With the possible exception of Jane Goodall, Frans de Waal has done more than any other primatologist to change our understanding of the social lives of our closest living evolutionary relatives. His painstaking observations and experiments have exposed capacities for identifying and responding to the needs of conspecifics, apparently most sophisticated in chimpanzees and bonobos, but present in other primates as well. His detailed accounts of the ways in which these capacities are manifested have broken the stranglehold of the fear, once common among primatologists, that postulating complex psychological states and dispositions is sentimental anthropomorphism. Any scholar who hopes to use primate social behavior as a lens for understanding aspects of our own practices should be profoundly grateful.
In his Tanner Lectures, de Waal intends to build on his decades of careful research to elaborate the program Darwin envisaged in chapter 5 of *The Descent of Man*. Human morality, he suggests, stems from dispositions we share with other primates, particularly with those closest to us on the phylogenetic tree. Yet my formulation of his position, like his own, is vague in crucial respects: what exactly is meant by claiming that morality “stems from” traits present in chimpanzees, or that morality is “a direct outgrowth of the social instincts we share with other animals,” or that “deep down” we are truly moral, or that “the building blocks of morality are evolutionarily ancient”? I want to focus the position more precisely by articulating a particular version of what de Waal might have in mind. If this version is not what he intends, I hope it will prompt him to develop his preferred alternative with more specificity than he has done so far.

In fact, I think de Waal’s own presentation is hampered by his desire to take a sledgehammer to something he conceives of as the rival to his own view. That rival, “Veneer Theory,” is to be demolished. The fact that the demolition is so easy should alert us to the possibility that the real issues have not been exposed and addressed.

II

Veneer Theory, as I understand it, divides the animal kingdom into two. There are nonhuman animals who lack any capacity for sympathy and kindness, and whose actions, to the extent that they can be understood as intentional at all, are the expression of selfish desires. There are also human beings, often driven by selfish impulses to be sure, but capable
of rising above egoism to sympathize with others, to curb their baser tendencies, and to sacrifice their own interests for higher ideals. Members of our species have the selfish dispositions that pervade the psychologically more complex parts of the rest of the animal world, but they have something else, an ability to subdue these dispositions. Our psyches are not just full of weeds; we also have a capacity for gardening.

De Waal associates this position with T. H. Huxley, whose famous lecture of 1893 introduced the gardening metaphor. He accuses Huxley of deviating from Darwinism on this point, but it is not clear to me that, even if this is an adequate statement of Huxley’s view (which I doubt), the accusation is justified. A fully Darwinian Huxley might claim that human evolution involved the emergence of a psychological trait that has a tendency to inhibit another part of our psychological nature; it is not that something mysterious outside us opposes our nature, but that we come to experience internal conflicts of a kind that had not previously figured in our lives. It would be quite reasonable, of course, to ask this Darwinian Huxley to offer an account of how this new mechanism might have evolved, but, even if any answer proved to be speculative, Huxley would be innocent of assuming that morality is some sort of nonnaturalistic addition.

The version of Veneer Theory I have sketched, and the one that occupies de Waal, takes a specific view of the starting point and the end point. Back in our evolutionary past, we had ancestors, as recent as the common ancestors of human beings and chimpanzees, who lacked any capacities for sympathy and altruism. Present human beings have ways of disciplining their selfish urges, and the theory thinks of morality as this collection of disciplinary strategies. The real objection
to Veneer Theory in this form is that it has the starting point wrong. It is falsified by all the evidence de Waal has acquired about the other-directed tendencies of chimpanzees, bonobos, and, to a lesser extent, other primates.

Appreciating this point ought to be the first stage in an inquiry about the evolutionary history that links the psychological dispositions of our ancestors to the capacities that underlie our contemporary moral behavior. De Waal demolishes his favored version of Veneer Theory by being very clear about the starting point—that, after all, is a project to which he has devoted much of his life—but he is considerably less clear as to the nature of the terminus. The vague talk about “building blocks” and “direct outgrowth” comes in because de Waal hasn’t thought as hard about the human phenomenon he takes to be anticipated or foreshadowed in chimpanzee social life.

