Notes

INTRODUCTION

1. A sure sign that King's appeal has become a catchphrase is that it has been altered. A Google search on "can't we all get along" (which King never said) turns up three times as many hits as "can we all get along."

2. See Pinker 2011 for an explanation of how civilization brought about a spectacular drop in violence and cruelty, even when the wars and genocides of the twentieth century are included. See also Keeley 1996 on the very high prevalence of intergroup violence before civilization.

3. *Oxford English Dictionary*.

4. *Webster's Third New International Dictionary*. This is definition #3 of *righteous;* the first definition is "doing that which is right: acting rightly or justly: conforming to the standard of the divine or the moral law."

5. *Webster's Third New International Dictionary*.

6. Evolution *is* a design process; it's just not an intelligent design process. See Tooby and Cosmides 1992.

7. In my academic writings, I describe *four* principles of moral psychology, not three. For simplicity and ease of memory, I have merged the first two together in this book because they are both about aspects of the social intuitionist model (Haidt 2001). When separated, the two principles are: *Intuitive primacy but not dictatorship*, and *moral thinking is for social doing*. See extensive discussion of all four principles in Haidt and Kesebir 2010.

8. See T. D. Wilson 2002 on the "adaptive unconscious."

9. To quote the title of Rob Kurzban's (2010) excellent recent book.

10. As Nick Clegg, leader of the UK Liberal Democrats put it, "But we are not on the left and we are not on the right. We have our own label: Liberal" (speech to the Liberal Democrat Spring Conference, Sheffield, UK, March 13, 2011). European liberals rarely go as far as American libertarians in their devotion to free markets and small government. See Iyer, Koleva, Graham, Ditto, and Haidt 2011 for a literature review and new findings on libertarians.

11. Sen-ts'an, *Hsin hsin ming*. In Conze 1954.

1. WHERE DOES MORALITY COME FROM?

1. My conclusion at graduation was that psychology and literature would have been better fields to help a young person on an existential quest. But philosophy has gotten better since then—see Wolf 2010.

2. See for example Jeremiah 31:33–34: "I will put my law within them, and I will write it on their hearts." See also Darwin 1998/1871.

3. *Empiricism* has two different meanings. I'm using it here as psychologists typically do, to mean the belief, in contrast to nativism, that the mind is more or less a "blank slate" at birth, and that nearly all of its content is learned from experience. I believe this view is wrong. Empiricism is also used by philosophers of science to refer to the devotion to empirical methods—methods of observing, measuring, and manipulating the world in order to derive reliable conclusions about it. As a scientist, I fully endorse empiricism in this sense.

4. Locke 1979/1690.

5. Piaget 1932/1965.

6. Although now we know that knowledge of physics is, to some extent, innate (Baillargeon 2008), and so is much moral knowledge (Hamlin, Wynn, and Bloom 2007). More on this in chapter 3.

7. Piaget seems to have been wrong about this. It now appears that when you use more sensitive measures that don't require kids to respond verbally, they begin reacting to violations of fairness by the age of three (LoBue et al. 2011), and perhaps even by the age of fifteen months (Schmidt and Sommerville 2011). In other words, there is increasing support for nativist theories such as Moral Foundations Theory (see chapter 6).

8. My definition of rationalism is not far from philosophical definitions, e.g., rationalists believe in "the power of a priori reason to grasp substantial truths about the world" (B. Williams 1967, p. 69). But my approach avoids eighteenth-century debates about innate ideas and connects with twentieth-century concerns about whether reasoning, particularly the reasoning of an independent individual, is a reliable (versus dangerous) way to choose laws and public policies. See Oakeshott 1997/1947. Hayek 1988 argued that "constructivism" was the more accurate term for the kind of rationalism that believes it can construct a social or moral order on the basis of rational reflection. I note that Kohlberg did not actually call himself a rationalist; he called himself a constructivist. But I will refer to Kohlberg, Piaget, and Turiel as rationalists to highlight their contrast with intuitionism, as I develop it in the rest of this book.

9. Kohlberg 1969, 1971.

10. Kohlberg 1968.

11. See, for example, Killen and Smetana 2006.

12. Turiel 1983, p. 3, defined social conventions as "behavioral uniformities that serve to coordinate social interactions and are tied to the contexts of specific social systems."

13. Turiel 1983, p. 3.

14. Hollos, Leis, and Turiel 1986; Nucci, Turiel, and Encarnacion-Gawrych 1983.

15. Most of the experimental work was motivated by Kohlberg and Turiel, but I should also mention two other very influential figures: Carol Gilligan (1982) argued that Kohlberg had neglected the "ethic of care," which she said was more common in women than in men. Also, Martin Hoffman (1982) did important work on the development of empathy, highlighting a moral emotion at a time when most of the research was on moral reasoning. Tragically, Kohlberg committed suicide in January 1987. He had been suffering from depression, and from chronic pain due to a parasitic infection.

16. A. P. Fiske 1991.

17. Evans-Pritchard 1976.

18. I'll develop this idea in chapter 11, drawing heavily on the ideas of Emile Durkheim.

19. Rosaldo 1980.

20. Meigs 1984.

21. See Leviticus 11.

22. See Deuteronomy 22:9–11. Mary Douglas (1966) argues that the need to keep categories pure is the most important principle behind the kosher laws. I disagree, and think that disgust plays a much more powerful role; see Rozin, Haidt, and McCauley 2008.

23. The earliest record of this phrase is a sermon by John Wesley in 1778, but it clearly harks back to the book of Leviticus.

24. Shweder, Mahapatra, and Miller 1987.

25. Geertz 1984, p. 126.

26. Shweder and Bourne 1984. Shweder used the word *egocentric* rather than *individualistic,* but I fear that *egocentric* has too many negative connotations, and is too closely related to selfishness.

27. Shweder, Mahapatra, and Miller 1987. Each person responded to thirteen of the thirty-nine cases.

28. Turiel, Killen, and Helwig 1987.

29. I thank Dan Wegner, my colleague and mentor at UVA, for coining the term *moral dumbfounding*.

30. Hume 1969/1739–40, p. 462. Hume meant that reason finds the means to achieve whatever ends are chosen by the passions. He did not focus on post hoc justification as the function of reasoning. But as I'll show in later chapters,

justifying the self's actions and judgments is one of the principal ends that we are all passionate about.

31. Haidt, Koller, and Dias 1993.

2. THE INTUITIVE DOG AND ITS RATIONAL TAIL

1. This is the foundational truth of *The Happiness Hypothesis*, described in chapter 1 of that book.

2. Medea, in *Metamorphosis* (Ovid 2004), Book VII.

3. Plato 1997. Quote is from *Timaeus* 69d. Note that Timaeus seems to be speaking for Plato. He is not used as a foil, about to be refuted by Socrates.

4. Solomon 1993.

5. Hume used the word *slave,* but I'll switch to the less offensive and more accurate term *servant*. Hume was building on the ideas of other English and Scottish sentimentalists, such as Francis Hutcheson and the Earl of Shaftesbury. Other noted sentimentalists, or antirationalists, include Rousseau, Nietzsche, and Freud.

6. Ellis 1996.

7. Jefferson 1975/1786 p. 406.

8. Ibid., pp. 408–9.

9. Plato's model in the *Timaeus,* as in the *Phaedrus,* was actually that there are three parts to the soul: reason (in the head), spirit (including the desire for honor, in the chest), and appetite (the love of pleasure and money, in the stomach). But in this chapter I'll simplify it as a dual-process model, pitting reason (above the neck) against the two sets of passions (below).

10. This famous phrase was coined by Herbert Spencer, but Darwin used it too.

11. Darwin 1998/1871, part I, chapter 5. More on this in chapter 9.

12. The idea was developed by Herbert Spencer in the late nineteenth century, but it goes back to Thomas Malthus in the eighteenth century. Darwin did believe that tribes competed with tribes (see chapter 9), but he was no social Darwinist, according to Desmond and Moore 2009.

13. Hitler was a vegetarian too, but nobody would argue that endorsing vegetarianism makes one a Nazi.

14. Pinker 2002, p. 106.

15. Rawls remains one of the most cited political philosophers. He is famous for his thought experiment in Rawls 1971 asking people to imagine the society they would design if they had to do so from behind a "veil of ignorance" so that they would not know what position they would eventually occupy in that society. Rationalists tend to love Rawls.

16. Wilson's exact words bear repeating, for they were prophetic: "Ethical philosophers intuit the deontological canons of morality by consulting the emo-

tive centers of their own hypothalamic-limbic system. This is also true of the developmentalists [such as Kohlberg], even when they are being their most severely objective. Only by interpreting the activity of the emotive centers as a biological adaptation can the meaning of the canons be deciphered." E. O. Wilson 1975, p. 563.

17. E. O. Wilson 1998.

18. Leading biologists such as Stephen Jay Gould and Richard Lewontin wrote diatribes against sociobiology that explicitly linked science to the political agenda of social justice. See, for example, Allen et al. 1975.

19. See Pinker 2002, chapter 6.

20. The exception to this statement was work on empathy by Martin Hoffman, e.g., Hoffman 1982.

21. De Waal 1996. I read this one after graduate school, but I had gotten interested in de Waal's work during grad school.

22. Damasio 1994.

23. Three very influential works that brought emotions into morality were *Passions Within Reason* by the economist Robert Frank, *Wise Choices, Apt Feelings* by the philosopher Allan Gibbard, and *Varieties of Moral Personality* by the philosopher Owen Flanagan. Also, work by the social psychologist John Bargh was a crucial element of the revival of automatic processes—i.e., intuition, and the little flashes of affect that will feature prominently in chapter 3. See Bargh and Chartrand 1999.

24. I date the rebirth to 1992 because that is when an influential volume appeared with the provocative title *The Adapted Mind: Evolutionary Psychology and the Generation of Culture.* The book was edited by Jerome Barkow, Leda Cosmides, and John Tooby. Other leading figures in the field included David Buss, Doug Kenrick, and Steven Pinker. Morality (particularly cooperation and cheating) has been an important area of research in evolutionary psychology since the beginning.

25. I call this model "Jeffersonian" because it allows the "head" and the "heart" to reach independent and conflicting moral judgments, as happened in his letter to Cosway. But I note that Jefferson thought that the head was poorly suited to making moral judgments, and that it should confine itself to issues that can be determined by calculation. Jefferson himself was a sentimentalist about morality.

26. I conducted these studies with Stephen Stose and Fredrik Bjorklund. I never turned these data into a manuscript because at the time I thought these null findings would be unpublishable.

27. The idea for this task came from Dan Wegner, who got it from an episode of *The Simpsons* in which Bart sells his soul to his friend Milhouse.

28. We did not let anyone actually drink the juice; Scott stopped them just before the glass touched their lips.

29. The transcript is verbatim and is unedited, except that a few asides by the subject have been removed. This is the first half of the transcript for this subject on this story. We used a hidden video camera to record all interviews, and we obtained permission from all but one subject afterward to analyze the videos.

30. For example, in the harmless-taboo interviews, people were almost twice as likely to say "I don't know" compared to the Heinz interview. They were more than twice as likely to simply declare something without support ("That's just wrong!" or "You just don't do that!"); they were ten times as likely to say they couldn't explain themselves (as in the last round of the transcript above); and they were 70 percent more likely to reason themselves into what we called a dead end—an argument that the subject starts to make, but then drops after realizing that it won't work. This is what happened when the person described above started to argue that the brother and sister were too young to be having sex with anyone. Some of these dead ends were accompanied by what we called the self-doubt face, with people furrowing their brows and scowling while they talked, just as you might do when listening to someone *else* make a ridiculous argument. I never published this study, but you can read the report of it on my webpage, www.jonathanhaidt.com, under Publications, then Working Papers, then see Haidt and Murphy.

31. Wason 1969.

32. Johnson-Laird and Wason 1977, p. 155.

33. Margolis 1987, p. 21. See Gazzaniga 1985 for a similar argument.

34. Margolis 1987, p. 76. Some forms of reasoning can be done by creatures without language, but they cannot do "reasoning-why" because that kind of reasoning is done specifically to prepare to convince others.

35. In one of his last major works, Kohlberg stated that a pillar of his approach was the assumption that "moral reasoning is the process of using ordinary moral language" (Kohlberg, Levine, and Hewer 1983, p. 69). He was not interested in unconscious or nonverbal inferences (i.e., in intuition).

36. Several philosophers have developed this idea that moral reasoning should be understood as playing social and justificatory functions. See Gibbard 1990 and Stevenson 1960; in psychology, see Mercier and Sperber 2011.

37. See Neisser 1967. Greene (2008) is careful to define cognition in a more narrow way that can be contrasted with emotion, but he is the rare exception.

38. Ekman 1992; Ellsworth and Smith 1985; Scherer 1984.

39. Lazarus 1991.

40. Emotions are not entirely subcategories of intuition: emotions are often said to include all the bodily changes that prepare one for adaptive behavior, including hormonal changes in the rest of the body. Hormonal responses are not intu-

itions. But the cognitive elements of emotions—such as appraisals of events and alterations of attention and vigilance—are subtypes of intuition. They happen automatically and with conscious awareness of the outputs, but not of the processes.

41. Daniel Kahneman has long called these two kinds of cognition "system 1" (the elephant) and "system 2" (the rider). See Kahneman 2011 for a highly readable account of thinking and decision making from a two-system perspective.

42. The neuroscientist Michael Gazzaniga calls this "the interpreter module."

43. This is called the confirmation bias; see a review of this literature in chapter 4.

44. One of the most common criticisms of the social intuitionist model from philosophers is that links 5 and 6, which I show as dotted lines, might in fact be much more frequent in daily life than I assert. See, for example, Greene, forthcoming. These critics present no evidence, but, in fairness, I have no evidence either as to the actual frequency in daily life with which people reason their way to counterintuitive conclusions (link 5) or change their minds during private reflection about moral matters (link 6). Of course people change their minds on moral issues, but I suspect that in most cases the cause of change was a new intuitively compelling experience (link 1), such as seeing a sonogram of a fetus, or an intuitively compelling argument made by another person (link 3). I also suspect that philosophers are able to override their initial intuitions more easily than can ordinary folk, based on findings by Kuhn (1991).

45. Zimbardo 2007.

46. Latane and Darley, 1970.

47. Haidt 2001.

48. See especially Hauser 2006; Huebner, Dwyer, and Hauser 2009; Saltzstein and Kasachkoff 2004.

49. Hume 1960/1777, Part I, the opening paragraph.

50. Carnegie 1981/1936, p. 37.

3. ELEPHANTS RULE

1. The article I was writing is Haidt 2007. In that article, and in all of my academic writings, I describe *four* principles of moral psychology, the first two of which are *Intuitive primacy but not dictatorship* and *Moral thinking is for social doing*. In this book I am combining these two principles into a single principle—*Intuitions come first, strategic reasoning second*—because I think it will be easier to remember and apply.

