## The Deep Roots of Mara and Mammon: The Implications of Evolutionary Psychology

## David Loy

## ABSTRACT

If we want to address the problems created by Mara and Mammon, reviewing Buddhist and Christian views of our human condition is not sufficient: Both are Axial Age religions, based on profound cultural transformations that occurred in the Middle East, Greece, India, and China in the middle of the first millennium B.C.E. In order to understand the worldview and social role of such religions, however, they need to be contextualized within a broader understanding of the evolution of culture generally and religion in particular. That means going much further back into our long prehistory and benefiting from the often-uncomfortable insights of evolutionary psychology.

Why "often uncomfortable"? Despite accepting the physical implications of evolution, most of us remain wary of any psychological explanation of our predispositions that invokes genetics. But cultural influences do not operate on a Blank Slate: They condition genetically based tendencies for how to interact with others. What psychological predispositions are associated with the genes that tend to survive, and do they sometimes include—and thereby perpetuate—the three poisons: greed (acquisitiveness), ill will (violence, war), and delusion (egoism, tribalism)? In our long history, the most important social program attempting to control and channel our conflicting genetic predispositions was provided by Axial Age religions. The Axial Age can be understood as cultural-evolution's way of compensating for the problematic genetic propensities, both individual and tribal, that had originally enabled our species to survive and thrive in very competitive and often-threatening environments—tendencies, however, that not only led to Bronze Age breakdown but now threaten our very existence.

Keywords: evolutionary psychology, Axial Age, cultural evolution, nature vs. nurture, individual vs. group selection, altruism, cosmological dualism, individual salvation

I

Just as we can gain a better understanding of ourselves from knowledge of our parents and their lives, so we can draw solace and a sense of orientation from

knowledge of the genetic and cultural evolutionary processes that created our human natures and shaped humanity's long history and much longer prehistory. (Paul Ehrlich)

If we want to address the problems created by Mara and Mammon, it might be helpful to know what created Mara and Mammon. Reviewing Buddhist and Christian views of our human condition is not sufficient: Both Buddhism and Christianity (as an Abrahamic tradition) are Axial Age religions, based on profound cultural transformations that occurred in the Middle East, Greece, India, and China in the middle of the first millennium B.C.E. In order to understand the worldview and social role of such religions, however, they need to be contextualized within a broader understanding of the evolution of culture generally and religion in particular. That means going much further back into our long prehistory and benefiting from the often-uncomfortable insights of evolutionary psychology.

Why "often uncomfortable"? Despite accepting the *physical* implications of evolution, most of us remain wary of any *psychological* explanation of our predispositions that invokes genetics. Darwin didn't discover evolution—it was already widely discussed in his day—but his naturalistic explanation for how it occurred was revolutionary because it refuted an important argument for God's existence: that a supreme intelligence was necessary to design the incredibly complex species of the biosphere.

Was this a deathblow for religion? If we do not assume a materialistic reductionism, there is a more "spiritual" way to understand the evolutionary process: It is how the cosmos is becoming self-aware, as Thomas Berry and Brian Swimme have argued in books such as *The Universe Story*. "The mind that searches for contact with the Milky Way is the very mind of the Milky Way galaxy in search of its own depths." Admittedly, this is still a stretch for most religious traditions, which remain rooted in premodern cosmologies, but, in any case, there is an aspect of the evolutionary challenge that remains largely unaddressed by the "new cosmology": our evolutionary psychology.

Evolution explains why we are so vulnerable to back and knee problems: Humans evolved from four-legged species, and shifting to an upright posture resulted in different skeletal stresses. Likewise, our cravings for lots of sweets and fatty foods, which cause so many health problems today, were beneficial for nomadic hunting-gatherers (98 percent of our species history) who had no experience of refined sugar, Big Macs, or a sedentary lifestyle. If our long evolutionary prehistory helps to explain present physiological problems, can it also help us understand some of our present psychological problems? From infancy, humans are instinctively afraid of snakes, spiders, the dark, heights, and thunder; we are not instinctively afraid of electric sockets, guns, or cars—dangers that have developed too recently to affect our genome.<sup>2</sup>

A more emotionally charged example is reproduction—an issue very much at the heart of the matter, since evolutionary psychology inevitably focuses on what traits help to get one's genes into the next generation. We don't like to think of a mother's love—our primary metaphor for selfless compassion—from that perspective, but, of course, maternal care serves an important evolutionary function: Although things can

occasionally go wrong, mothers are genetically programmed to love their offspring, motivated by an instinct that helps children and their genes to survive. (Does that make a mother's love any the less wonderful?)

What does evolutionary psychology have to do with Mara and Mammon?