There’s a polar opposite of Veneer Theory, one we might call “Solid-to-the-Core Theory” (STCT, for short). STCT claims that morality is essentially present in our evolutionary ancestors. Perhaps in the glory days of human sociobiology some people were tempted to flirt with STCT, supposing, for example, that human morality reduces to dispositions to avoid incest (and similar simple tendencies) and that these have evolutionary explanations that apply to a wide range of organisms.1 STCT effectively takes the terminus of the

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1 See, for example, Michael Ruse and E. O. Wilson, “Moral Philosophy as Applied Science,” *Philosophy*, 61, 1986, 173–92. Although this essay takes a radically oversimplified view of the content of morality, I think it would be unfair to accuse Ruse and Wilson of going all the way to STCT. For discussion of the flaws of sociobiological ventures in ethics, see the last chapter of my *Vaulting Ambition* (Cambridge, MA: MIT Press, 1985) and “Four Ways of ‘Biologizing’ Ethics” (most easily available in my collection *In Mendel’s Mirror* [New York: Oxford University Press, 2003]).
evolutionary process that yields human morality to be the same as some prehuman starting point. It is no more, but no less, plausible than Veneer Theory as de Waal characterizes it. All the interesting positions lie somewhere in between.

De Waal prefaces his lectures with a quotation from the late Stephen Jay Gould, indeed from a passage in which Gould was responding to sociobiological accounts of human nature. I think it’s worth reflecting on another observation of Gould’s, the comment that when we utter the sentence “Human beings are descended from apes” we can change the emphasis to bring out either the continuities or the differences. Or, to vary the point, Darwin’s phrase “descent with modification” captures two aspects of the evolutionary process: descent and modification. What is least satisfactory about de Waal’s lectures is his substitution of vague language (“building blocks,” “direct outgrowth”) for any specific suggestions about what has descended and what has been modified. Lambasting a view like his “Veneer Theory” (or like STCT) is not enough.

III

In fact, de Waal provides a little more than I have so far granted. He has been attuned to developments in evolutionary ethics (or in the evolution of ethics) during the past fifteen years, a period in which the naive reductions favored in sociobiological accounts have given way to proposals of an alliance between Darwin and Hume. The sentimentalist tradition in ethical theory, in which, as de Waal rightly sees, Adam Smith deserves (at least) equal billing with Hume, has
won increased favor with philosophers. As it has done so, would-be evolutionary ethicists have felt the appeal of what I shall call the “Hume-Smith lure.”

The lure consists in focusing on the central role of sympathy in the ethical accounts offered by Hume and Smith. So you first claim that moral conduct consists in the expression of the appropriate passions, and that sympathy is central to these passions. Then you argue that chimpanzees have capacities for sympathy, and conclude that they have the core of the psychology required for morality. If there are worries about what it means to talk about the “central” role of sympathy or the “core” of moral psychology, the primatologist or evolutionary theorist can shift the burden. Hume, Smith, and their contemporary champions sort out the ways in which sympathy figures in moral psychology and moral behavior; the primatologists demonstrate the sympathetic tendencies at work in primate social life; the evolutionary theorists show how tendencies of this type might have evolved.2

My characterization of this strategy as “the Hume-Smith lure” is supposed to signal that it is far more problematic than many writers (including some philosophers, but especially nonphilosophers) take it to be. To understand the difficulties we need to probe the notion of psychological altruism, recognize just what types of psychological altruism have been revealed by studies of primates, and relate these dispositions to the moral sentiments invoked by Hume, Smith, and their successors.