2. It's a six-word summary of what happens in the first few seconds of judgment, according to the social intuitionist model. It doesn't capture the mutual influence that happens over time as two people give each other reasons and sometimes change each other's judgement.

3. Wheatley and Haidt 2005.

4. We used only highly hypnotizable subjects, selected from my Psych 101 lecture class on the day I lectured about hypnosis. There was a period in the 1980s when scientists thought that hypnosis was not a real phenomenon, it was just subjects adopting a role or playacting. But a string of studies has demonstrated effects that cannot be faked; for example, if you give people the posthypnotic suggestion that they can only see in black and white, and then you put them in an fMRI scanner, you find greatly reduced activity in color vision circuits of the brain when subjects are viewing images in color (Kosslyn et al. 2000).

5. *Dhammapada* verse 252 (Mascaro 1973). See chapter 4 of *The Happiness Hypothesis* for more on the psychology of this great truth.

6. This sentence is a reasonable approximation of the central claim of behaviorism; see Pavlov 1927 on the two basic orienting reflexes. With a slight change it applies to Freud as well—the various parts of the unconscious are constantly scanning the environment and triggering rapid automatic reactions, although sometimes they are at odds with each other. See also Osgood 1962, on the three fundamental dimensions of categorization, the first of which is valence good versus bad.

7. Wundt 1907/1896.

8. See LeDoux 1996 on how the amygdala can trigger an emotional reaction to something well before the cerebral cortex has had a chance to process the event.

9. The effect did not depend on whether people could remember having seen a particular stimulus. In one study, Zajonc flashed images up on a screen for a mere thousandth of a second, too fast for anyone to be able to identify consciously, yet when tested later, people preferred the images they had "seen" five times to the images they had previously been exposed to just once, or not at all (Zajonc 1968).

10. Zajonc 1980. I drew heavily on Zajonc when I formulated the metaphor of the elephant and rider.

11. Ibid., p. 171.

12. Fazio et al. 1986; Greenwald, McGhee, and Schwartz 1998.

13. Morris et al. 2003.

14. Greenwald, Nosek, and Banaji 2003.

15. Morris et al. 2003. The difference was found in the N400 component, which is larger when the brain encounters incongruity, i.e., when Morris paired words that had different emotional meanings. A more recent Dutch study (Van Berkum et al. 2009) asked partisans to read statements endorsing or opposing issues such as euthanasia. They found the same N400 effect, as well as a bigger and slower LPP (late positive potential) effect, linked to emotional responding in general, indicating that partisans began to feel different things within the first half-second of reading key words.

16. Dion, Berscheid, and Walster 1972.

17. For an experiment with mock jurors, see Efran 1974; for a field study showing that attractive defendants get off more lightly, see Stewart 1980. For a meta-analysis, see Mazzella and Feingold 1994. Being attractive is an advantage for defendants for most crimes, but not for those where attractiveness helped the criminal pull off the crime, such as swindling (Sigall and Ostrove 1975).

18. Todorov et al. 2005. He discarded the few cases in which participants could identify either candidate.

19. The original study found no decline of accuracy with a one-second exposure. The tenth-of-a-second finding is from a follow-up study, Ballew and Todorov 2007. This study also addressed the possibility that incumbency is a third variable that makes politicians look competent and also, coincidentally, win. It is not. Prediction by facial competence was just as accurate in races where there was no incumbent, or where the incumbent lost, as it was when the incumbent won.

20. For additional reviews on the role of intuition and automatic "moral heuristics," see Gigerenzer 2007 and Sunstein 2005.

21. See reviews in Damasio 2003; Greene, 2009a. For fairness and the insula, see Hsu, Anen, and Quartz 2008; Rilling et al. 2008; Sanfey et al. 2003.

22. Schnall et al. 2008, Study 1. All four judgments went in the predicted direction, although not every comparison was statistically significant. When the four stories were combined, which is the normal way such data are analyzed, the effect of the fart spray was highly significant, $p < .001$. There was also a third experimental condition, in which just one spray of fart spray was applied, but this condition did not differ from the two-spray condition.

23. Eskine, Kacinic, and Prinz 2011. See also Liljenquist, Zhong, and Galinsky 2010 on how good smells promote good behavior.

24. Clore, Schwarz, and Conway 1994. When people are made aware that some external factor caused their unpleasant feelings, the effect usually diminishes or disappears. Our affective reactions are usually good guides to whether we like something or not, but when psychologists "trick" subjects by triggering extraneous emotions, the "affect as information" heuristic makes mistakes.

25. Zhong, Strejcek, and Sivanathan 2010.

26. Zhong and Liljenquist 2006.

27. Helzer and Pizarro 2011. The first study in this paper, using the hand sanitizer, only asked for subjects' overall self-descriptions, and found that subjects called themselves more conservative when standing near the sanitizer. In the second study the authors replicated the effect and showed that reminders of cleanliness and washing made people more judgmental primarily on questions related to sexual purity.

28. Hare 1993.
29. Ibid., p. 54.
30. Ibid., p. 91.
31. Beaver et al. 2011; Blonigen et al. 2005; Viding et al. 2005.
32. Brain scanning studies confirm that many emotional areas, including the amygdala and the vmPFC, are much less reactive in psychopaths than in normal people; see Blair 2007; Kiehl 2006. If you hook them up to a skin conductance meter, as in a lie detector test, psychopaths show a normal response to a photograph of a shark with open jaws. But show them a picture of mutilated bodies or suffering children, and the meter doesn't budge (Blair 1999). For the best clinical portraits of psychopaths and their indifference to others, including their parents, see Cleckley 1955.
33. James 1950/1890, I:488.
34. Baillargeon 1987.
35. The first work demonstrating that infants have innate abilities to understand the social world, including abilities to infer intentions and react to harm, was done by David and Ann Premack; see Premack and Premack 1994 for a review summarizing the origins of moral cognition.
36. Hamlin, Wynn, and Bloom 2007. This looking-time difference was found only for the ten-month-old children, not the six-month-olds. But the reaching-out difference was found for both age groups. The puppets were not traditional puppets; they were different colors and shapes of wood blocks. You can view the puppet shows from links at www.yale.edu/infantlab/In_the_Media.html. This technique of measuring infants' attributions was first developed by Kuhlmeier, Wynn, and Bloom 2003.
37. Hamlin, Wynn, and Bloom 2007, p. 559.
38. For early writings on this idea, see Hoffman 1982; Kagan 1984.
39. The trolley dilemma was first discussed by philosophers Philippa Foot and Judith Jarvis Thompson.
40. Some philosophers note the difference that in the bridge story you are using the victim as a means to an end, whereas in the switch story the victim is not a means to an end; his death is just an unfortunate side effect. Greene and others have therefore tested alternative versions, such as the case where the switch only saves lives because it diverts the trolley onto a side loop where one man is standing. In that case the victim is still being used as a means to an end; if he were to step off the track, the trolley would continue on the loop, back onto the main track, and would kill the five people. In these cases, subjects tend to give responses in between the original switch and footbridge versions.
41. Greene et al. 2001. This study also reported that it took longer for subjects who did make the utilitarian choice to give their answer, as though reasoning was

struggling to overcome emotion, although that finding was later shown to be an artifact of the particular stories chosen, not a general principle (McGuire et al. 2009). But see Greene 2009b for a response.

42. Rilling et al. 2008; Sanfey et al. 2003.

43. For reviews see Greene 2009a and Greene forthcoming. The areas most frequently reported include the vmPFC, insula, and amygdala. For an exception, see Knoch, Pascual-Leone, Meyer, Treyer, and Fehr 2006.

44. Greene 2008; the quote is on p. 63. I asked Greene if he had known about the Wilson quote from p. 563 of *Sociobiology*, and he said no.

45. See my review of these works in Haidt and Kesebir 2010.

46. See Sinnott-Armstrong 2008 for a three-volume set of papers by this interdisciplinary community.

47. Paxton, Ungar, and Greene, forthcoming.

48. I should note that people vary in the degree to which they feel strong intuitions, in their ability to construct reasons, and in their openness to the reasons of others. See Bartels 2008 for a discussion of these individual differences.

4. VOTE FOR ME (HERE'S WHY)

1. *Republic,* 360c., trans. G. M. A. Grube and C. D. C. Reeve. In Plato 1997.

2. It is Glaucon's brother Adeimantus who states the challenge in this way, at 360e–361d, but he's just elaborating upon Glaucon's argument. Glaucon and Adeimantus want Socrates to succeed and refute their arguments. Nonetheless, I will use Glaucon for the rest of this book as a spokesman for the view that reputation matters more than reality.

3. *Republic,* 443–45.

4. Ibid., 473ff.

5. At least Plato stated his assumptions about human nature at great length. Many other moral philosophers, such as Kant and Rawls, simply make assertions about how minds work, what people want, or what seems "reasonable." These assertions seem to be based on little more than introspection about their own rather unusual personalities or value systems. For example, when some of Rawls's (1971) assumptions were tested—e.g., that most people would care more about raising the worst-off than about raising the average if they had to design a society from behind a "veil of ignorance," so that they don't know what position they'd occupy in the society—they were found to be false (Frohlich, Oppenheimer, and Eavey 1987).

6. His exact words were: "My thinking is first and last and always for the sake of my doing" (James 1950/1890, p. 333). Susan Fiske (1993) applied James's functionalism to social cognition, abbreviating his dictum as "thinking is for doing." For more on functionalism in the social sciences, see Merton 1968.

7. A rationalist can still believe that reasoning is easily corrupted, or that most people don't reason properly. But ought implies can, and rationalists are committed to the belief that reason *can* work this way, perhaps (as in Plato's case) because perfect rationality is the soul's true nature.

8. Lerner and Tetlock 2003, p. 434.

9. Gopnik, Meltzoff, and Kuhl 2000.

10. I could perhaps use the term *Machiavellian* instead of *Glauconian* throughout this book. But the word *Machiavellian* is too dark, too suggestive of leaders tricking people in order to dominate them. I think moral life is really about cooperation and alliance, rather than about power and domination. The dishonesty and hypocrisy of our moral reasoning is done to get people to like us and cooperate with us, so I prefer the term *Glauconian*.

11. See review in Lerner and Tetlock 2003. Tetlock 2002 presents three metaphors: intuitive politicians, intuitive prosecutors, and intuitive theologians. I focus on the intuitive politician here, and I present the intuitive prosecutor below, as being related to the needs of the intuitive politician. I cover the subject matter of the intuitive theologian when I discuss religion and the need to bind people together with shared beliefs about sacredness, in chapter 11.

12. For reviews see Ariely 2008; Baron 2007.

13. Lerner and Tetlock 2003, p. 438.

14. Ibid., p. 433; emphasis added.

15. Leary 2004.

16. Leary 2005, p. 85. There surely are differences among people in how obsessed they are with the opinions of others. But Leary's findings indicate that we are not particularly accurate at assessing our own levels of obsession.

17. Millon et al. 1998. Psychopaths often care what others think, but only as part of a plan to manipulate or exploit others. They don't have emotions such as shame and guilt that make it painful for them when others see through their lies and come to hate them. They don't have an automatic unconscious sociometer.

18. Wason 1960.

19. Shaw 1996. The confirmation bias is found widely in social, clinical, and cognitive psychology. It appears early in childhood and it lasts for life. See reviews in Kunda 1990; Mercier & Sperber 2010; Nickerson 1998; Pyszczynski and Greenberg 1987.

20. Kuhn 1989, p. 681.

21. Perkins, Farady, and Bushey 1991.

22. Ibid., p. 95. They did find a bit of overall improvement between the first and fourth year of high school, but this might have been simple maturation, rather than an effect of education. They didn't find it in college.

23. The *Daily Telegraph* got a leaked copy of the full expense report, which had

been prepared by the House of Commons in response to a Freedom of Information request that it had resisted for years.

24. Bersoff 1999. See also Dan Batson's research on "moral hypocrisy," e.g., Batson et al. 1999.
25. Perugini and Leone 2009.
26. Ariely 2008, p. 201; emphasis added.
27. This is the term I used in *The Happiness Hypothesis.*
28. Gilovich 1991, p. 84.
29. Ditto, Pizarro, and Tannenbaum 2009; Kunda 1990.
30. Frey and Stahlberg 1986.
31. Kunda 1987.
32. Ditto and Lopez 1992. See also Ditto et al. 2003, which finds that when we want to believe something, we often don't even bother to search for a single piece of supporting evidence. We just accept things uncritically.
33. Balcetis and Dunning 2006.
34. See Brockman 2009.
35. See review in Kinder 1998. The exception to this rule is that when the material benefits of a policy are "substantial, imminent, and well-publicized," those who would benefit from it are more likely to support it than those who would be harmed. See also D. T. Miller 1999 on the "norm of self-interest."
36. Kinder 1998, p. 808.
37. The term is from Smith, Bruner, and White, as quoted by Kinder 1998.
38. See the classic study by Hastorf and Cantril (1954) in which students at Dartmouth and Princeton came to very different conclusions about what had happened on the football field after watching the same film showing several disputed penalty calls.
39. Lord, Ross, and Lepper 1979; Munro et al. 2002; Taber and Lodge 2006. Polarization effects are not found in all studies, but as Taber and Lodge argue, the studies that failed to find the effect generally used cooler, less emotional stimuli that did not fully engage partisan motivations.
40. Westen et al. 2006.
41. The activated areas included insula, medial PFC, ventral ACC, ventromedial PFC, and posterior cingulate cortex. The areas associated with negative emotion are particularly the left insula, lateral orbital frontal cortex, and ventromedial PFC. The amygdala, closely related to fear and threat, did show greater activity in the early trials but had "habituated" in the later trials. Note that all of these findings come from subtracting reactions to hypocrisy by the neutral target (e.g., Tom Hanks) from reactions to hypocrisy by one's own candidate.
42. Greene (2008) refers to this area as "Mill" in the brain, because it tends to be

more active when subjects make the cool, utilitarian choice, rather than the more emotion-based deontological choice.

43. The dlPFC did not show an increase in activity until *after* the exculpatory information was given and the partisan was freed from the handcuffs. It was as if confirmatory reasoning could not even begin until subjects had a clear and emotionally acceptable explanation to confirm.

44. Olds and Milner 1954.

45. *Webster's Third New International Dictionary.* Related definitions include "false belief or a persistent error of perception occasioned by a false belief or mental derangement."