Homo sapiens is an innately dysfunctional species. We are hampered by the Paleolithic Curse: genetic adaptations that worked very well for millions of years of hunter-gatherer existence but are increasingly a hindrance in a globally urban and technoscientific society. We seem unable to stabilize either economic policies or the means of governance higher than the level of a village. Further, the great majority of people worldwide remain in the thrall of tribal organized religions, led by men who claim supernatural power in order to compete for the obedience and resources of the faithful. We are addicted to tribal conflict, which is harmless and entertaining when sublimated into team sports, but deadly when expressed as real-world ethnic, religious, and ideological struggles. There are other hereditary biases. Too paralyzed with self-absorption to protect the rest of life, we continue to tear down the natural environment, our species' irreplaceable and most precious heritage. . . . People find it hard to care for other people beyond their own tribe or country, and even then past one or two generations.<sup>3</sup>

Wilson says nothing about an original sin, but "dysfunctional" resonates well with the *dukkha* ("suffering" in the broadest sense) that is our basic problem, according to Buddhism. The important question is whether Wilson's account points to an evolutionary origin for our greed, ill will, and delusion (the Buddhist "three poisons"), which are not only individual problems but arguably at the root of our collective social ills as well.

The evidence for their evolutionary origin is not obvious. As Robert Wright has pointed out, "The basic evolutionary logic common to people everywhere is opaque to introspection. Natural selection appears to have hidden our true selves [true motivations] from our conscious selves." And we cannot perform psychological evaluations of people who lived hundreds of thousands of years ago, in order to test hypotheses.

So perhaps it is not surprising that those concerned about social justice are often resistant to the findings of evolutionary psychology. Our task seems much easier if social problems are due solely to social conditioning. We want to believe that humans are born free and benevolent, and only later are corrupted by society (Rousseau, Kropotkin, Pelagius); the idea that we are basically selfish and need to be tamed by culture (Hobbes, Machiavelli, St. Augustine) is unattractive. Psychologically, we prefer the Blank Slate and the Noble Savage. The last thing we want is an evolutionary version of Calvinism, especially a more scientific predestination in genetic determinism.

But can our "essential nature" be both selfish and selfless? Contrary to some contemporary forms of Buddhism, nowhere in the Pali Canon does the Buddha declare that our human nature is basically good. What he does say, in effect, is that we all

have wholesome (Pali, kusala) traits and unwholesome (akusala) traits. This does not mean that what Buddhism calls the defilements (kilesas) are programmed into us, because traits are predispositions that we can act upon or decline to act upon. As the *Dhammapada* and many other Buddhist texts put it, "Renounce all evil, practice all good, keep your mind pure—thus all the Buddhas taught." The Buddha taught that our actions should reinforce the beneficial predilections and weaken the problematic ones.

The important thing here is not to fall into a simplistic "nature versus nurture" dichotomy. We are "incomplete or unfinished animals who complete or finish ourselves through culture." Culture is another form of trait-transmission, social and learned rather than genetic. Biologically we are born too soon, in that most of our brain development occurs after birth, during the many years that we are dependent on and molded by the influence of adult caregivers. But such cultural influences do not operate on a Blank Slate: They condition genetically based tendencies for how to interact with others. Loyal Rue summarizes this well:

There is a human nature, a wide range of universally endowed defaults and disposition shared across the species. These universal characteristics are fixed in neural systems that are in turn constructed from information stored in genetic material. But many of these systems are open to modulation by acquired information. Sometimes we override our default behaviors by repressing them or by designing alternative behaviors. And sometimes we reinforce them with learning.<sup>6</sup>

Despite the important role of genetics, there's no determinism here, and no naturalistic fallacy, either: contra the "social Darwinism" of Herbert Spencer and Ayn Rand, we do not need to derive what we *ought* to do from what *is* the case—all the more so if we are subject to conflicting predispositions, some of which tend to cause *dukkha* (see below).

How does this help us understand the roots of Mara and Mammon? Let me respond by offering a plausible and interesting story about their origins, with important implications for our pursuit of social justice today.

Π

Richard Dawkins wrote a book famously titled *The Selfish Gene*, which is a metaphor too far. Genes are neither selfish nor selfless, because they have no intentions of their own. But his basic point remains: Some genes produce traits (predispositions) that are likely to cause behavior that tends to lead to successful reproduction. "Given that genes are the replicating currency of natural selection, it is an inevitable, algorithmic certainty that genes which cause behavior that enhances the survival of such genes must thrive at the expense of genes that do not." The important question for us is: what psychological predispositions are associated with the genes that tend to

survive, and do they sometimes include—and thereby perpetuate—greed (acquisitiveness), ill will (violence, war), and delusion (egoism, tribalism)?

The most controversial topic in evolutionary psychology is individual selection versus group selection. In the struggle to get one's genes into the next generation, is each individual competing only with other individuals, or does competition for genetic survival also occur between groups?