2This requires developing the approaches to cooperation pioneered by Robert Trivers, Robert Axelrod, and W. D. Hamilton, so as to take account of the underlying motivations. For one possible approach, see my essay “The Evolution of Human Altruism” (Journal of Philosophy 1993; reprinted in In Mendel’s Mirror).
De Waal wants to recognize nonhuman primates as having dispositions that are not simply egoistic, and it’s useful to think of “psychological altruism” as a catchall term for covering these. As I understand it, psychological altruism is a complex notion that involves the adjustment of desires, intentions, and emotions in light of perceptions of the needs and wishes of others. De Waal rightly distinguishes the psychological notion from the biological conception of altruism, defined in terms of the promotion of others’ reproductive success at reproductive cost to oneself; as he points out, the interesting notion is one that only applies in the context of intentional behavior, and it can be disconnected from any thought of assisting the reproductive success of other animals.

More precisely, psychological altruism should be thought of in terms of the relation among psychological states in situations that vary according to the perception of another’s need or desire. Although an altruistic response can consist in modification of emotions or intentions, it may be easiest to introduce the concept in reference to desire. Imagine an organism A, in a context in which the actions available have no perceptible bearing on another organism B, and suppose that A prefers a particular option. It may nonetheless be true of A that, in a context very similar to the original one, in which there is a perceptible effect on B, A would prefer a different course of action, one that A takes to be more conducive to the wishes or needs of B. If these conditions are met, then A meets a minimal requirement for having an altruistic disposition towards B as a beneficiary. The conditions are not sufficient, however, unless it is also the case that A’s change of preference in the situation where B’s interests are an issue would be caused by A’s perception that the alternative action
accorded more closely with B’s desires or needs, and, fur-
thermore, that the switch was not generated by a calculation
that pursuing the alternative would be likely to satisfy others
of A’s standing preferences. All this is a way of spelling out
the thought that what makes a desire altruistic is a disposi-
tion to modify what is chosen in a situation where there is a
perceived impact on another, that the modification aligns
the choice more closely with the perceived wishes or needs
of the other, that the modification is caused by the percep-
tion of those wishes or needs, and that it doesn’t involve cal-
culation of expected future advantages in satisfaction of
standing preferences.

An illustration may help. Suppose that A comes across
an item of food, and wishes to devour it all—that is, in the
absence of B, A would devour it all. If B is present, how-
ever, A may choose to share the food with B (modifying the
wish that would have been operative in the context in
which B was absent), may do so because A perceives that B
desires some of the food (or maybe that B needs some of
the food), and may do so not from calculating that sharing
will bring some further selfish benefit (for example, that B
will then be likely to reciprocate on future occasions). Un-
der these circumstances, A’s desire to share is altruistic with
respect to B.

We can think of the same structure as applying in the case
of emotions or of intentions—a modification of the state
that would have been present that is caused by the percep-
tion of the wants or needs of the other and that does not
come about through the calculation of future benefit. Yet
even if we restrict attention to the case of altruistic desire, it
should be plain that there are many kinds of psychological
altruism. As my disjunctive formulation, “wishes or needs,”
already suggests, an altruist may respond either to the perceived wants or to the perceived needs of the beneficiary. Typically, these are likely to be in harmony, but, when they diverge, altruists have to choose which to follow. Paternalistic altruism responds to the needs, rather than the wishes; nonpaternalistic altruism does the reverse.

Besides the distinction between paternalistic and nonpaternalistic altruism, it’s also important to recognize four dimensions of altruism: intensity, range, extent, and skill. Intensity is marked by the degree to which the altruist accommodates the perceived desire (or need) of the beneficiary; in the food-sharing illustration it’s easy to present this concretely, as the fraction of the item the altruist is willing to assign the beneficiary. The range of altruism is marked by the set of contexts in which the altruist makes an altruistic response: to take an example from de Waal, two adult male chimpanzees may be willing to share across a range of situations, but, if the stakes become really high (with the possibility of monopolizing reproductive access, say), an erstwhile friend may act with utter disregard for the other’s wishes or needs. The extent of altruism is expressed in the set of individuals towards whom an altruist is prepared to make an altruistic response. Finally the skill of the altruist is measured by the ability to discern, across a range of situations, the real wishes of the intended beneficiary (or, for paternalistic altruists, the real needs of the intended beneficiary).