46. Dawkins 2006; Dennett 2006; Harris 2006. I'll discuss their arguments in detail in chapter 11.

47. Plato gives his childrearing advice in Book 3 of *The Republic;* Dawkins gives it in chapter 9 of *The God Delusion.*

48. Schwitzgebel and Rust 2009, 2011; Schwitzgebel et al. 2011.

49. Schwitzgebel 2009.

50. Mercier and Sperber 2011, p. 57.

51. See Lilienfeld, Ammirati, and Landfield 2009 for a report on how hard it has been to develop methods of "debiasing" human thinking. What little success there is in the "critical thinking" literature almost never finds (or even looks for) transfer of skills beyond the classroom.

52. Wilson 2002; Wilson and Schooler 1991.

53. Baron 1998.

54. Heath and Heath 2010.

55. See www.EthicalSystems.org for my attempt to bring together research on these "path changes," many of which are simple to do. One good example is Dan Ariely's finding that if you ask people to sign an expense report at the beginning, promising to be honest, rather than at the end, affirming that they were honest, you get a big drop in overclaiming of expenses. See Ariely 2008.
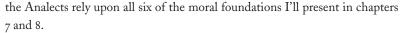
5 · beyond weird morality

1. Mill 2003/1859, p. 80.

2. Henrich, Heine, and Norenzayan 2010.

3. Markus and Kitayama 1991.

4. For a review of these sorts of cultural differences, see Kitayama et al. 2009.

5. Nisbett et al. 2001.

6. In Analects 15:24, Confucius is asked whether there is a single word that could guide one's life. He responds: "Should it not be reciprocity? What you do not wish for yourself, do not do to others" (Lays 1997). But there is no way to reduce the moral teachings of the Analects to the golden rule. As I read them,

the Analects rely upon all six of the moral foundations I'll present in chapters 7 and 8.

7. See, for example, the books of Sam Harris, such as *The End of Faith* and *The Moral Landscape*.

8. Not entirely new. As Shweder 1990a explains, it has arisen several times in psychology. But if someone today calls herself a cultural psychologist, she probably orients herself to the field as it was reborn in the ten years after the publication of Shweder and LeVine 1984.

9. Shweder 1990a.

10. The first published mention of the three ethics was Shweder 1990b. The major statement of the theory is Shweder et al. 1997.

11. Peter Singer is the most prominent utilitarian philosopher of our time. See P. Singer 1979.

12. It need not be a soul in anything like the Christian sense. As Paul Bloom (2004) has shown, we are "natural born dualists." Despite wide religious variations, most people (including many atheists) believe that the mind, spirit, or soul is something separable from the body, something that inhabits the body.

13. This, for example, was the conclusion drawn by Sayyid Qutb, an Egyptian who spent two years studying in America in the 1940s. He was repulsed, and this moral repulsion influenced his later work as an Islamist philosopher and theorist, one of the main inspirations for Osama bin Laden and Al-Qaeda.

14. These text analyses are reported in Haidt et al. 1993. See also work by Lene Arnett Jensen (1997, 1998), which reached similar findings applying Shweder's three ethics to differences between progressive and orthodox participants, in India and in the United States.

15. I am forever grateful to the late Sukumar Sen and his son Surojit Sen, of Cuttack and Bhubaneswar, for their generosity and kindness.

16. In the Koran, see 2:222, 4:43, 24:30. In the Hebrew Bible, see the book of Leviticus in particular. For Christianity, see Thomas 1983, chapter 1. Also see New Testament passages on the purifications of Jesus and his followers, e.g., John 3:25, 11:55; Acts 15:9, 20:26, 21:26, 24:18.

17. We also wanted to explain why so many languages extend their word for "disgust" to apply not just to physically repulsive things like excrement but also to some moral violations—but not all violations, and not always the same ones across cultures (Haidt et al. 1997).

18. People intuitively associate up with good and down with bad, even when up and down are just relative positions on a computer monitor (Meier and Robinson 2004). For overviews of research on this psychological dimension, see Brandt and Reyna 2011; Rozin, Haidt, and McCauley 2008; and chapter 9 of *The Happiness Hypothesis*.

19. I describe my research on moral elevation and disgust in detail in chapter 9 of *The Happiness Hypothesis*. See also www.ElevationResearch.org.

20. Moral violations have often been shown to activate the frontal insula, a brain area important for disgust (Rilling et al. 2008; Sanfey et al. 2003), although so far the moral violations used have mostly involved cheating, not what Rozin, McCauley, and I would call moral disgust. See Rozin, Haidt, and Fincher 2009.

21. Andres Serrano's *Piss Christ* is a particularly difficult case because the resulting image is visually stunning. Strong light shining through the yellow urine gives the photo a quasi-divine glow. See also Chris Ofili's painting *The Holy Virgin Mary*, and the controversy over its exhibition in New York City in 1999. The painting portrayed the Virgin Mary as a black woman surrounded by images of vulvas cut out from pornographic magazines and smeared with actual elephant dung.

22. After I wrote this hypothetical example, Bruce Buchanan pointed out to me that something very much like it happened in Chicago in 1988. See the Wikipedia entry for *Mirth & Girth*, a painting that satirized the revered and recently deceased African American mayor of Chicago, Harold Washington.

23. Martha Nussbaum (2004) has made this case powerfully, in an extended argument with Leon Kass, beginning with Kass 1997.

24. Popes Benedict XVI and John Paul II have been particularly eloquent on these points. See also Bellah et al. 1985.

25. For example, the Hindu veil of Maya; the Platonic world of Forms and the escape from Plato's cave.

26. According to data from the American National Election Survey. Jews are second only to African Americans in their support for the Democratic Party. Between 1992 and 2008, 82 percent of Jews identified with or leaned toward the Democratic Party.

27. As I'll say in chapter 8, it is only recently that I've come to realize that conservatives care at least as much about fairness as do liberals; they just care more about proportionality than about equality.

28. I am not saying that all moral visions and ideologies are equally good, or equally effective at creating humane and morally ordered societies. I am not a relativist. I will address the issue of how well ideologies fit with human nature in chapter 12. But for now I want to insist on the point that long-standing ideological struggles almost invariably involve people who are pursuing a moral vision in which they believe passionately and sincerely. We often have the urge to attribute ulterior motives to our opponents, such as monetary gain. This is usually an error.

29. Shweder 1991, p. 5.

30. I have been involved in a dispute about this claim. I have collected materials relevant to the controversy at www.JonathanHaidt.com/postpartisan.html.

6. TASTE BUDS OF THE RIGHTEOUS MIND

1. Examples in philosophy include Jeremy Bentham, R. M. Hare, and Peter Singer. In psychology, morality is often operationalized as altruism or "pro-social behavior." It's about getting more people to help more people, ideally strangers. Even the Dalai Lama defines an ethical act as "one where we refrain from causing harm to others' experience or expectation of happiness" (Dalai Lama XIV 1999, p. 49).

2. Examples in philosophy include Immanuel Kant and John Rawls; in psychology, Lawrence Kohlberg. Elliot Turiel allows welfare and justice to be competing concerns.

3. See Berlin 2001 on the dangers of monism.

4. Chan 1963, p. 54.

5. As well as pleasing noses with a much more complex olfactory system, which I'll ignore to keep the analogy simple.

6. The word I want to use here is *empiricism*, but that word has two meanings, and I've already used it in chapter 1 as a contrast to nativism. I reject empiricism in that sense, which suggests a blank slate, but embrace it in its other meaning as the method by which scientists gain knowledge through empirical (observational, experience-based) methods.

7. E. O. Wilson pointed this out in chapter 11 of *Consilience*. Like Hume, he embraced naturalism/empiricism, rather than transcendentalism. I do too.

8. Hume noted that some passions and sentiments are so calm that they are sometimes mistaken for reason (*Treatise of Human Nature*, Book 2). This is why I think the word *intuition* is the best modern rendering of Hume's word *sentiments*.

9. Hume is here building on an argument from an earlier "moral sense" theorist, Frances Hutcheson. This text was in the first two editions of the *Enquiry Concerning Human Understanding*. It was removed from the last edition, but I have not found any indication that Hume changed his mind about the taste analogy. For example, in the final edition of the *Enquiry*, sec. xii, pt. 3, he says: "Morals and criticism are not so properly objects of the understanding as of taste and sentiment. Beauty, whether moral or natural, is felt, more properly than perceived."

10. Especially Adam Smith and Edmund Burke. See Frazier 2010.

11. Chapter 3 is my review of this research. See also my more academic review paper, Haidt and Kesebir 2010.

12. Baron-Cohen 1995.

13. Baron-Cohen 2002, p. 248.
14. Ibid.
15. Baron-Cohen 2009. One prenatal factor seems to be testosterone, which has many effects on the brain of a developing fetus. We all start off as girls in the first two months after conception. If the Y chromosome is present, it triggers the production of testosterone beginning in the eighth week; this converts both brain and body over to the male pattern. Autism is several times more common in boys than in girls.
16. Bentham 1996/1789, chapter I, section 2.
17. Lucas and Sheeran 2006.
18. Ibid., p. 5, quoting William Hazlitt.
19. Ibid., quoting Mill.
20. Lucas and Sheeran 2006, p. 1. Of course, postmortem psychiatric diagnosis is a difficult game. Whether or not Bentham had Asperger's, my main point here is that his thinking was unusual and his understanding of human nature was poor.
21. Denis 2008.
22. Kant 1993/1785, p. 30.
23. Fitzgerald 2005. Another possibility is that Kant developed a brain tumor at the age of forty-seven. He began complaining of headaches, and soon after that he lost vision in his left eye. His writing style and his philosophy changed after that too, and some have speculated that he developed a tumor that interfered with emotional processing in the left prefrontal cortex, leaving his high systemizing unchecked by normal empathizing. See Gazzaniga 1998, p. 121.
24. Scruton 1982.
25. I don't mean this statement to apply to all scientific inquiry. Chemists need no empathy. But to observe the inner lives of people, it helps to have empathy, as great novelists and playwrights do.
26. The authors of the WEIRD people article (Henrich et al. 2010; see chapter 5) do not comment on when Western thinking became WEIRD. But their thesis directly implies that during the nineteenth century, as the industrial revolution progressed and levels of wealth, education, and individualism increased (at least for the elite class), WEIRD thinking became increasingly common.
27. Moral philosophy has gotten better in the last twenty years, in my view, because it has returned somewhat to its ancient interest in the natural world, including psychology. Many philosophers nowadays are very well read in neuroscience, social psychology, and evolution. There has been a growing interest in "psychological realism" since the 1990s, e.g., Flanagan 1991 and Gibbard 1990. For the state of the art, see Appiah 2008 and the three-volume set of essays edited by Walter Sinnott-Armstrong 2008.

28. Only Buddha, for example, preached compassion for all sentient beings, including animals. For a review of culture and virtue theory, see Haidt and Joseph 2007.

29. Granted, there are olfactory receptors at work here too, but I'm ignoring those for simplicity's sake. And granted, many fruit drinks also trigger the sour receptor, but that works quite well with this analogy: many moral violations trigger one foundation primarily, and one or more other foundations weakly.

30. Sperber and Hirschfeld 2004. Modules are not usually specific spots in the brain; rather, they are defined by what they *do*. Craig and I reject the very demanding list of requirements for modularity proposed by Fodor 1983. Instead we embrace the "massive modularity" of Sperber 2005, which includes innate "learning modules" that generate many more specific modules during the course of childhood development. See Haidt and Joseph 2007, 2011.

31. In primates it's a bit more complicated. Primates are born not so much with an innate fear of snakes as with an innate "preparedness" to *learn* to fear snakes, after just one bad experience with a snake, or after merely seeing one other member of its species reacting with fear to a snake (Mineka and Cook 2008). They don't learn to fear flowers, or other objects to which another animal reacts with fear. The learning module is specific to snakes.

32. Sperber and Hirchfeld used the terms *proper domain* and *actual domain*, but many people (including me) find it hard to remember these terms, so I have swapped in *original triggers* and *current triggers*. The term *original trigger* is not meant to imply that there was once a time, long ago, when the module didn't make mistakes. I would use the term *intended trigger* except that evolutionary design has no intentions.

33. Natural selection is a design process; it is the cause of the design that abounds in the biological world. It is just not an intelligent or conscious designer. See Tooby and Cosmides 1992.

34. For more on the origins and details of the theory, see Haidt and Graham 2007; Haidt and Joseph 2004, 2007. The theory was strongly influenced by the work of Richard Shweder and Alan Fiske. Our choice of the five foundations is close to Shweder's three ethics. Our general approach of identifying evolved cognitive modules that get filled out in culturally variable ways was inspired by Alan Fiske's Relational Models Theory. See Rai and Fiske 2011 for the application of this theory to moral psychology.

35. For a recent list, see Neuberg, Kenrick, and Schaller 2010.

36. In our original article (Haidt and Joseph 2004), we described only four foundations, which we labeled Suffering, Hierarchy, Reciprocity, and Purity. We noted that there were probably many more, and we specifically noted "group-loyalty" in a footnote as a good candidate for a fifth. I am grateful to Jennifer Wright,

who had argued with me by email while I was working on that paper, that group loyalty is distinct from hierarchy, which is where Craig and I had put it originally. Beginning in 2005, we changed the names of the five foundations to use two related words for each one, in order to reduce the misunderstandings we were encountering. We used these names from 2005 to 2009: Harm/care, Fairness/reciprocity, In-group/loyalty, Authority/respect, and Purity/sanctity. In 2010 we reformulated the theory to expand it and fix shortcomings that I will describe in chapter 8. To avoid the confusion of talking about multiple names for the same foundations, I adopt the 2010 names here, when I describe the origins of the theory. For Authority, I have focused here on the psychology of the subordinate—the psychology of respect for authority. In the next chapter I'll explore the psychology of the superior leader as well.

37. See, for example, the "suite" of moral emotions that Trivers 1971 proposed as the mechanism behind reciprocal altruism (e.g., gratitude for favors received, indignation for favors not returned by the other person, guilt for favors not returned by the self.) For the Care foundation, for example, there might be one module that detects suffering, another for intentional infliction of harm, a third that detects kinship, and a fourth that detects efforts to care or comfort. The important point is that there is a set of innate "if-then" programs that work together to help people meet the adaptive challenge. Some of these innate modules may be innate as "learning modules," which generate more specific modules during childhood development, as described by Sperber. See Haidt and Joseph 2007 for a detailed discussion of moral modularity.

