?[35] There are two reasons to reject this gloomy prediction. First, although one should never assume that current practices and institutions will persist indefinitely—indeed, Chapter 9 will offer good reasons for appreciating the fragility of human rights culture—there seems to be no evidence at present that inclusivist practices and institutions are headed for disintegration. It is true that these inclusivist developments are relatively recent; but the same is true of the modern state and the global market economy, yet no one would predict that because the latter are recent developments they are likely to collapse in the foreseeable future.

Second, there is nothing in the standard evolutionary explanations, whether selectionist or byproduct, that could serve to ground a prediction that inclusivist social practices or institutions are likely to collapse. To ground the prediction that inclusivist developments are not durable, one would need more than an explanation that shows that they are in a sense against the grain (an overly simplistic picture that we in any case criticize in Chapter 6); one would need a theory showing that cultural innovations that go against the grain are incapable of being sustained. No such theory is currently available. To the contrary, as we noted earlier, modeling work by Boyd and Richerson and their collaborators suggests that the dynamics of cultural transmission allow for the stabilization of a very wide range of norms and behaviors (via punishment and other incentives) even if they fail to promote fitness, are not group-beneficial, and do nothing to remedy altruism failures.

Finally, consider the third evoconservative claim, namely that we have already reached the end of the evolutionary leash—that no further developments in the direction of greater inclusion can be expected. Goldsmith and Posner advance a specific version of this thesis, arguing that efforts to extend institutional orders that confer equal rights beyond the nation-state are futile, due

[35] See, for example, Stephen Asma, *Against Fairness* (University of Chicago Press, 2012, pp. 459–460).

to the same biological and psychological constraints that preclude strong obligations on the part of individual citizens to foreigners—namely, that both individuals and the institutions they form tend to have weak or nonexistent cosmopolitan sentiments.[36] Once again, evolutionary explanations of morality do not support the general prediction or Goldsmith and Posner's specification of it. The fact that inclusivist institutions now extend moral consideration to millions of strangers we will never encounter—namely, our fellow citizens in the modern state—is hard enough to explain given the standard evolutionary account of parochial altruism. To explain why the circle of regard has extended as far as the nation-state but can extend no farther is even more daunting. Once we recognize the limits of evolutionary explanations of morality and the significant steps toward inclusivist morality that have already been achieved, we can reasonably infer that we are far from the outer limits of our capacities for moral inclusivity.

The Open-Ended Normativity of the Ethical

An explanation is needed of the curious fact that, although human beings apparently began with highly constrained, group-based moralities, many of them have come to have moralities that are much more inclusive. Evolutionary psychologists Leda Cosmides and John Tooby argue that "once human cultures were propelled beyond those Pleistocene conditions to which they were adapted at high enough rates, the formerly necessary connection between adaptive tracking and cultural dynamics was broken down."[37] Even so, this still leaves us in need of an explanation as to why human morality has taken an inclusivist turn.

[36] Jack Goldsmith and Eric Posner, *The Limits of International Law* (Oxford University Press, 2005, pp. 209–212).

[37] Leda Cosmides and John Tooby (1989), "Evolutionary Psychology and the Generation of Culture. 2. Case Study: A Computational Theory of Social Exchange," *Ethology and Sociobiology* 10: 51–97.

We will sketch one such explanation over the course of the next two chapters. For now, we will simply note that any naturalistic account of the inclusivist shift will feature a capacity that we have called *the open-ended normativity of the ethical*.[38] This is the capacity to reflect on and revise our moral norms and modify our behavior accordingly, even when doing so is not only not fitness-enhancing but even fitness-reducing.[39] Darwin's remarks about inclusive moral regard, which we noted earlier, suggest that he was aware of this capacity and thought that it helped explain how humans can transcend the narrow confines of cooperative group morality. Likewise, some contemporary philosophers, such as William FitzPatrick, have argued that the "intelligent extension of evolutionarily influenced evaluative judgment" is no more constrained by its evolved underpinnings than other domains of human inquiry, such as science and mathematics.[40]

It is crucial to emphasize that the capacity for critical revision extends not just to duty norms (moral "oughts" and "ought nots") but also to something more fundamental: judgments about which kinds of beings have moral standing and about the different moral statuses of various types of being with moral standing. If humans are capable of deliberately and radically revising the grounds by which the moral community is delineated, then constraints imposed by evolution will be far weaker than many have supposed.

[38] Allen Buchanan (2012), "The Open-Ended Normativity of the Ethical," *Analyse & Kritik: Zeitschrift fur Sozialtheorie* 34(1): 81–94.

[39] Kitcher maintains that morality was shaped in part through deliberative, collaborative discussions "around the campfire" regarding how to reduce costly conflicts in group living (*The Ethical Project*, supra note 11, pp. 97, 104). We agree that moral change can and has been brought about by social deliberation but think that whether this takes place around a campfire or a session of the General Assembly of the United Nations, it will not, going forward, be limited to matters of strategic morality.

[40] William J. FitzPatrick, "Debunking Evolutionary Debunking of Ethical Realism," *Philosophical Studies* 172(4): 883–904.