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3 See “The Evolution of Human Altruism.” As noted there, the response can range from complete self-abnegation (give all) through “golden-rule altruism” (split evenly) to complete selfishness (give none).

4 See Frans de Waal, Chimpanzee Politics (Baltimore: Johns Hopkins University Press, 1982).
Even if we ignore the complications of elaborating a similar approach to emotion and intention, and even if we disregard the distinction between paternalistic and nonpaternalistic altruism, it’s evident that psychological altruists come in a vast array of types. If we think of a four-dimensional space, we can map “altruism profiles” that capture the distinct intensities and different skills with which individuals respond across a range of contexts and potential beneficiaries. Some possible profiles show low-intensity responses to a lot of others in a lot of situations; other possible profiles show high-intensity responses to a few select individuals across almost all situations; yet others are responses to the neediest individual in any given situation, with the intensity of the response proportioned to the level of need. Which, if any, of these profiles are found in human beings and in nonhuman animals? Which would be found in morally exemplary individuals? Is there a single ideal type to which we’d want everyone to conform, or is a morally ideal world one in which there’s diversity?

I pose these questions not as a prelude to answering them, but as a way of exposing how complex the notion of psychological altruism is and how untenable is the idea that, once we know that nonhuman animals have capacities for psychological altruism, we can infer that they have the “building blocks” of morality, too. The demise of Veneer Theory, as de Waal understands it, tells us that our evolutionary relatives belong somewhere in altruism space away from the point of complete selfish indifference. Until we have a clearer view of the specific kinds of psychological altruism chimpanzees (and other nonhuman primates) display, and until we know what kinds are relevant to morality, it’s premature
to claim that human morality is a “direct outgrowth” of tendencies these animals share.

IV

De Waal has made a powerful case for the existence of some forms of psychological altruism in the nonhuman world. His best example, to my mind, is one he offered in Good Natured, and which he retells here, the tale of Jakie, Krom, and the tires. His description shows convincingly that the juvenile, Jakie, modified his wishes and intentions from those he’d otherwise have had, that he did so in response to his perception of Krom’s wishes, and that the modified wishes were directed at satisfying her perceived desire; although hard-line champions of psychological egoism may insist that the change was produced by some cunning Machiavellian calculation, it’s extremely hard to arrive at a plausible hypothesis—Krom is a mildly retarded, low-ranking adult female who is not in any great position to help Jakie, and the idea that this might raise his standing with onlookers is scotched by the absence of other members of the troop.5 What this reveals is that Jakie was capable of a psychologically altruistic response, of at most moderate intensity (there was little cost in interrupting his activities to help with the

5It also seems to me that this example avoids the worry that Elliott Sober and David Sloan Wilson belabor in the final chapter of their excellent study of altruism, Unto Others (Cambridge, MA: Harvard University Press, 1998). It’s very hard to suppose that Jakie was moved by desire for the glow that comes from recognizing that one has acted rightly (or as the community would approve), or by desire to avoid the pang that comes from recognition that one has not. These psychological hypotheses really do invite the charge of unwarranted anthropomorphism.
tires), towards an individual with whom he had a standing relationship, in a context where not much else was going on.

Other examples are a lot less convincing. Consider the capuchins, the cucumber, and the grape. When de Waal’s report of his experiments appeared, some enthusiasts were prepared to hail them as demonstrating a sense of fairness in nonhuman animals. I take a sense of fairness to involve psychological altruism, as I have understood it, for it depends on not being content with a situation one would have seen as satisfactory precisely because one recognizes that the needs of others haven’t been met. In fact, de Waal’s experimental study reveals no kind of psychological altruism, but simply an animal’s recognition of the possibility of a preferred reward that it has not received, and a protest that results from the selfish wish for that reward.