7. THE MORAL FOUNDATIONS OF POLITICS

1. E.g., Luce and Raiffa 1957.

2. Marcus 2004, p. 12.

3. Marcus 2004. I stitched this definition together from two pages. The first sentence is on p. 34, the second is on p. 40. But it's all part of a unified discussion in chapter 3.

4. It has recently been discovered that genetic kinship in hunter-gatherer groups is not nearly as high as anthropologists had long assumed (Hill et al. 2011). I assume, however, that this drop in relatedness came in the last few hundred thousand years, as our cultural complexity increased. I assume that the Care foundation had already been modified and intensified in the few million years before that, as our brain size and length of childhood increased.

5. Such as for tracking degree of kinship, or for distinguishing intentional from accidental harm so that you know when to get angry at someone who causes your child to cry. I repeat my note from the last chapter that these are not mod-

ules as Fodor 1983 originally defined them. Fodor's criteria were so stringent that pretty much nothing in higher cognition could qualify. For a discussion of how higher cognition can be partially modularized, see Haidt and Joseph 2007, and see Barrett and Kurzban 2006 on modules as functional systems rather than as spots in the brain.

6. Bowlby 1969.

7. See Sherman and Haidt 2011 for a review.

8. For a recent account of the evolution and neurology of empathy, see Decety 2011.

9. See Pinker 2011 on the long and steady rise of repugnance toward violence. For example, jokes about wife beating were common and acceptable in American movies and television programs up through the 1960s.

10. Sometimes a political bumper sticker will appeal to fear or monetary self-interest (e.g., "Drill here, drill now, pay less" for Republicans in 2008) but this is rare compared to moralistic appeals.

11. For non-American readers, I note again that by *liberal* I mean the political left. The data I'll show in the next chapter indicate that people on the left, in every country we have examined, score higher on the Care/harm foundation than do people on the political right.

12. Conservative Christians do send a great deal of money abroad, and do provide a great deal of help and relief to the poor, but it is generally done through missionary groups that strive to add converts to the group. It is still a form of parochial caring, not universalist caring.

13. It was a major concern for Darwin, in *Origin of Species* and in *Descent of Man*. I'll return to Darwin's puzzlement and his solutions in chapter 9.

14. Trivers 1971.

15. This point was demonstrated elegantly in Robert Axelrod's famous 1984 tournament in which strategies competed in an evolutionary simulation on a computer. No strategy was able to beat tit for tat. (But see Nowak 2010 for a discussion of his "Win Stay, Lose Shift" strategy, which is superior when you take account of errors and misperceptions.)

16. Rozin et al. 1999; Sanfey et al. 2003.

17. I visited just as this book was going to press. I published a photo essay in which I applied Moral Foundations Theory to the signs at Occupy Wall Street at http://reason.com/archives/2011/10/20/the-moral-foundations-of-occup.

18. I have argued that the moral motive of the Tea Partiers is primarily fairness as proportionality and karma. I do not believe it is liberty, as some libertarian groups have claimed. See Haidt 2010.

19. Sherif et al. 1961/1954, p. 94.

20. For example, boys spontaneously organize themselves for team competitions

far more often than do girls (Maccoby 1998), and male college students get more cooperative when a task is framed as an intergroup competition; female students are unaffected by the manipulation (Van Vugt, De Cremer, and Janssen 2007).

21. Baumeister and Sommer 1997; Maccoby 1998.

22. Boehm 2012; Goodall 1986.

23. Keeley 1996.

24. Glover 2000.

25. This verse is from Koran 4:56, translated by Arberry 1955. For more on killing apostates, see Koran 4:89, as well as many Hadith verses, e.g., Bukhari 52:260, Bukhari 84:58.

26. Scholars of liberalism often point this out (e.g., Gray 1995), and we find it in many studies on www.YourMorals.org; see Iyer et al. 2011.

27. Coulter 2003.

28. A point made forcefully by the sociologist Robert Nisbet 1993/1966 in his chapters 1 and 4.

29. Boehm 1999; de Waal 1996.

30. De Waal 1996, p. 92.

31. From a translation by L. W. King, retrieved from www.holyebooks.org/babylonia/the_code_of_hammurabi/ham04.html.

32. This quote is from an overview of the theory on Fiske's website: www.sscnet.ucla.edu/anthro/faculty/fiske/relmodov.htm. For the full presentation of the theory, see Fiske 1991.

33. The evolutionary story is actually more complicated, and I'll address the important fact that humans went through a long period of egalitarianism in the next chapter. For now, I hope you'll simply entertain the possibility that we have some cognitive modules that make most people good at detecting and caring about hierarchy and respect.

34. De Waal 1996; Fiske 1991.

35. This is my explanation of why people low down in a hierarchy generally support the hierarchy. For more detail, see Haidt and Graham, 2009. For an alternative view see work on "system justification theory," e.g., Jost and Hunyady 2002.

36. Due to public outrage at the manslaughter sentence, the prosecutor's office appealed the sentence, won a retrial, and ultimately won a conviction for murder and a sentence of imprisonment for life. For a full account of this case, see Stampf 2008.

37. Rozin 1976 introduced this term; Michael Pollan then borrowed it as the title of his best-selling book.

38. McCrae 1996.

39. Rozin and Fallon 1987. We don't know when disgust arose, but we know that it

does not exist in any other animal. Other mammals reject foods based on their taste or smell, but only humans reject them based on what they have touched, or who handled them.

40. Schaller and Park 2011.

41. Thornhill, Fincher, and Aran 2009. Schaller's team has even demonstrated that they can increase Canadian students' fears of unfamiliar immigrants just by showing them images of disease and infection; students who saw images of other threats, such as electrocution, were less fearful (Faulkner et al. 2004).

42. I will address the evolutionary origins of sacralization and religion in chapters 9 and 11.

43. One might object that their actions were sure to disgust and offend people who learned about them. But that argument would commit you to prohibiting gay or interracial sex, or eating foods such as chicken feet and fish eyes, in the privacy of one's home, within communities that would be disgusted by such actions.

44. Libertarians, on average, experience less empathy and weaker disgust (Iyer et al., 2011), and they are more willing to allow people to violate taboos (Tetlock et al. 2000).

45. By the German-born painter Hans Memling, 1475. In the Musée Jacquemart-André, Paris. For information on this painting see http://www.ghc.edu/faculty/sandgren/sample2.pdf.

46. NRSV.

47. See D. Jensen 2008 as an example.

48. Kass 1997.

8. THE CONSERVATIVE ADVANTAGE

1. See Lakoff 2008 and Westen 2007 for a similar argument.

2. I equate Democrat with liberal and the left; I equate Republican with conservative and the right. That equation was not true before 1970, when both parties were broad coalitions, but since the 1980s, when the South changed its party allegiance from Democratic to Republican, the two parties have become sorted almost perfectly on the left-right axis. Data from the American National Election Survey shows this realignment clearly; the correlation of liberal-conservative self-identification with Democratic-Republican party identification has increased steadily since 1972, accelerating sharply in the 1990s (Abramowitz and Saunders 2008). Of course, not everyone fits neatly on this one-dimensional spectrum, and of those who do, most are somewhere in the middle, not near the extremes. But politics and policy are driven mostly by those who have strong partisan identities, and I focus in this chapter and in chapter 12 on understanding this kind of righteous mind.

3. Subjects in this study placed themselves on a scale from "strongly liberal" to

"strongly conservative," but I have changed "strongly" to "very" to match the wording used in Figure 8.2.

4. The longer and more accurate expansion of the shorthand is this: everyone can use any of the five foundations in some circumstances, but liberals like Care and Fairness best, and build their moral matrices mostly on those two foundations.

5. See report in Graham et al. 2011, Table 11, for data on the United States, United Kingdom, Canada, and Australia, plus the rest of the world aggregated into regions: Western Europe, Eastern Europe, Latin America, Africa, Middle East, South Asia, East Asia, and Southeast Asia. The basic pattern I've reported here holds in all of these countries and regions.

6. Four years later, in January 2011, I gave a talk at this conference urging the field to recognize the binding and blinding effects of shared ideology. The talk, and reactions to it, are collected at www.JonathanHaidt.com/postpartisan.html.

7. Wade 2007.

8. For people who say they are "very conservative" the lines actually cross, meaning that they value Loyalty, Authority, and Sanctity slightly more than Care and Fairness, at least if we go by the questions on the MFQ. The questions on this version of the MFQ are mostly different from those on the original version, shown in Figure 8.1, so it is difficult to compare the exact means across the two forms. What matters is that the slopes of the lines are similar across the various versions of the questionnaire, and in this one, with a much larger number of subjects, the lines become quite straight, indicating a simple linear effect of political ideology on each of the five foundations.

9. Linguistic Inquiry Word Count; Pennebaker, Francis, and Booth 2003.

10. Graham, Haidt, and Nosek 2009. I note that the first pass of simple word counts produced the predicted results for all foundations except for Loyalty. When we did a second pass, in which we had our research assistants read the words in context and then code whether a moral foundation was being supported or rejected, the differences between the two denominations got larger, and the predicted differences were found for all five foundations, including Loyalty.

11. We examined the N400 and the LPP components. See Graham 2010.

12. Speech of June 15, 2008, delivered at the Apostolic Church of God, Chicago, Illinois.

13. Speech of June 30, 2008, in Independence, Missouri.

14. Speech of July 14, 2008, to the NAACP, Cincinnati, Ohio.

15. Speech of July 24, 2008. He introduced himself as "a proud citizen of the United States, and a fellow citizen of the world." But conservative publications in the United States latched on to the "citizen of the world" part and did not quote the "proud citizen" part.

16. You can find the article here: www.edge.org/3rd_culture/haid08/haid08 _index.html. Brockman had recently become my literary agent.

17. See, for example, Adorno et al. 1950, and Jost et al. 2003. Lakoff 1996 offers a compatible analysis, although he does not present the conservative "strict father" morality as a pathology.

18. I learned to see the Durkheimian vision not just from reading Durkheim but from working with Richard Shweder and from living in India, as I described in chapter 5. I later discovered that much of the Durkheimian vision could be credited to the Irish philosopher Edmund Burke as well.

19. I want to emphasize that this analysis applies only to *social* conservatives. It does not apply to libertarians or to "laissez-faire" conservatives, also known as classical liberals. See chapter 12.

20. Of course, it's a lot easier in ethnically homogeneous nations with long histories and one language, such as the Nordic countries. This may be one reason those nations are far more liberal and secular than the United States. See further discussion in chapter 12.

21. It's interesting to note that Democrats have done much better in the U.S. Congress. Senators and congressmen are not priests. Legislation is a grubby and corrupt business in which the ability to bring money and jobs to one's district may count for more than one's ability to respect sacred symbols.

22. Bellah 1967.

23. Westen 2007, chapter 15, offered similar advice, also drawing on Durkheim's distinction between sacred and profane. I benefited from his analysis.

24. I present this and subsequent email messages verbatim, edited only for length and to protect the anonymity of the writer.

25. We had long gotten complaints from libertarians that the initial five foundations could not account for the morality of libertarians. After we completed a major study comparing libertarians to liberals and conservatives, we concluded that they were right (Iyer et al. 2011). Our decision to modify the list of moral foundations was also influenced by a "challenge" that we posted at www.MoralFoundations.org, asking people to criticize Moral Foundations Theory and propose additional foundations. Strong arguments came in for liberty. Additional candidates that we are still investigating include honesty, Property/ownership, and Waste/inefficiency. The sixth foundation, Liberty/ oppression, is provisional in that we are now in the process of developing multiple ways to measure concerns about liberty, and so we have not yet carried out the rigorous testing that went into our research on the original five foundations and the original MFQ. I describe the Liberty/oppression foundation here because I believe that the theoretical rationale for it is strong, and because we have already found that concerns about liberty are indeed the focal concerns of libertarians (Iyer et al. 2011), a substantial group that is largely overlooked

by political psychologists. But the empirical facts may prove otherwise. See www.MoralFoundations.org for updates on our research.

26. Boehm 1999.

27. Ibid. But see also the work of archaeologist Brian Hayden (2001), who finds that evidence of hierarchy and inequality often *precedes* the transition to agriculture by several thousand years as other technological innovations make it possible for "aggrandizers" to dominate production and also make it possible for groups to begin undertaking agriculture.

28. De Waal, 1996.

29. As described in de Waal 1982. Boehm 2012 tries to reconstruct a portrait of the last common ancestor of humans, chimpanzees, and bonobos. He concludes that the last common ancestor was more like the aggressive and territorial chimpanzee than like the more peaceful bonobo. Wrangham 2001 (and Wrangham and Pilbeam 2001) agrees, and suggests that bonobos and humans share many features because they might have both gone through a similar process of "self-domestication," which made both species more peaceful and playful by making both retain more childlike features into adulthood. But nobody knows for sure, and de Waal and Lanting 1997 suggests that the last common ancestor might have been more similar to the bonobo than to the chimp, although this paper too notes that bonobos are more neotonous (childlike) than chimps.

30. In chapter 9 I'll explain why the best candidate for this shift is *Homo heidelbergensis,* which first appears around seven or eight hundred thousand years ago, and then begins to master important new technologies such as fire and spear making.

31. Dunbar 1996.

32. De Waal 1996 argues that chimpanzees have a rudimentary ability to learn behavioral norms and then react to norm violators. As with so much else about comparisons between humans and chimps, there are hints of many advanced human abilities, yet norms don't seem to grow and build on one another and envelop everyone. De Waal says clearly that he does not believe chimpanzees have morality. I think we can't really speak about true "moral communities" until after *Homo heidelbergensis*, as I'll explain in the next chapter.

33. Lee 1979, quoted in Boehm 1999, p. 180.

34. The term may have first been used in an 1852 *New York Times* article about Marx, but Marx and Marxists soon embraced the term, and it shows up in Marx's 1875 *Critique of the Gotha Program*.

35. Brehm and Brehm 1981.

36. The question of free riders naturally arises; see Dawkins 1976. Wouldn't the best strategy be to hang back and let others risk their lives standing up to dangerous bullies? The free rider problem is quite pressing for species that

lack language, norms, and moralistic punishment. But as I'll show in the next chapter, its importance has been greatly overstated for humans. *Morality is, in large part, an evolved solution to the free rider problem.* Hunter-gatherer groups and also larger tribes can compel members to work and sacrifice for the group by punishing free riders; see Mathew and Boyd 2011.

37. Leaders often emerge in the struggle against tyranny, only to become tyrants themselves. As the rock band The Who famously put it: "Meet the new boss. Same as the old boss."

38. I thank Melody Dickson for permission to reprint from her email. All other quotations longer than one sentence from emails and blog posts in this chapter are used with permission of the authors, who chose to remain anonymous.