It is clear that the capacity for open-ended normativity exists. There have been significant revisions both in our conceptions of duties and in our assumptions about moral standing, as we have already discussed.[41] To say that some humans possess this capacity, however, is not to say that the capacity is sui generis or that it is exercised pervasively. As we shall see, it may be that the capacity is acquired and exercised only under certain environmental conditions broadly understood, including certain institutional configurations and resulting motivations. The point is that we have strong evidence for the existence of this capacity in the form of what many of us regard as the most progressive developments in morality, even if we do not yet possess a good account of the conditions under which the capacity is likely to be effectively exercised. In Chapter 5, we will begin to develop an account of what those conditions are.

We have already shown that inclusivist morality is not amenable to standard evolutionary explanations. Could this more *general capacity* for open-ended normativity be afforded an evolutionary explanation? Both selectionist and byproduct explanations of the standard sort will come up short here for the same reasons that that they came up short in connection with inclusivist morality. For instance, if one attempts to show that open-ended normativity is a byproduct of, say, the preference for consistency in belief, one is once again confronted with the fatal time lag problem discussed in connection with the emergence of inclusivist morality. It is likewise unclear how the ability to critically reflect

[41] For example, abolitionists attacked the common belief that African slaves were less than fully human and hence not possessors of "natural rights" by providing public venues in which freed slaves could exhibit rationality. Similarly, advocates of "animal liberation" have worked to make the public aware of the intense pain, fear, and anxiety that animals raised for food can suffer under conditions of "factory farming" and in the processes by which they are slaughtered. In such cases, changes in beliefs and a motivation to act consistently across like cases have resulted in removing restrictions on the scope of moral norms and even revisions in our understandings of which kinds of beings have particular moral statuses.

on and revise moral norms might be explained as a specific application of one or more generic adaptive capacities. One might assert that open-ended normativity is a byproduct of an evolved general cultural learning device or a nested capacity of a more generic cognitive flexibility that helped humans cope with variable ancestral environments. But these would hardly constitute *evolutionary explanations*, let alone ones that have any interesting upshot for moral theory or practice. In any case, what matters for present purposes is not whether open-ended normativity can be given an evolutionary explanation per se but whether it can be given an evolutionary explanation that implicates the sorts of constraints on human morality and society that evoconservatives and others envision—and clearly it cannot since by definition the capacity is, like language and reason, open-ended.

So far, we have argued that standard evolutionary explanations fail to account for the four inclusivist features of contemporary morality. It is important to emphasize that we do not mean to advocate any mysterious or transcendental view regarding their origins. Rather, our contention is that any naturalistic explanation of inclusivist morality must feature the capacity for open-ended normativity. Explanations that advert solely or principally to the modulation of ancestral moral sentiments under modern environmental conditions, without assigning any role to the capacity for open-ended normativity, will not suffice.

Evoconservatism and Minimal Moral Psychological Realism

As was noted earlier, some authors appeal to evolutionary explanations of morality, infer from these explanations that the content of morality is highly constrained, and then draw conservative ethical and political lessons therefrom. We think that such authors have operated with a deficient grasp of both the explanandum (morality) and the scope of evolutionary explanation. At best, they have selectively focused on those aspects of existing

morality that are plausible candidates for evolutionary explanation. Less charitably, their penchant for evolutionary explanations may have shaped (or rather truncated) their conception of what morality now encompasses, causing them to overlook the great flexibility of moral cognition, behavior, and norms as illustrated by the success of inclusivist morality. In other words, they may have unwittingly tailored their conception of the explanandum to fit their favored type of explanans. If all one has is a hammer, one should resist the temptation to assume that reality consists only of nails. Even better, one should consider acquiring more tools.

Evoconservatives can be seen as attempting to heed the principle of minimal psychological realism (PMPR), which was given its first clear statement by Owen Flanagan.[42] The PMPR holds that moral theory and moralities should take the psychological capacities of human beings into account in framing their conceptions of moral principles, duties, and virtues. "Taking into account" our psychological capacities here is usually understood to mean recognizing the empirically evidenced limitations of those capacities. Thomas Nagel has similarly argued that the ideals set by our moral and political theories must be "motivationally reasonable," with respect to both their prescriptions for individual behavior and the institutions they require we adopt.[43] According to Flanagan, a moral ideal satisfies the PMPR if its prescriptions are presently realizable by "all biologically normal human beings" or "asymptotically realizable" by their descendants.[44] The PMPR is the naturalizing philosopher's version of the slogan "ought implies can."

Evoconservatives appear to be taking the PMPR seriously. They think that moralities and institutions should be realistic in

[42] Owen Flanagan, *Varieties of Moral Personality: Ethics and Psychological Realism* (Harvard University Press, 1991).

[43] Thomas Nagel, *Equality and Partiality* (Oxford University Press, 1991, p. 21).