In my judgment, the most convincing examples of psychological altruism are those of the Jakie-Krom type, cases in which one animal accommodates its behavior to the perception of a wish, or a need, of another animal with whom it has often interacted, or of instances in which an older animal attends to the perceived needs of the very young. These are quite enough to show that nonhuman animals aren’t invariably psychological egoists—and, indeed, to suppose that we are likely to share the same capacities and the same status. But how relevant is psychological altruism of these types to human moral practice?

At a conference at the London School of Economics, de Waal was inclined to present them in similar terms. The Tanner Lectures correctly back away from that interpretation. For, as many people at the LSE meeting pointed out, protests on the part of the aggrieved party don’t do much to demonstrate a sense of fairness. Of course, if the lucky capuchin were to throw down the grape until his comrade had a similar reward, that would be very interesting!
Some ability to adjust our desires and intentions to the perceived wishes or needs of others appears to be a necessary condition for moral behavior. But, as my remarks about the varieties of psychological altruism should have suggested, it’s not sufficient. Hume and Smith both believed that the capacity for psychological altruism, for benevolence (Hume) or sympathy (Smith), was quite limited; Smith begins the *Theory of Moral Sentiments* with a discussion of the ways in which our responses to the emotions of others are pallid copies. Both would probably recognize the full range of de Waal’s studies, from *Chimpanzee Politics* through *Peacemaking among Primates* to *Good Natured*, as vindicating their central points, showing (in my terms) that psychological altruism exists, but that it is limited in intensity, range, extent, and skill.

Far more importantly, they would distinguish this first-order psychological altruism from the responses of the genuinely moral sentiments. Hume’s *Enquiry Concerning the Principles of Morals* closes with the identification of the moral sentiments with “the party of humanity.” I interpret him as supposing that we have a capacity for refining the original, limited, dispositions to respond to the wishes and needs of our friends and children. Through proper immersion in society, we can be brought to expand our sympathies, so that we eventually become moved by what is “useful and agreeable” to people, not only when that conflicts with our selfish desires but even when it is at odds with our more primitive, locally partisan, altruistic responses.

It seems to me that not only those in the Hume-Smith tradition, but also the strictest Kantians, can accept this point. An extreme Kantian might suppose that the psychologically altruistic response proceeds through the operation of reason, by “cold cognition” rather than by Humean or Smithian sympathy.
Smith is far more explicit than Hume about how this enlargement of sympathy should proceed. He takes it to involve reflecting upon—mirroring—the judgments of those with many different perspectives around us, until we are able to combine each point of view, with its peculiar biases, into an assessment that expresses a genuinely moral sentiment.8 Without the impartial spectator, Smith’s “man in the breast,” we only have our limited and idiosyncratic sympathies, types of psychological altruism that may be necessary if moral responses are to develop in us but that fall a long way short of morality.

So I think the Hume-Smith lure is just that. It’s an invitation to students of animal behavior to demonstrate psychological altruism in their subjects, on the assumption that any kind will do, because “Hume and Smith have shown that altruism is what morality is all about.” I think a lot more work needs to be done. Fortunately, de Waal’s studies are valuable in showing us how it might proceed.