39. This was a reference to the Boston Tea Party of 1773, one of the first major acts of rebellion by the American colonists against Great Britain.

40. Hammerstein 2003.

41. I'm guilty of spreading this myth, in *The Happiness Hypothesis*. I was referring to work by Wilkinson 1984. But it turns out that Wilkinson's bats were probably close kin. See Hammerstein 2003.

42. See a review in S. F. Brosnan 2006. In the main experimental study documenting fairness concerns in capuchins (S. F. Brosnan and de Waal 2003), the monkeys failed the main control condition: they got upset whenever they saw a grape that they did not have, whether the grape was given to the other monkey or not. My own view is that Brosnan and de Waal are probably right; chimps and capuchins do keep track of favors and slights, and do have a primitive sense of fairness. But they don't live in moral matrices. In the absence of clear norms and gossip, they don't show this sense of fairness consistently in lab situations.

43. Trivers did discuss "moralistic reciprocity," but this is a very different process from reciprocal altruism. See Richerson and Boyd 2005, chapter 6.

44. Mathew and Boyd 2011.

45. Fehr and Gächter 2002.

46. Fehr and Gächter also ran a version of this study that was identical except that punishment was available in the first six rounds and taken away in the seventh round. The results were the same: high and rising levels of cooperation in the first six rounds, which plummeted at round 7 and declined from then on.

47. A PET study by de Quervain et al. 2004 found that reward areas of the brain were more active when people had a chance to inflict altruistic punishment. I should note that Carlsmith, Wilson, and Gilbert 2008 found that the pleasure of revenge is sometimes an "affective forecasting" error; revenge is often not as sweet as we expect. But whether they feel better or not afterward, the important point is that people *want* to punish when they are cheated.

48. This is Boehm's thesis, and I see confirmation of it in the fact that the left has

not been able to get the rest of the country upset by the extraordinary rise in American inequality since 1980. Finally, in 2011, the Occupy Wall Street protests have begun to move beyond simply pointing to the inequality, and have begun to make claims based on the Fairness/cheating foundation (about how the "1 percent" cheated to get to the top, and about how they "owe" us for the bailout we gave them), and also on the Liberty/oppression foundation (about how the 1 percent has seized control of the government and abuses its power to harm or enslave the 99 percent). But simply pointing to inequality, without also showing cheating or oppression, does not seem to trigger much outrage.

49. In factor and cluster analyses of our data at YourMorals.org, we repeatedly find that questions about equality go with questions about care, harm, and compassion (the Care foundation), not with questions about proportionality.

50. See the large body of research in social psychology called "equity theory," whose central axiom is that the ratio of net gains (outcome minus inputs) to inputs must be equal for all participants (Walster, Walster, and Berscheid 1978). That's a definition of proportionality.

51. Children generally like equality, until they near puberty, but as their social intelligence matures they stop being rigid egalitarians and start becoming proportionalists; see Almas et al. 2010.

52. Cosmides and Tooby 2005.

53. Our goal with Moral Foundations Theory and YourMorals.org has been to find the *best* bridges between anthropology and evolutionary psychology, not the complete set of bridges. We think the six we have identified are the most important ones, and we find that we can explain most moral and political controversies using these six. But there are surely additional innate modules that give rise to additional moral intuitions. Other candidates we are investigating include intuitions about honesty, ownership, self-control, and waste. See MoralFoundations.org to learn about our research on additional moral foundations.

54. If you see a child in pain, you feel compassion. It's like a drop of lemon juice on the tongue. I am arguing that witnessing inequality is not like this. It rankles us only when we perceive that the person is suffering (Care/harm), being oppressed by a bully (Liberty/oppression), or being cheated (Fairness/cheating). For an argument against me and in favor of equality as a basic foundation, see Rai and Fiske 2011.

55. You can see this finding across multiple surveys in Iyer et al. 2011.

56. Berlin 1997/1958 referred to this kind of liberty as "negative liberty"—the right to be left alone. He pointed out that the left had developed a new concept of "positive liberty" during the twentieth century—a conception of the rights and resources that people needed in order to enjoy liberty.

57. In a poll released October 26, 2004, the Pew Research Center found that small business owners favored Bush (56 percent) over Kerry (37 percent). A slight shift leftward in 2008 ended by 2010. See summary on HuffingtonPost.com by searching for "Small business polls: Dems get pummeled."

58. This was our empirical finding in Iyer et al. 2011, which can be printed from www.MoralFoundations.org.

59. Unpublished data, YourMorals.org. You can take this survey by going to Your Morals.org and then taking the MFQ version B. Also, see our discussions of our data on fairness on the YourMorals blog.

60. Bar and Zussman 2011.

61. Frank 2004.

9. why are we so groupish?

1. In the social sciences and humanities, conservatives went from being merely underrepresented in the decades after World War II to being nearly extinct by the 1990s except in economics. One of the main causes of this change was that professors from the "greatest generation," which fought WWII and was not so highly polarized, were gradually replaced by more politically polarized baby boomers beginning in the 1980s (Rothman, Lichter, and Nevitte 2005).

2. This is a reference to Glaucon in Plato's *Republic*, who asks whether a man would behave well if he owned the ring of Gyges, which makes its wearer invisible and therefore free from concerns about reputation. See chapter 4.

3. As Dawkins 1976 so memorably put it. Genes can only code for traits that end up making more copies of those genes. Dawkins did not mean that selfish genes make thoroughly selfish people.

4. Of course we are groupish in the minimal sense that we like groups, we are drawn to groups. Every animal that lives in herds, flocks, or schools is groupish in that sense. I mean to say far more than this. We care about our groups and want to promote our group's interests, even at some cost to ourselves. This is not usually true about animals that live in herds and flocks (Williams 1966).

5. I don't doubt that there is a fair bit of Glauconianism going on when people put on displays of patriotism and other forms of group loyalty. I am simply asserting that our team spirit is not purely Glauconian. We sometimes do treat our groups as sacred, and would not betray them even if we could be assured of a large material reward and perfect secrecy for our betrayal.

6. See Dawkins 1999/1982, and also see Dawkins's use of the word *heresy* in Dicks 2000.

7. This is called *mutualism*—when two or more animals cooperate and all of them get some benefit from the interaction. It is not a form of altruism; it is not a puzzle for evolutionary theory. Mutualism may have been extremely

important in the early phases of the evolution of humanity's ultrasociality; see Baumard, André, and Sperber, unpublished; Tomasello et al., forthcoming.

8. I will focus on cooperation in this chapter, rather than altruism. But I am most interested in cooperation in these sorts of cases, in which a truly self-interested Glauconian would not cooperate. We might therefore call these focal cases "altruistic cooperation" to distinguish them from the sort of strategic coopera- tion that is so easy to explain by natural selection acting at the individual level.

9. Part I, chapter 4, p. 134; emphasis added. Dawkins 2006 does not consider this to be a case of true group selection because Darwin did not imagine the tribe growing and then splitting into "daughter tribes" the way a beehive splits into daughter hives. But if we add that detail (which is typically true in hunter- gatherer societies that tend to split when they grow larger than around 150 adults), then this would, by all accounts, be an example of group selection. Okasha 2005 calls this kind MLS-2, in contrast to the less demanding MLS-1, which he thinks is more common early in the process of a major transition. More on this below.

10. *Descent of Man,* chapter 5, p. 135; emphasis added. The free rider problem is the *only* objection that Dawkins raises against group selection in *The God Delusion*, chapter 5.

11. Price 1972.

12. I note that the old idea that there were genes "for" traits has fared poorly in the genomic age. There are not single genes, or even groups of dozens of genes, that can explain much of the variance in any psychological trait. Yet somehow, nearly every psychological trait is heritable. I will sometimes speak of a gene "for" a trait, but this is just a convenience. What I really mean is that the genome as a whole codes for certain traits, and natural selection alters the genome so that it codes for different traits.

13. I emphasize that group selection or colony-level selection as I have described it here is perfectly compatible with inclusive fitness theory (Hamilton 1964) and with Dawkins's "selfish gene" perspective. But people who work with bees, ants, and other highly social creatures sometimes say that multilevel selection helps them see phenomena that are less visible when they take the gene's-eye view; see Seeley 1997.

14. I'm oversimplifying here; species of bees, ants, wasps, and termites vary in the degree to which they have achieved the status of superorganisms. Self-interest is rarely reduced to absolute zero, particularly in bees and wasps, which retain the ability to breed under some circumstances. See Hölldobler and Wilson 2009.

15. I thank Steven Pinker for pointing this out to me, in a critique of an early version of this chapter. Pinker noted that war in pre-state societies is nothing

like our modern image of men marching off to die for a cause. There's a lot of posturing, a lot of Glauconian behavior going on as warriors strive to burnish their reputations. Suicide terrorism occurs only rarely in human history; see Pape 2005, who notes that such incidents occur almost exclusively in situations where a group is defending its sacred homeland from culturally alien invaders. See also Atran 2010 on the role of sacred values in suicide terrorism.

16. *Descent of Man*, chapter 5, p. 135.

17. See in particular Miller 2007, on how sexual selection contributed to the evolution of morality. People go to great lengths to advertise their virtues to potential mates.

18. *Descent of Man*, Part I, chapter 5, p.137. See Richerson and Boyd 2004, who make the case that Darwin basically got it right.

19. Wynne-Edwards 1962.

20. Williams 1966, p. 4.

21. Williams (ibid., pp. 8–9) defined an adaptation as a biological mechanism that produces at least one effect that can properly be called its goal.

22. Williams wrote about a "fleet herd of deer," but I have substituted the word *fast* for the less common word *fleet*.

23. Williams 1966, pp. 92–93.

24. Ibid., p. 93.

25. Walster, Walster, and Berscheid 1978, p. 6.

26. I agree that genes are always "selfish," and all parties to these debates agree that selfish genes can make strategically generous people. The debate is over whether human nature includes *any* mental mechanisms that make people put the good of the group ahead of their own interests, and if so, whether such mechanisms count as group-level adaptations.

27. This turns out not to be true. In a survey of thirty-two hunter-gatherer societies, Hill et al. 2011 found that for any target individual, only about 10 percent of his or her fellow group mates were close kin. The majority had no blood relationship. Hamilton's coefficient of genetic relatedness among the Ache was a mere 0.054. This is a problem for theories that try to explain human cooperation by kin selection.

28. Williams 1988, p. 438.

29. Dawkins 1976, p. 3. In his introduction to the thirtieth-anniversary edition, Dawkins regrets his choice of words, because selfish genes can and do cooperate with each other, and they can and do make vehicles such as people who can cooperate with each other. But his current views still seem incompatible with the sort of groupishness and team-spiritedness that I describe in this chapter and the next.

30. Primatologists have long reported acts that appear to be altruistic during their

observations of unconstrained interactions in several primate species, but until recently nobody was able to show altruism in a controlled lab setting in the chimpanzee. There is now one study (Horner et al. 2011) showing that chimps will choose the option that brings greater benefit to a partner at no cost to themselves. Chimps are aware that they can produce a benefit, and they choose to do so. But because this choice imposes no cost on the chooser, it fails to meet many definitions of altruism. I believe the anecdotes about chimp altruism, but I stand by my claim that humans are the "giraffes" of altruism. Even if chimps and other primates can do it a little bit, we do it vastly more.

31. I did not like George W. Bush at any point during his presidency, but I did trust that his vigorous response to the attacks, including the U.S. invasion of Afghanistan, was the right one. Of course, leaders can easily exploit the rally-round-the-flag response for their own ends, as many believe happened with the subsequent invasion of Iraq. See Clarke 2004.

32. The reflex doesn't require a flag; it refers to the reflex to come together and show signs of group solidarity in response to an external threat. For reviews of the literature on this effect, see Dion 1979; Kesebir, forthcoming.

33. The leading spokesmen for this view are David Sloan Wilson, Elliot Sober, Edward O. Wilson, and Michael Wade. For technical reviews, see Sober and D. S. Wilson 1998; D. S. Wilson and E. O. Wilson 2007. For an accessible introduction, see D. S. Wilson and E. O. Wilson 2008.

34. Racism, genocide, and suicide bombing are all manifestations of groupishness. They are not things that people do in order to outcompete their local peers; they are things people do to help their groups outcompete other groups. For evidence that rates of violence are vastly lower in civilized societies than among hunter-gatherers, see Pinker 2011. Pinker explains how increasingly strong states plus the spread of capitalism have led to ever decreasing levels of violence, even when you include the wars and genocides of the twentieth century. (The trend is not perfectly linear—individual nations can experience some regressions. But the overall trend of violence is steadily downward.)

35. Margulis 1970. In plant cells, chloroplasts also have their own DNA.

36. Maynard Smith and Szathmary 1997; Bourke 2011.

37. There is an important flaw in my "boat race" analogy: the new vehicles don't really "win" the race. Prokaryotes are still quite successful; they still represent most of the life on earth by weight and by number. But still, new vehicles seem to come out of nowhere and then claim a substantial portion of the earth's available bio-energy.

38. Maynard Smith and Szathmáry attribute the human transition to language, and suggest that the transition occurred around 40,000 years ago. Bourke 2011 offers an up-to-date discussion. He identifies six major *kinds* of transitions,

and notes that several of them have occurred dozens of times independently, e.g., the transition to eusociality.

39. Hölldobler and Wilson 2009. Many theorists prefer terms other than *super-organism*. Bourke 2011, for example, calls them simply "individuals."

40. Okasha 2006 calls this MLS-2. I'll call it *selection among stable groups* in contrast to MLS-1, which I'll call *selection among shifting groups*. This is a subtle distinction that is crucial in discussions among specialists who debate whether group selection has actually occurred. It is too subtle to explain in the main text, but the general idea is this: For selection among stable groups, we focus on the group as an entity, and we track its fitness as it competes with other groups. For this kind of selection to matter, groups must maintain strong boundaries with a high degree of genetic relatedness inside each group over many generations. Hunter-gatherer groups as we know them today do not do this; individuals come and go, through marriage or for other reasons. (Although, as I point out below, the ways of current hunter-gatherers cannot be taken to be the ways that our ancestors lived 100,000 years ago, or even 30,000 years ago.) In contrast, for selection among shifting groups to affect gene frequencies, all that is needed is that the social environment be composed of multiple kinds of groups which compete with each other, perhaps just for a few days or months. We focus not on the fitness of the groups, but on the fitness of individuals who either have, or lack, group-related adaptations. Individuals whose minds contain effective group-related adaptations end up playing on the winning team more often—at least if the population structure is somewhat lumpy or uneven, such that groupish individuals have a better than chance likelihood of finding themselves on the same team. Some critics say that this is not "real" group selection, or that it ends up being the same thing as individual-level selection, but Okasha disagrees. He points out that selection among shifting groups happens early in the process of a major transition, and it leads to adaptations that increase cohesiveness and suppress free riding, which then pave the way for selection among stable groups to operate in the later stages of a major transition. Some have argued that human beings are "stalled" midway through the major transition process (Stearns 2007). I think that's another way of saying that we are 90 percent chimp and 10 percent bee. For a full explanation of MLS-1 and MLS-2, see Okasha 2006 chapters 2 and 6.