[44] Flanagan, *Varieties of Moral Personality*, supra note 42, p. 340.

the sense that they should not overestimate human abilities to extend sympathy—and, more fundamentally, moral community—to out-groups. They reason that because our moral traits are products of selection in the EEA, or constrained byproducts of the same, our capacities for other-regard are highly circumscribed. But once one recognizes that humans have the capacity for open-ended normativity and robust culture—especially in the form of constructing institutions—it becomes clear that the motivational limits of evolved "internal" psychology are not nearly so constraining as evoconservatives assume. "Ought implies can" makes sense, but one must be careful not to underestimate the "can"—or what is "asymptotically realizable" by humans in robust deliberative and institutional environments.

The human capacity to reflect on and revise our conceptions of duty and moral standing can give us reasons here and now to expand our capacities for moral behavior by developing institutions that economize on sympathy and enhance our ability to take the interests of strangers into account. This same capacity might also give us reasons, in the not-too-distant future, to modify our evolved psychology through the employment of biomedical interventions that enable us to implement new norms that we develop as a result of the process of reflection. In the final chapter, we consider this possibility.

Recall the "evoliberal" claim that human altruism is so unalterably parochial that the radical biomedical alteration of human moral capacities is required. Evoliberals tacitly make an important point that reinforces our claim that the PMPR provides little guidance. If our conception of morality implies that aspects of our evolved psychology are preventing us from living up to our moral commitments and if we can relax these constraints by employing biomedical interventions, then, other things being equal, we ought to develop such technologies and deploy them. We *ought* to change our so-called moral hardwiring to allow us to be morally better than we now *can* be. The project of biomedical moral enhancement is thus compatible with the "ought implies

can" thesis, but it shows that what we ultimately can do may depend in part on assessments about what we ought to do.

In both cases, the limits of our evolved motivational capacities do not translate into a comparable constraint on our capacity for moral action. The fact that we are not currently motivationally capable of acting on the considered moral norms we have come to endorse is not a reason to trim back those norms; it is a reason to enhance our motivational capacity, either through institutional or biomedical means or through some form of moral education, so that that it matches the demands of our considered morality (a problem discussed at length in Chapter 11). The PMPR is therefore far less informative than often assumed.

The evoconservative misappropriation of the PMPR is the contemporary version of a classic foible of conservative thought. Traditional conservatives have been justly criticized for basing their pessimistic predictions about the possibilities for significant social progress and institutional reform on an unscientific conception of human nature—and, more specifically, on the idea that human nature suffers serious *and permanent* cognitive and motivational limitations. Modern conservatives—some of whom might properly be called evoconservatives—give the appearance of improvement because they appeal to science, and to evolutionary explanations in particular, to ground their pessimistic conclusions. But we have shown that old and new conservatives have something in common: they both fail to appreciate that even though human beings have limitations, they also have the capacity to stretch them considerably.

Conclusion

Evolutionary psychologists and empirically savvy ethicists are right to reject the antiquated view that morality is purely a rational, cultural construct—an exogenous constraint on the expression of an evolved human nature that is thoroughly amoral or even immoral. Nothing we have said in this chapter suggests that our evolved psychology can be discounted, either in moral theory

or in the design of institutions. We cheerfully acknowledge that evolved psychological capacities, interacting with particular social and institutional environments, can pose serious obstacles to using our rationality in ways that result in more inclusive moralities. Indeed, the next chapter offers a model that explains in detail why environments that mirror conditions of the EEA—such as those characterized by great physical insecurity, high parasite threat, severe intergroup competition for resources, and a lack of institutions for peaceful, mutually beneficial cooperation—will tend to be very unfriendly to the development of inclusivist morality.

Evolutionary explanations of morality can thus help to explain why inclusivist attitudes both were a long time coming and remain imperfectly realized today. At the same time, however, this chapter has offered compelling reasons, both theoretical and empirical, to believe that human morality is only weakly constrained by human evolutionary history, leaving the potential for substantial moral progress open. Our point is not that human beings have slipped the "leash" of evolution but rather that the leash is far longer than evoconservatives and even many evolutionary psychologists have acknowledged—and no one is in a position at present to know just how elastic it will turn out to be.

CHAPTER 6

Toward a Naturalistic Theory of Inclusivist Moral Progress

Chapters 4 and 5 argued that evolved human nature is not as formidable an obstacle to moral progress as evoconservatives have thought. Yet evoconservatives do paint a picture of human morality that challenges traditional liberal accounts of moral progress. In particular, they suggest that moral progress in the form of inclusivist morality faces formidable psychological and cultural hurdles, rooted in our evolved nature. This chapter outlines an evolutionary developmental model of inclusivist moral progress that calls into question the seemingly uncontroversial but ultimately misleading assertion that inclusivist morality goes against the human evolutionary psychological grain *tout court* or, as is also sometimes said, that we are "hard-wired" for exclusivist, tribalistic morality. On the account of moral psychological development that we advance, *evolved human nature is both an obstacle to moral progress and an enabler of it, depending upon the environment and the degree to which it resembles certain conditions that were prevalent in the environment of evolutionary adaptation (EEA).*

If our model withstands scrutiny, it will also enable us more confidently to reject another evoconservative/evoliberal claim upon which we cast doubt in Chapter 4: the assertion that although humans are capable of some degree of moral inclusion,