V

The role of Smith’s impartial spectator (or of Kant’s inner reasoner, or of a number of other philosophical devices for

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8I describe in more detail how this process of refinement is supposed to occur in “The Hall of Mirrors” (in Proceedings and Addresses of the American Philosophical Association November 1985, 67–84.). In that essay, I also argue that Smith’s procedure (like Hume’s much less developed version) cannot eradicate widely shared biases. Appreciating this point leads me to offer a modification of the ethical project along lines suggested by Dewey—instead of thinking of the enlargement of sympathy as providing a finished ethical system, we should view it as a device for going on from where we are.
directing moral behavior) is especially evident in cases of conflict. The most obvious conflicts are those that pit a selfish impulse against an altruistic one. In these cases, you might think, the verdict of morality is that the altruistic one should win, so that a key step in the evolution of ethics is the acquisition of some capacity for psychological altruism. But that is far too swift. We need impartial spectators (or some equivalent) because our altruistic dispositions are too weak, often of the wrong kinds, and because conflicting altruistic impulses need adjudication. What happens when there’s no internal adjudicator can be seen if we consider de Waal’s earlier studies in light of his later defenses of psychological altruism.

Chimpanzee Politics and Peacemaking among Primates reveal social worlds in which there are limited forms of psychological altruism. The societies are divided into coalitions and alliances, within which, some of the time, the animals cooperate. Some of the cooperation may be based on the identification of future advantages, but there are occasions on which the hypothesis that one animal is responding to the needs of another without calculating future benefit appears quite plausible. If you try to plot the psychological altruism manifested on the dimensions I delineated above, you’ll find that de Waal’s chimpanzees (the species for which there are most data) are quite limited in the intensity, range, and extent of their altruistic tendencies.

The limitation on range is especially important because, as Peacemaking among Primates makes especially vivid, cooperation among these animals, and the psychological altruism...
that often underlies it, is always breaking down. When an ally fails to do his part, the social fabric is torn, and has to be repaired. De Waal documents the time-consuming ways in which primates reassure one another, the long bouts of grooming, for example, that follow ruptures within alliances.

If you look at this behavior through the eyes of Adam Smith—both moral philosopher and social theorist—there’s an obvious thought. These animals could use their time and energy much more efficiently and profitably than they do, were they to have some device for extending and reinforcing their dispositions to psychological altruism. A “little chimp in the breast” would provide them with a smoother, more functional society, with greater opportunities for cooperative projects; maybe they could even interact with animals whom they didn’t see on a daily basis, and their group size could grow. Because they have some forms of psychological altruism they are able to have a richer social organization than most other primate species. Because those forms of psychological altruism are so limited they are socially stuck, unable to achieve larger societies or more extensive cooperation.

Chimpanzee societies show overt conflicts, resolved by elaborate peacemaking. There are also conflicts within the chimpanzees themselves. Sometimes a chimpanzee has a tendency to share that militates against a tendency to keep a food item for itself—the leafy branch is stiffly held out towards a beggar and the chimp in possession averts its face, half-turning away; the rigidity of the posture, the redirected gaze, and the expression of discontent make the inner

10 My account here is based on my own, highly limited, observations at the Wild Animal Park near San Diego; the animal I saw belonged to the celebrated bonobo colony there; I don’t think that the fact that it was a bonobo, rather than a common chimpanzee, makes any difference to the point.
conflict as clear as in the determined dieter who salivates as she resolutely passes the tempting food tray. The frequency of overt conflicts could be reduced if there were some device for resolving the inner conflicts in the right way. As things stand, however, chimpanzees are wantons (in Harry Frankfurter’s helpful terminology), vulnerable to whichever impulse happens to be dominant at a particular moment.

Somewhere in hominid evolution came a step that provided us with a psychological device for overcoming wantonness. I am inclined to think of it as part of what made us fully human. Perhaps it began with an awareness that certain forms of projected behavior might have troublesome results and a consequent ability to inhibit the desires that would otherwise have been dominant. I suspect that it was linked to the evolution of our linguistic capacity, and even that one facet of the selective advantage of linguistic ability lay in helping us to know when to restrain our impulses. As I envisage it, our ancestors became able to formulate patterns for action, to discuss them with one another, and to arrive at ways of regulating the conduct of group members.¹¹