41. I do not mean to imply that there is an overall or inevitable progression of life toward ever greater complexity and cooperation. Multilevel selection means that there are always antagonistic selection forces operating at different levels. Sometimes species revert from superorganisms to more solitary forms. But a world with bees, ants, wasps, termites, and humans in it has many more tons of cooperative individuals than did the world of 200 million years ago.
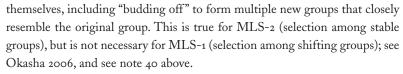
42. Bourke 2011; Hölldobler and Wilson 2009.

43. Hölldobler and Wilson 2009; E. O. Wilson 1990. I note that the new super-organisms don't shoot up to dominance right away after the free rider problem is addressed. Superorganisms go through a period of refinement until they begin to take maximum advantage of their new cooperation, which gets improved by group-level selection as they compete with other superorganisms. The eusocial hymenoptera first emerged more than 100 million years ago, but they didn't reach a state of world domination until closer to 50 million years ago. Same story, perhaps, for humans, who probably developed fully groupish minds in the late Pleistocene, but didn't achieve world dominance until the late Holocene.

44. Richerson and Boyd 1998.

45. The term *eusociality* arose for work with insects, and it is defined in a way that cannot apply to humans—i.e., it requires that members divide reproduction so that nearly all group members are effectively sterile. I therefore use the more general term *ultrasocial,* which encompasses the behavior of eusocial insects as well as of human beings.

46. Hölldobler and Wilson 2009, p. 30; emphasis added. The text I replaced with the bracketed text was "clades whose extant species."

47. Wilson and Hölldobler 2005, p. 13370.

48. Humans are just as closely related to the more peaceful bonobo as to the more violent chimpanzee. But I follow Boehm (2012) and Wrangham (2001; Wrangham and Pilbeam, 2001) in assuming that the last common ancestor of the three species was more chimplike, and that the features humans share with bonobos such as greater peacefulness and adult playfulness are the result of convergent evolution—both species changed in a similar direction long after the split with the common ancestor. Both changed to become more childlike as adults. See Wobber, Wrangham, and Hare 2010.

49. I am not saying that human brains or genes changed radically at this time. I follow Richerson and Boyd 2005 and Tooby and Cosmides 1992 in assuming that most of the genes that made life in city-states possible were shaped during hundreds of thousands of years of hunter-gatherer life. But as I'll say below, I think it's likely that there was *some* additional genetic evolution during the Holocene.

50. We're not literally a majority of the world's mammalian weight, but that's only because we raise so many cows, pigs, sheep, and dogs. If you include us together with our domesticated servants, our civilizations now account for an astonishing 98 percent of all mammalian life, by weight, according to a statement by Donald Johanson, made at a conference on "Origins" at Arizona State University in April 2009.

51. Critics of group selection add the criterion that the groups must reproduce

themselves, including "budding off" to form multiple new groups that closely resemble the original group. This is true for MLS-2 (selection among stable groups), but is not necessary for MLS-1 (selection among shifting groups); see Okasha 2006, and see note 40 above.

52. Tomasello gave three major lectures at UVA in October 2010. His basic argument, including a quote like this one, can be found in Tomasello et al. 2005. Chimpanzees can recruit a collaborator to help them get food in a task that requires two chimps to get any food (Melis, Hare, and Tomasello 2006) but they don't seem to be sharing intentions or truly coordinating with that collaborator.

53. Herrmann et al. 2007. The full descriptions of the tasks, including videos, can be downloaded at http://www.sciencemag.org/content/317/5843/1360/suppl/DC1, but note that the videos always show chimps solving the tasks, even though they rarely did so on the social tasks. Note also that the experiment included a third group—orangutans, who fared worse than the chimps at both kinds of tasks.

54. Tomasello et al. 2005. Tomasello cites earlier work by autism researcher Simon Baron-Cohen (1995), who described a "shared attention mechanism" that develops in normal children, but not in children with autism, which leaves them "mind-blind."

55. Boesch 1994.

56. Tomasello et al., forthcoming. It is clear that chimps form political coalitions—two males will team up to oppose the current alpha male, as documented by de Waal 1982. But the *coordination* here is weak at best.

57. De Waal 1996 argues that chimpanzee communities develop norms and administer punishment to norm violators. However, examples of such norms among chimps are rare, and chimps certainly don't build up increasingly elaborate networks of norms over time. As with so much else about chimps, such as their cultural abilities, they seem to have many of the "building blocks" of human morality, but they don't seem to put them together to build moral systems.

58. A major topic of debate in evolutionary circles is why any individual would pay the costs of punishing another, which might include a violent reaction from the individual being punished. But if the punishment is very low cost—e.g., gossiping, or simply not choosing the transgressor for joint ventures (Baumard, André, and Sperber, unpublished)—then the cost becomes quite small, and computer models show various ways in which a tendency to punish could emerge; see Panchanathan and Boyd 2004. As the cost of free riding increases and it becomes increasingly rare, group-level selection on many other traits becomes increasingly powerful, compared to individual-level selection.

59. For more on cumulative culture and gene-culture coevolution, see Richerson

and Boyd's masterpiece *Not by Genes Alone*. I am heavily indebted to them for many ideas in this chapter.

60. It is likely that these creatures made some tools. Even chimpanzees make some tools. But there's not much evidence of tool use in the fossil record until the end of this period, nearing the emergence of the genus *Homo*.

61. Lepre et al. 2011.

62. Richerson and Boyd 2005 makes this point. Cultural artifacts almost never show such stability across time and space. Think, for example, about swords and teapots, which fill museum cases because cultures are so inventive in the ways they create objects that fulfill the same basic functions.

63. My account of *Homo heidelbergensis* is drawn from Potts and Sloan 2010 and from Richerson and Boyd 2005, chapter 4.

64. My account is speculative; it's always hazardous to guess when a specific event occurred or a specific ability emerged. Tomasello, who is more cautious than I am, has never identified a time or a species in which shared intentionality first emerged. But when I asked him if *Homo heidelbergensis* was the best candidate, he said yes.

65. There are two major differences: (1) cultural innovations spread laterally, as people see and then copy an innovation; genetic innovations can only spread vertically, from parent to child, and (2) cultural innovations can be driven by intelligent designers—people who are trying to solve a problem; genetic innovation happens only by random mutation. See Richerson and Boyd 2005. Dawkins 1976 first popularized the notion of cultural evolution being like genetic evolution with his notion of "memes," but Richerson and Boyd developed the coevolutionary implications more fully.

66. Tishkoff et al. 2007. Interestingly, it's a different gene in African populations than in Europeans. The genome is so flexible and adaptive that it often finds multiple ways to respond to a single adaptive pressure.

67. One might argue that modern industrial societies are cosmopolitan and not tribal. But our tendency to form groups within such societies has been linked to the basic social nature of tribalism; see Dunbar 1996. At the other extreme, hunter-gatherers are not just small bands of close kin, as many people suppose. People move in and out of co-residing groups for marriage and for other reasons. Bands maintain close ties of trade and exchange with other bands that are not based on kinship directly, although they may be facilitated by the fact that children of one band so often marry out, joining neighboring bands, while maintaining ties with parents and siblings. Marital exchanges bind *groups* together, well beyond the individual families involved in the marriage. See Hill et al. 2011.

68. Colored powders and pigments have been found at human campsites dating

back as far as 160,000 years ago, and they are thought to have been used for symbolic and ceremonial purposes; see Marean et al. 2007.

69. Kinzler, Dupoux, and Spelke 2007; see Kesebir, forthcoming, for a review.

70. Richerson and Boyd 2005, p. 214. See also Fessler 2007 on how shame evolved from an emotion of submission to authority into an emotion of conformity to norms.

71. Hare, Wobber, and Wrangham, unpublished; Wrangham 2001. Self-domestication (sometimes called autodomestication) is a form of the more general process known as social selection, in which selection results from the choices made by members of one's own species.

72. Hare, Wobber, and Wrangham, unpublished.

73. By saying that our older primate nature is more selfish, I do not mean to contradict Frans de Waal's work showing the presence of empathy and other building blocks of the human moral sense in chimpanzees and bonobos. I mean only that these building blocks are all easily explained as mechanisms that helped individuals prosper within groups. I don't think you need group selection to explain chimpanzee nature, but I think you need it to explain human nature. De Waal (2006) criticizes "veneer theorists" who think that morality is a thin veneer covering our true nature, which is selfish. I am not a veneer theorist in that sense. However, I am a veneer theorist in suggesting that we humans have some recent adaptations, shaped by group-level selection, that evolved out of our older primate nature but that makes us very different from other primates.

74. See Bourke 2011, pp. 3–4.

75. Other than two species of African mole rats, which are the only mammals that qualify as eusocial. The mole rats achieve their eusociality in the same way as bees and ants—by suppressing breeding in all except for a single breeding couple, such that all members of the colony are very close kin. Also, because they dig extensive underground tunnels, they have a shared defensible nest.

76. Some *Homo sapiens* had left Africa by 70,000 years ago, and were living in and around Israel. During this time there seems to have been some interbreeding with Neanderthals (Green et al. 2010). Some humans may have left Africa between 70,000 and 60,000 years ago and traveled through Yemen and South Asia to become the ancestors of people in New Guinea and Australia. But the group that left Africa and Israel around 50,000 years ago is the group that is believed to have populated Eurasia and the Americas. I therefore use 50,000 years ago as the date for the great dispersion, even though some people had already left in the 20,000 years before that. See Potts and Sloan 2010.

77. Gould in an interview in *Leader to Leader Journal* 15 (Winter 2000). Available at http://www.pfdf.org/knowledgecenter/journal.aspx?ArticleID=64. Emphasis added.
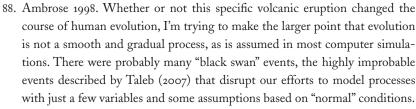
78. This is known as Lamarckism. Darwin believed it too, erroneously. Lamarckism was helpful to a dictatorship bent on producing a new breed of human being, Soviet Man. Trofim Lysenko was the preferred biologist, rather than Mendel.

79. Trut 1999.

80. Muir 1996.

81. See Hawks et al. 2007; Williamson et al. 2007. The short explanation is that you examine the degree to which each gene tends to pull neighboring DNA along with it as it goes through the chromosomal shuffle of meiosis. If it's just random drift, then neighboring nucleotides don't get dragged along.

82. Richerson and Boyd 2005 note that when environments change rapidly, such as every few millennia, the genes don't respond; all adaptation is done by cultural innovation. But they formulated their theory back when everyone thought genetic evolution required tens or hundreds of thousands of years. Now that we know that genes can respond within a single millennium, I think my statement here is accurate.

83. Yi et al. 2010.

84. Pickrell et al. 2009.

85. See e.g., Clark 2007.

86. Some readers may fear, as perhaps Gould did, that if genetic evolution continued during the last 50,000 years, then there could be genetic differences among the races. I think such concerns are valid but overstated. There were few selection pressures that ever applied to all Europeans, or all Africans, or all Asians. Continent-wide races are not the relevant units of analysis for the evolution of morality. Rather, there were many selection pressures facing each group that moved into a new ecological niche, or that took up a new way of making a living, or that developed a particular way of regulating marriages. Furthermore, when gene-culture coevolution favored certain traits, these traits were usually adaptations to some challenge or other, so differences among groups do not imply defects. And finally, even if there do turn out to be ethnic differences in moral behavior that are related to genetic differences, the genetic contribution to such behavioral differences would likely be tiny compared to the effects of culture. Anyone could have made up a just-so story in 1945 to explain how Germans evolved to be so well suited to militaristic conquest while Ashkenazi Jews evolved to be meek and pacifistic. But fifty years later, comparing Israel to Germany, they'd have to explain the opposite behavioral pattern. (I thank Steven Pinker for this example.)

87. Potts and Sloan 2010. See also Richerson and Boyd 2005 for a theory about how an earlier period of climatic instability may have driven the first jump in humanity's transformation into cultural creatures, around 500,000 years ago.

88. Ambrose 1998. Whether or not this specific volcanic eruption changed the course of human evolution, I'm trying to make the larger point that evolution is not a smooth and gradual process, as is assumed in most computer simulations. There were probably many "black swan" events, the highly improbable events described by Taleb (2007) that disrupt our efforts to model processes with just a few variables and some assumptions based on "normal" conditions.

89. Potts and Sloan 2010.

90. The latter part of this period is when the archaeological record begins to show clear signs of decorated objects, beads, symbolic and quasi-religious activities, and tribal behavior more generally. See Henshilwood et al. 2004 on findings from Blombos Cave in South Africa, circa 75,000 years ago. See also Kelly 1995; Tomasello et al., forthcoming; Wade 2009. Something really interesting was going on in Africa between 70,000 and 80,000 years ago.

91. For an attempt to explain human groupishness without invoking group selection, see Tooby and Cosmides 2010. See also Henrich and Henrich 2007; they allow for cultural group selection, but with no genetic effects. I think these approaches can explain much of our groupishness, but I don't think they can explain things like the hive switch, which I describe in the next chapter.

92. These issues are all complicated, and as a social psychologist I am not an expert in any of the four areas I have reviewed. So it may be more accurate to describe my presentation not as a defense in a legal trial, but as an appellate brief to the high court of science explaining why I think the case should be reopened and retried by the experts, in light of the new evidence.

93. The numbers 90 percent and 10 percent should not be taken literally. I am just trying to say that most of human nature was forged by the same sorts of individual-level processes that forged chimpanzee nature, while a substantially smaller portion of human nature was forged by group-level selection, which is a process more commonly associated with bees, ants, and other eusocial creatures. Of course the psychology of bees has nothing in common with human psychology—they achieve their extraordinary cooperation without anything like morality or the moral emotions. I'm merely using bees as an illustration of how group-level selection creates team players.
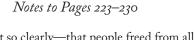
10. THE HIVE SWITCH

1. McNeill 1995, p. 2.

2. J. G. Gray 1970/1959, pp. 44–47. The quotes are from Gray himself, speaking as a veteran across several pages. The quotes were assembled in this way by McNeill 1995, p. 10.

3. See chapter 4. I repeat that Glaucon himself was not a Glauconian; he was Plato's brother, and in *The Republic* he wants Socrates to succeed. But he for-

mulated the argument so clearly—that people freed from all reputational consequences tend to behave abominably—that I use him as a spokesman for this view, which I believe is correct.

4. G. C. Williams 1966, pp. 92–93; see discussion of Williams in the previous chapter.

5. I first developed this argument in Haidt, Seder, and Kesebir 2008, where I explored the implications of hive psychology for positive psychology and public policy.

6. My use of the word *should* in this sentence is purely pragmatic, not normative. I'm saying that if you want to achieve X, then you should know about this hive stuff when you make your plan for achieving X. I'm not trying to tell people what X is.

7. This idea was developed earlier by Freeman 1995 and by McNeill 1995.

8. The acronym and the concept come from Henrich, Heine, and Norenzayan 2010.

9. Ehrenreich 2006, p. 14.

10. Durkheim 1992/1887, p. 220.

11. As described in chapter 9; on "social selection," see Boehm 2012.

12. Durkheim 1992/1887, pp. 219–20; emphasis added.

13. Durkheim 1995/1915, p. 217.

14. Durkheim 1995/1915, p. 424.

15. Emerson 1960/1838, p. 24.

16. From Darwin's autobiography, quoted in Wright 1994, p. 364.

17. Keltner and Haidt 2003.

18. For a cautious and often critical review of the wild claims sometimes made about mushrooms and human history, see Lechter 2007. Lechter says that the evidence for mushroom use among the Aztecs is extremely strong.

19. See the extensive library of drug experiences at www.Erowid.org. For each of the hallucinogens there are many accounts of mystical experiences and many of bad or terrifying trips.

20. For an example and analysis of initiation rites, see Herdt 1981.

21. Grob and de Rios 1994.

22. See in particular Appendix B in Maslow 1964. Maslow lists twenty-five features, including: "The whole universe is perceived as an integrated and unified whole"; "The world . . . is seen only as beautiful"; "The peak-experiencer becomes more loving and more accepting."

23. Pahnke 1966.

24. Doblin 1991. Only one of the control subjects said that the experiment had resulted in beneficial growth, and that, ironically, was because it convinced the subject to try psychedelic drugs as soon as possible. Doblin's study adds

an important note that was not reported in Pahnke's original study: most of the psilocybin subjects experienced some fear and negativity along the way, although all said that the experience overall was highly positive.

25. Hsieh 2010, p. 79; emphasis added.
26. There are two other candidates that I won't cover because there is far less research on them. V. S. Ramachandran has identified a spot in the left temporal lobe that, when stimulated electrically, sometimes gives people religious experiences; see Ramachandran and Blakeslee 1998. And Newberg, D'Aquili, and Rause 2001 studied the brains of people who achieve altered states of consciousness via meditation. The researchers found a reduction in activity in two areas of the parietal cortex that the brain uses to maintain a mental map of the body in space. When those areas are quieter, the person experiences a pleasurable loss of self.
27. My goal is not to present a full account of the neurobiology of the hive switch. It is simply to point out that there is a great deal of convergence between my functional description of the hive switch and two of the hottest areas of social neuroscience—oxytocin and mirror neurons. I hope that experts in neuroscience will look more closely at how the brain and body respond to the kind of groupish and synchronous activities I'm describing. For more on the neurobiology of ritual and synchrony, see Thomson 2011.
28. Carter 1998.
29. Kosfeld et al. 2005.
30. Zak 2011 describes the biology of the system in some detail. Of particular note, oxytocin causes group bonding and altruism in part by working through two additional neurotransmitters: dopamine, which motivates action and makes it rewarding, and serotonin, which reduces anxiety and makes people more sociable—common effects of Prozac-like drugs that raise serotonin levels.
31. Morhenn et al. 2008, although back rubs in this study only increased oxytocin levels when the back rub was paired with a sign of trust. Physical touch has a variety of bonding effects; see Keltner 2009.
32. *Parochial* means local or restricted, as if within the borders of a church parish. The concept of parochial altruism has been developed by Sam Bowles and others, e.g., Choi and Bowles 2007.
33. De Dreu et al. 2010.
34. De Dreu et al. 2011; quote is from p. 1264.
35. The initial report of this work was Iacoboni et al. 1999. For a recent overview, see Iacoboni 2008.
36. Tomasello et al. 2005; see chapter 9.
37. Iacoboni 2008, p. 119.
38. T. Singer et al. 2006. The game was a repeated prisoner's dilemma.

39. The findings were that men showed a big drop in empathy, and on average they showed activation in neural circuits associated with reward as well. They liked seeing the selfish player get shocked. Women showed only a small drop in empathic responding. This drop was not statistically significant, but I think it is very likely that women are able to cut off their empathy under *some* circumstances. With a larger sample size, or a more serious offense, I would bet that women would show a statistically significant drop in empathy as well.

40. Of course in this case the "bad" player directly cheated the subject, so some subjects felt anger. The key test, which has not yet been done, will be to see if empathic responding drops toward a "bad" player whom the subject merely observed cheating another person, not the subject. I predict that empathy will drop there too.

41. Kyd 1794, p. 13; emphasis added.

42. Burns 1978.

43. Kaiser, Hogan, and Craig 2008.

44. Burns 1978.

45. Kaiser, Hogan, and Craig 2008; Van Vugt, Hogan, and Kaiser 2008.

46. The number 150 is sometimes called "Dunbar's number" after Robin Dunbar noted that this very roughly seems to be the upper limit on the size of a group in which everyone can know each other, and know the relationships among the others; see Dunbar 1996.

47. Sherif et al. 1961/1954, as described in chapter 7.

48. Baumeister, Chesner, Senders, and Tice 1989; Hamblin 1958.

49. See work on common in-group identity (Gaertner and Dovidio 2000; Motyl et al. 2011) for a demonstration that increasing perceptions of similarity reduces implicit and explicit prejudice. See Haidt, Rosenberg, and Hom 2003 on the problem of moral diversity.

50. See Batson 1998 for a review of the ways that similarity increases altruism.

51. See Kurzban, Tooby, and Cosmides 2001 for an experiment showing that you can "erase race"—that is, you can get people to fail to notice and remember the race of other people when race is not a useful cue to "coalitional membership."

52. Wiltermuth and Heath 2008; Valdesolo, Ouyang, and DeSteno 2010. See also Cohen et al. 2009 for a demonstration that synchronous rowing increases pain tolerance (compared to equally vigorous rowing alone) because it increases endorphin release.

53. Brewer and Campbell 1976.

54. I'll say more at www.RighteousMind.com, and at www.EthicalSystems.org.

55. Kaiser, Hogan, and Craig 2008, p. 104; emphasis added.

56. Mussolini 1932. The phrase removed on the second to last line is "by death itself." Mussolini may not have written these lines; the essay was written

mostly or entirely by the philosopher Giovanni Gentile, but it was published with Mussolini's name as the author.

57. See in particular V. Turner 1969.

58. Compare the effects of fascist rallies, where people are awed by displays of military synchrony and devote themselves to the leader, to the effects that McNeill reported of marching with a small group of men in formation. Basic training bonds soldiers to each other, not to the drill sergeant.

59. If you think this statement comes close to making a value judgment, you are right. This is an example of Durkheimian utilitarianism, the normative theory I'll develop in the next chapter. I do believe that hiving contributes to the well-being and decency of a modern democratic society, which is in no danger of binding individuals too tightly; see Haidt, Seder, and Kesebir 2008. For recent empirical support, see Putnam and Campbell 2010.

60. See James Madison's notes for June 6 in *The Records of the Federal Convention of 1787*: "The only remedy [for the risk of oppression by a majority] is to enlarge the sphere, and thereby divide the community into so great a number of interests and parties, that, in the first place, a majority will not be likely, at the same moment, to have a common interest separate from that of the whole, or of the minority; and in the second place, that in case they should have such an interest, they may not be so apt to unite in the pursuit of it." The Founders were talking about political factions which rarely rise to the cohesion of hives. Nonetheless, they envisioned a nation whose strength came from people's commitment to local groups and institutions, in line with Putnam's (2000) analysis of social capital.

61. Putnam 2000, p. 209.

11. RELIGION IS A TEAM SPORT

1. McNeill 1995, see Chapter 10. The link to aggression is more obvious at some other universities where the motion used during their chant is the swinging of a tomahawk (e.g., Florida State University) or the snapping of an alligator's jaws (University of Florida) toward the fans of the opposing team, on the other side of the stadium.

2. I developed this analogy, and many of the ideas in this chapter, with Jesse Graham in Graham and Haidt 2010.

3. Durkheim 1965/1915, p. 62.

4. Or, for some on the far left, blame was placed on America itself. See, for example, Ward Churchill's 2003 claim that the people in the Twin Towers deserved to die. I note that there is a long history of left-wing hostility to religion, going back to Marx, and to the French *philosophes* in the eighteenth century. I believe that the current left-wing defense of Islam in Western nations is not a defense

of religion in any way; it is the result of the growing tendency on the left of seeing Muslims as victims of oppression in Europe and Palestine. I also note that in the days after the 9/11 attacks, President Bush placed himself firmly on the side of those who said that Islam is a religion of peace.

5. Buddhism is usually spared from critique, and sometimes even embraced—e.g., by Sam Harris—perhaps because it can easily be secularized and taken as a philosophical and ethical system resting firmly on the Care/harm foundation. The Dalai Lama does precisely this in his 1999 book *Ethics for the New Millennium*.

6. Harris 2004, p. 65.

7. Ibid., p. 12. Harris elevates belief to be the quintessence of humanity: "The very humanness of any brain consists largely in its capacity to evaluate new statements of propositional truth in light of innumerable others that it already accepts" (ibid., p. 51). That's a fine definition for a rationalist, but as a social intuitionist I think the humanness of any brain consists in its ability to share intentions and enter into the consensual hallucinations (i.e., moral matrices) that create cooperative moral communities. See my discussion of Tomasello's work in chapter 9. See also Harris et al. 2009.

8. Dawkins 2006, p. 31.

9. Ibid.

10. Dennett 2006, p. 9, says that religions are "social systems whose participants avow belief in a supernatural agent or agents whose approval is to be sought." Dennett does at least acknowledge that religions are "social systems," but most of the rest of his book focuses on the causes and consequences of false beliefs held by individuals, and in the footnote to his definition he explicitly contrasts his definition with Durkheim's.

11. See, for example, Ault 2005; Eliade 1957/1959. I note that the greatest scholar of religion in psychology, William James (1961/1902), took a lone-believer perspective too. He defined religion as "the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine." The focus on belief is not unique to the New Atheists. It is common to psychologists, biologists, and other natural scientists, as contrasted to sociologists, anthropologists, and scholars in religious studies departments, all of whom are more skilled at thinking about what Durkheim called "social facts."

12. See, e.g., Froese and Bader 2007; Woodberry and Smith 1998.

13. Dennett 2006, p. 141.

14. Dawkins 2006, p. 166.

15. A meme is a bit of cultural information that can evolve in some of the same ways that a gene evolves. See Dawkins 1976.

16. Barrett 2000; Boyer 2001.

17. This idea was popularized by Guthrie 1993.

18. Dawkins 2006, p. 174. But religious commitment and religious conversion experiences begin in earnest in the teen years, which are precisely the years when children seem *least* likely to believe whatever grown-ups tell them.

19. Dennett 2006, chapter 9. I believe Dennett is correct.

20. Bloom 2004; 2012. Bloom is not a New Atheist. I think his suggestion here is correct—this is one of the most important psychological precursors of supernatural beliefs.

21. Dennett 2006, p. 123.

22. See also Blackmore 1999. Blackmore is a meme theorist who originally shared Dawkins's view that religions were memes that spread like viruses. But after seeing the evidence that religious people are happier, more generous, and more fertile, she recanted. See Blackmore 2010.

23. Dawkins 2006, p. 188.

24. Atran and Henrich 2010.

25. For detailed accounts of how gods and religions have evolved, see Wade 2009; Wright 2009.

26. Roes and Raymond 2003; Norenzayan and Shariff 2008.

27. Zhong, Bohns, and Gino 2010.

28. Haley and Fessler 2005.

29. Shariff and Norenzayan 2007.

30. Sosis 2000; Sosis and Alcorta 2003.

31. Sosis and Bressler 2003.

32. Rappaport 1971, p. 36.

33. By "rational" here I mean that the group can act in ways that further its long-term interests, rather than dissipating because individuals pursue their own private interests. See Frank 1988 for a similar analysis of how the moral emotions can make people "strategically irrational" in a way that helps them to solve "commitment problems."

34. Or maybe a few thousand years before agriculture, if the mysterious site at Göbekli Tepe, in Turkey, was devoted to high or moralistic gods. See Scham 2008.

35. See Hawks et al. 2007, and chapter 9, for reviews of the speed of genetic evolution. See Powell and Clark, forthcoming, for a critique of by-product models that also makes this point—that by-product theories do not preclude subsequent biological adaptation.

36. Richerson and Boyd 2005, p. 192, as I described in chapter 9.

37. Along with Eliot Sober, e.g., Sober and Wilson 1998.

38. Dawkins 2006, p. 171, grants that religion might provide those special con-

ditions. He then offers no argument against the possibility that religion facilitated group selection, even though if this possibility is true, it refutes his argument that religion is a parasite, rather than an adaptation. I urge readers to examine pp. 170–72 of *The God Delusion* carefully.

39. If I seem at times to be overenthusiastic about group selection, it's because I read *Darwin's Cathedral* in 2005, just as I was writing the last chapter of *The Happiness Hypothesis*. By the time I finished Wilson's book, I felt I had found the missing link in my understanding not only of happiness and why it comes from "between" but also of morality and why it binds and blinds.

40. D. S. Wilson 2002, p. 136.

41. Lansing 1991.

42. Hardin 1968.

43. D. S. Wilson 2002, p. 159.

44. Marshall 1999, quoted in Wade 2009, p. 106.

45. Hawks et al. 2007, described in chapter 9; Roes and Raymond 2003.

46. Wade 2009, p. 107; emphasis added.

47. G. C. Williams 1966.

48. Muir 1996; see chapter 9. I repeat that selection pressures on humans were probably never as strong and consistent as those applied in breeding experiments, so I would not talk about genetic evolution occurring in five or ten generations. But thirty or forty generations would be consistent with many of the genetic changes found in human populations and described in Cochran and Harpending 2009.