At this stage, I conjecture, there began a process of cultural evolution. Different small bands of human beings tried out various sets of normative resources—rules, stories, myths, images, and more—to define the way in which “we” live. Some of these were more popular with neighbors and with descendant groups, perhaps because they offered greater

¹¹ Here I am indebted to one of the philosophically most sophisticated attempts to set our moral practice in the context of human evolution, Allan Gibbard’s Wise Choices, Apt Feelings (Cambridge, MA: Harvard University Press, 1990). I think Gibbard is right to emphasize the role of conversation about what to do in the history of moral thinking, from small bands of human beings to the societies of the present.
reproductive success, more likely because they made for smoother societies, greater harmony, and increased cooperation. The most successful ones were transmitted across the generations, appearing in fragmentary ways in the first documents we have, the addenda to law codes of societies in Mesopotamia.

Most of this process is invisible because of the long period between the full acquisition of linguistic ability (50,000 years ago at the very latest) and the invention of writing (5,000 years ago). There are fascinating hints of important developments: the cave art and the figurines, for example. Most significant are the indications of greater ability to cooperate with individuals who don’t belong to the local band. From about 20,000 years ago on, the remains of some sites show an increase in the number of individuals present at a particular time, as if several smaller bands had come together there. Even more intriguing are finds of tools made of particular materials at considerable distances from the nearest natural source; perhaps these should be understood in terms of the development of “trading networks,” as some archeologists have proposed; or perhaps they should be viewed as indicators of the ability of strangers to negotiate their way through the territories of many different bands. Whichever alternative one selects, these phenomena reveal an increased capacity for cooperation and social interaction, one that becomes fully manifest in the large Neolithic settlements at Jericho and Çatal Hüyük.

Whether or not we can ever do more than guess at the actual course of events, there is, I think, a possible evolutionary account of how we got here from there, one which sees the development of a capacity for normative guidance—perhaps understood in that enlargement and refinement of sympathy
that gives rise to Smith’s impartial spectator—as a crucial step. Once that was in place, and once we had languages in which to engage in discussions with one another, the explicit moral practices, the compendia of rules, parables, and stories, could be developed in cultural lineages, some of which extend into the present. To revert to Huxley’s famous image, we became gardeners, having, as part of our nature, an impulse to root out the weeds that are parts of our psyche, and to foster other plants by adding a stake here or a trellis there. Moreover, with us, as with any garden, the project is never finished but continues indefinitely, as new circumstances and new varieties arise.12

VI

In returning to Huxley have I ended up with Veneer Theory? Surely not in the simple version de Waal aims to demolish. How then does it stand with the idea that our evolutionary relatives have the “building blocks” of morality, that our moral practices and dispositions are “direct outgrowths” of capacities we share with them? As I complained earlier, these phrases are too vague to be helpful. There are important continuities between human moral agents and chimpanzees: we share dispositions to psychological altruism without which any genuinely moral action would be impossible. But I suspect that between us and our most recent common ancestor with the chimps there have been some very important evolutionary steps: the emergence of a capacity for normative

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12 This is the Deweyan version of the moral project, which I outline more fully in “The Hall of Mirrors.”
guidance and self-control, the ability to speak and to discuss potential moral resources with one another, and about fifty thousand years (at least) of important cultural evolution. As Steve Gould saw so clearly, in any evaluation of our evolutionary history you can emphasize the continuities or the discontinuities. I think little is gained by either emphasis. You do better simply to recognize what has endured and what has altered.

Of course, de Waal might reject my speculations about how we got from there to here. Despite the fact that I think my story integrates insights he has developed at different stages of his career, he might prefer some alternative. The important point is that some account of this kind is needed. For central to my argument is the thesis that mere demonstration of some type of psychological altruism in chimpanzees (or other higher primates) shows very little about the origins or evolution of ethics. I am happy to consign Ve-neer Theory (though not Huxley’s insights!) to the flames. That, however, is only the start of making the many primatological insights de Waal has given us relevant to our understanding of human morality.