49. See Bowles 2009.

50. This statement is most true for Harris and Hitchens, least true for Dennett.

51. For a concise review of these two literatures, see Norenzayan and Shariff 2008.

52. Putnam and Campbell 2010.

53. Tan and Vogel 2008.

54. Ruffle and Sosis 2006 had members of secular and religious kibbutzim in Israel play a one-shot cooperation game, in pairs. Religious males who pray together frequently were best able to restrain their own selfishness and maximize the pot of money that they divided at the end of the game.

55. Larue 1991.

56. See discussion in Norenzayan and Shariff 2008.

57. Coleman 1988.

58. Putnam and Campbell are careful about drawing causal inferences from their correlational data. But because they have data collected over several years, they were able to see whether increases or decreases in religious participation predicted changes in behavior the following year, within individuals. They conclude that the data is most consistent with a causal explanation, rather than resulting from a spurious third variable.

59. Arthur Brooks reached this same conclusion in his 2006 book *Who Really Cares*.

60. Putnam and Campbell 2010, p. 461.

61. Ibid., p. 473.

62. Pape 2005. The reason it's mostly democracies that are the targets of suicide terrorism is that democracies are more responsive to public opinion. Suicide bombing campaigns against dictatorships are unlikely to provoke a withdrawal from the terrorists' homeland.

63. I acknowledge that such looser societies are a boon to those who are excluded from a religious moral order, such as gay people living in areas dominated by conservative Christians or Muslims.

64. Durkheim 1951/1897. For evidence that Durkheim's observations about suicide rates still hold true today, see Eckersley and Dear 2002, and see the sharp spike in suicide rates among young people that began in the United States in the 1960s, as anomie increased. (See www.suicide.org/suicide-statistics.html.)

65. Durkheim 1984/1893, p. 331.

66. I have given and justified this definition in earlier publications, including Haidt and Kesebir 2010.

67. Turiel 1983, p. 3, and see chapter 1.

68. I personally think that virtue ethics is the normative framework that fits human nature most closely. See Haidt and Joseph 2007 for a review.

69. I agree with Harris 2010 in his choice of utilitarianism, but with two big differences: (1) I endorse it only for public policy, as I do not think individuals are obligated to produce the greatest total benefit, and (2) Harris claims to be a monist. He says that what is right is whatever maximizes the happiness of conscious creatures, and he believes that happiness can be measured with objective techniques, such as an fMRI scanner. I disagree. I am a pluralist, not a monist. I follow Shweder (1991; Shweder and Haidt 1993) and Berlin 2001 in believing that there are multiple and sometimes conflicting goods and values, and there is no simple arithmetical way of ranking societies along a single dimension. There is no way to eliminate the need for philosophical reflection about what makes a good society.

70. I am endorsing here a version of utilitarianism known as "rule utilitarianism," which says that we should aim to create the system and rules that will, in the long run, produce the greatest total good. This is in contrast to "act utilitarianism," which says that we should aim to maximize utility in each case, with each act.

71. I grant that utilitarianism, defined abstractly, already includes Durkheim. If it could be proven that Durkheim was correct about how to make people flourish, then many utilitarians would agree that we should implement Durkheimian policies. But in practice, utilitarians tend to be high systemizers who focus on

individuals and have difficulty seeing groups. They also tend to be politically liberal, and are therefore likely to resist drawing on the Loyalty, Authority, or Sanctity foundations. I therefore think the term *Durkheimian utilitarianism* is useful as a constant reminder that humans are *Homo duplex*, and that both levels of human nature must be included in utilitarian thinking.

12. CAN'T WE ALL DISAGREE MORE CONSTRUCTIVELY?

1. Finley Peter Dunne; first printed in the *Chicago Evening Post* in 1895. The full quote, in an 1898 version in Irish brogue, is: "Politics ain't beanbag. 'Tis a man's game; an' women, childher, an' pro-hybitionists 'd do well to keep out iv it."
2. Fiorina, Abrams, and Pope 2005.
3. Go to Gallup.com and search for "U.S. Political Ideology" for the latest findings. Those reported here are from the "2011 Half-Year Update."
4. The causes of the decline in civility are complex, including changes in the media, the replacement of the "greatest generation" by the baby boomers, and the increasing role of money in politics. See analysis and references at CivilPolitics.org. Several former congressmen I have met or listened to at conferences, from both parties, point to procedural and cultural changes implemented by Newt Gingrich when he became Speaker of the House in 1995.
5. Democratic congressman Jim Cooper of Tennessee, quoted in Nocera 2011.
6. Jost 2006.
7. Poole and Rosenthal 2000.
8. Erikson and Tedin 2003, p. 64, cited in Jost, Federico, and Napier 2009, p. 309.
9. Kinder 1998. See further discussion in chapter 4.
10. Zaller 1992, for example, focused on exposure to the opinions of political elites.
11. Converse 1964.
12. Bouchard 1994.
13. Turkheimer 2000, although Turkheimer showed that environment is always a contributor as well.
14. Alford, Funk, and Hibbing 2005, 2008.
15. Hatemi et al. 2011.
16. Helzer and Pizarro 2011; Inbar, Pizarro, and Bloom 2009; Oxley et al. 2008; Thórisdóttir and Jost 2011.
17. McCrae 1996; Settle et al. 2010.
18. Montaigne 1991/1588, Book III, section 9, on vanity.
19. The effects of these *single* genes are all tiny, and some only show up when certain environmental conditions are also present. One great puzzle of the genomic age is that while the genes collectively explain more than a third of the variability on most traits, there's almost never a single gene, or even a handful of genes, that are found to account for more than a few percentage

points of the variance, even for seemingly simple traits like physical height. See, e.g., Weedon et al. 2008.

20. Jost et al. 2003.
21. McAdams and Pals 2006.
22. Block and Block 2006. This study is widely misdescribed as showing that future conservatives had much less attractive personalities as young children. This seems to be true for the boys, but the list of traits for future liberal girls is quite mixed.
23. Putnam and Campbell 2010, as described in chapter 11.
24. People who are able to construct a good narrative, particularly one that connects early setbacks and suffering to later triumph, are happier and more productive than those who lack such a "redemption" narrative; see McAdams 2006; McAdams and Pals 2006. Of course, the simple correlation does not show that writing a good narrative *causes* good outcomes. But experiments done by Pennebaker show that giving people the opportunity to make sense of a trauma by writing about it causes better mental and even physical health. See Pennebaker 1997.
25. McAdams et al. 2008, p. 987.
26. Richards 2010, p. 53.
27. C. Smith 2003. Smith uses the term "moral order," but he means what I mean by the term "moral matrix."
28. Ibid., p. 82.
29. I don't mean to minimize the importance of equality as a moral good; I am simply arguing as I did in chapter 8 that political equality is a passion that grows out of the Liberty foundation and its emotional reaction to bullying and oppression, along with the Care foundation and its concern for victims. I do not think the love of political equality is derived from the Fairness foundation and its concerns for reciprocity and proportionality.
30. Westen 2007, pp. 157–58.
31. Iyer et al. 2011.
32. Graham, Nosek, and Haidt 2011. We used several baselines to measure the reality. One was our own data collected in this study, using all self-described liberals and conservatives. Another was this same data set but limited to those who called themselves "very liberal" or "very conservative." A third baseline was obtained from a nationally representative dataset using the MFQ. In all analyses, conservatives were more accurate than liberals.
33. M. Feingold, "Foreman's Wake-Up Call," 2004, retrieved March 28, 2011, from http://www.villagevoice.com/2004–01–13/theater/foreman-s-wake-up-call/. I assume the last line is not serious, but I could find no sign in the essay that Feingold was engaging in parody or was speaking as someone else.

34. Muller 1997, p. 4, citing Russell Kirk. See also Hunter 1991 for a similar definition of orthodoxy, which he then contrasts with progressivism.

35. Muller 1997, p. 5.

36. Political parties are messy things that must please many constituencies and donors, and so they never instantiate an ideology perfectly. Both major parties have serious problems, in my opinion. I wish the Democrats would become more Durkheimian, and I wish the Republicans would become more utilitarian. But right now I have less hope that the Republicans will change because they are so caught up in the binding (and blinding) passions of the Tea Partiers. Since 2009, and in particular in 2011, the Republicans have shown themselves to be less willing to compromise than the Democrats. And the issue they have sacralized is, unfortunately, taxes. Sacredness means no tradeoffs, and they are willing to sacrifice all the good things government can do to preserve low tax rates for the wealthiest Americans. This commitment exacerbates the rapidly growing income inequality that is poisonous to social trust, and therefore to moral capital (Wilkinson and Pickett 2009). As a Durkheimian utilitarian, I see much to like in conservatism, but much less to like in the Republican Party.

37. Putnam 2000.

38. That's Putnam's definition.

39. Coleman 1988.

40. Sosis and Bressler 2003; see chapter 11.

41. Sowell 2002.

42. The term *moral capital* has been used before, but it has usually been said to be a property of an *individual*, akin to integrity, which makes others trust and respect the person. See Kane 2001. I'm using the term in a different way. I'm defining it as a property of a *community* or social system. Rosenberg 1990 used it in this sense, attributing the idea but not the term to Adam Smith.

43. McWhorter 2005; Rieder 1985; Voegeli 2010.

44. Mill 2003/1859, p. 113. The quote continues: "Each of these modes of thinking derives its utility from the deficiencies of the other; but it is in a great measure the opposition of the other that keeps each within the limits of reason and sanity."

45. Russell 2004/1946, p. 9.

46. Ibid.

47. In the United States, and in every other nation and region we have examined on YourMorals.org. See Graham et al. 2011.

48. See, for example, the response to Daniel Patrick Moynihan's 1965 report on the black family, and the attacks and ostracism he had to endure; Patterson 2010.

49. Definitions of morality from liberal philosophers tend to focus on care, harm, or harm-reduction (The Utilitarian Grill), or on rights and the autonomy of

the individual (The Deontological Diner), as I described in chapter 6. See also definitions of morality in Gewirth 1975; P. Singer 1979.

50. Keillor 2004, p. 20.

51. See Pollan 2006 for a horrific description of the American industrial food system as a tangle of market distortions, particularly externalities imposed on America's farm animals, ecosystems, taxpayers, and waistlines.

52. *Citizens United v. Federal Election Commission,* 558 U.S. 08–205.

53. Kahan 2010. Only capitalism and an energetic private sector can generate the massive wealth that lifts the great majority of people out of poverty.

54. According to an EPA calculation done around that time; see Needleman 2000.

55. Needleman 2000.

56. Nevin 2000.

57. See Carpenter and Nevin 2010; Nevin 2000; Reyes 2007. The phaseout occurred in different states at different times, which allowed researchers to look at the lag between declines in lead exposure and declines in criminality.

58. It is true that producing gasoline without lead raises its cost. But Reyes 2007 calculated that the cost of removing lead from gasoline is "approximately twenty times smaller than the full value including quality of life of the crime reductions." That calculation does not include lives saved and other direct health benefits of lead reductions.

59. Carpenter and Nevin 2010.

60. Along with the other major causes of market failures and inefficiencies, such as monopoly power and the depletion of public goods, all of which frequently require government intervention to achieve market efficiency.

61. Murray, 1997, p. xii, says, "The correct word for my view of the world is '*liberal.*'"

62. Wilkinson, personal communication, 2010.

63. My short list of additional points: (1) power corrupts, so we should beware of concentrating power in any hands, including those of the government; (2) ordered liberty is the best recipe for flourishing in Western democracies; (3) nanny states and "cradle-to-grave" care infantilize people and make them behave less responsibly, thereby requiring even more government protection. See Boaz 1997.

64. Goldhill 2009.

65. Goldhill acknowledges that government has many roles to play in a market-based health system, as there are certain things that only the government can do. He specifically mentions enforcing safety standards, ensuring competition among providers, running an insurance pool for truly catastrophic cases, and subsidizing the poor, who could not afford to purchase their own health care even if prices dropped by 50 percent.

66. See *The Future of Healthcare in Europe*, a report prepared by *The Economist* magazine. Available at http://www.businessresearch.eiu.com/future-healthcare-europe.html-0.

67. Hayek 1988 referred to this belief that order comes from rational planning as "the fatal conceit."

68. See Cosmides and Tooby 2006 on how organizing labor along Marxist or socialist principles, which assume that people will cooperate in large groups, usually runs afoul of moral psychology. People do not cooperate well in large groups when they perceive that many others are free riding. Therefore, communist or heavily socialist nations often resort to the increasing application of threats and force to compel cooperation. Five-year plans rarely work as well as the invisible hand.

69. From "Conservatism as an ideology," as quoted by Muller 1997, p.3.

70. Burke 2003/1790, p. 40. I don't think Burke was right that the love of one's platoon leads, in general, to a love of humanity. But it does seem as though increasing the love of one's in-group usually doesn't lead to an increase in hate for out-groups (see Brewer and Campbell 1976; de Dreu et al. 2011), so I'd be content to live in a world with vastly more parochial love and little or no decrease in love of humanity.

71. Smith 1976/1759, Part VI, section ii, chapter 2.

72. McWhorter 2005; Rosenzweig 2009.

73. Arum 2003.

74. Stenner 2005, p. 330, concludes from her studies of authoritarians: "Ultimately, nothing inspires greater tolerance from the intolerant than an abundance of common and unifying beliefs, practices, rituals, institutions and processes. And regrettably, nothing is more certain to provoke increased expression of their latent predispositions than the likes of 'multicultural education.'"

75. See Pildes 2011 for an up-to-date review of the many factors that have contributed to our "hyperpolarized" state. Pildes argues that the political realignment, along with other historical trends, fully explains the rise in polarization. He therefore asserts that nothing can be done to reverse it. I disagree. Even if historical changes could explain 100 percent of the increase, that does not mean that institutional changes would have no effect. I prefer to follow Herbst 2010, who points out that civility and incivility are strategies that are used when they achieve desired results. There are many things we can do to reduce the payoff for incivility. See www.CivilPolitics.org.

76. No pun intended. Manichaean thinking is a problem for donkeys as well as elephants.

77. Bishop 2008.

78. Based on research by David Wasserman of *The Cook Political Report,* reported by Stolberg 2011.

CONCLUSION

1. Berlin 2001, pp. 11–12.
2. Ibid., p. 12; emphasis added. See also Shweder 1991; Shweder and Haidt 1993.
3. This is incredibly bad advice; it will just confuse people, and ambiguity leads to inaction (Latane and Darley 1970). It would be far better to define the situation clearly and identify the right course of action. For example, yell, "Help, I'm being raped. Call 911, then come here."