Although I'm not in a position to evaluate this debate, it's relevant that, after a period when individual selection and kin-selection (you help your relatives because you share genes) were favored, "multilevel selection" is becoming more prevalent among evolutionary biologists. This issue may seem abstract, but it provides a very important perspective on the origins of morality—especially why the conflict within us between "good" and "evil" is inevitable and permanent. As Matt Ridley reminds us, most vice (think murder, theft, rape, and fraud) originates from selfishness, while virtue (cooperation, altruism, generosity, sympathy, kindness) benefits the group because it expresses concern for others' welfare. E. O. Wilson explains how this works:

Selfish activity within the group provides competitive advantage but is commonly destructive to the group as a whole. Working in the opposite direction from individual-level selection is group selection—group versus group. When an individual is cooperative and altruistic, this reduces his advantage in competition to a comparable degree with other members but increases the survival and reproduction rate of the group as a whole. In a nutshell, individual selection favors what we call sin and group selection favors virtue.<sup>9</sup>

Thus "an unavoidable and perpetual war exists between honor, virtue, and duty, the products of group selection, on the one side, and selfishness, cowardice, and hypocrisy, the products of individual selection, on the other side." What we consider "evil" is not due merely to defective social conditioning: The conflict between good and evil is apparently hardwired into our psychology.

Given how crucial this tension is to all social life, it's not surprising that humans have become so acutely sensitive at reading the *intentions* of other people. We are experts at reading minds and detecting deceit, because we need to know what motivates what others do. Is someone really acting selflessly, or are they disguising something more selfish? Perhaps our most distinctive social trait is the ability to collaborate in order to achieve shared goals, but genuine cooperation is not something that can be taken for granted. Are you doing your bit, or freeloading off others? We are preoccupied with such concerns.

Although evolutionary psychologists have no problem understanding selfishness (which promotes individual selection), can natural selection also explain altruism? Yes, in a group I may have to play the game, but why not scrounge off others when I can get away with it? Being kind to close kin (who share many of one's genes) may make sense, yet that does not account for benevolence between those who are not kin. One explanation is *reciprocal* altruism: I am helpful to you with the expectation that you will be helpful to me when needed. But that doesn't account for the kindness of

people we have never seen before and will probably never meet again—for example, Good Samaritans. Another argument is that we feel good when we do something altruistic, so such behavior is really a way for us to feel good about ourselves; yet that presupposes we are already inclined to favor another's happiness—which is, of course, what altruism means!<sup>11</sup>

It's no coincidence that reforming motivations is at the heart of the Buddhist path. When our actions are motivated by the three poisons—greed, ill will, delusion dukkhais likely to result. A focus on intentionality was also the Buddha's main contribution to our understanding of karma: Karma is created not just by our deeds but by the intentions behind them. This can be appreciated in a naturalistic (non-transcendental) way: Someone who is self-centered and habitually greedy actually experiences the world very differently from someone compassionate and selfless. A pickpocket sees peoples' pockets; a Buddha sees their Buddhanature. Matt Ridley sees the implications of altruism for social evolution: "Reciprocators precipitate out of society, leaving the selfish rationalists to their fate. The virtuous are virtuous for no other reason than that it enables them to join forces with others who are virtuous, to mutual benefit."12 Note: mutual benefit here and now, not in an afterlife. I am reminded of the last proposition in Spinoza's Ethics: "Beatitudo (beatitude, happiness) is not the reward for virtue, but virtue itself." This point is very important, insofar as the traditional religious argument for being virtuous is that one will receive a postmortem reward—which is not much of an incentive for those who doubt postmortem survival.

Nevertheless, group selection does not necessarily avoid the problems with individual selection/selfishness. In fact, it often amounts to a larger version of the same problems, because what normally holds groups together is their competition with other groups—in short, *tribalism*. "All human preliterate societies, and all modern ones as well, tend to have an 'enemy,' a concept of them and us ... preferring the morality of group selection to the ruthlessness of individual struggle is to prefer genocide over murder .... It is a rule of evolution to which we are far from immune that the more cooperative societies are, the more violent the battles between them." I am reminded of the curious fact that, when ancient Athens restructured itself into a democracy, it also became more imperialistic. There are only two species of mammals where males live together with other males and occasionally make group excursions to hunt for and kill individuals in other groups: chimpanzees (one of our two closest genetic relatives) and humans. <sup>14</sup> Curiously, our other close relative, the bonobo, is much more peaceful.

So where does religion fit into this evolutionary psychology?

III

For almost all of our prehistory—hundreds of thousands of years—humans were hunter-gatherers living in small groups; only in the last few millennia has this changed (agriculture began about 11,500 years ago). This means that our brains and behavior evolved in and for a kind of social structure that no longer exists, resulting in traits that are sometimes problematic today. For example, anger in small

groups can be beneficial. It focuses attention and encourages people (who live together and usually know each other well) to work through the difficulty. But what about my anger at an inconsiderate but anonymous driver who cuts me off in a dangerous way? Or my anger at Monsanto for continuing to poison soil and kill bees by marketing Roundup? Or at the president of the United States for refusing to address climate change? What should I do with that anger? Let it congeal into hatred and resentment? Because our social situation is so different today, anger today is more likely to become a problem.

Small clans of hunter-gatherers do not need a prescribed moral code (e.g., the ten commandments or five precepts) to internalize group norms. To say it again, humans are very good at mind-reading intentions, shaming or punishing freeloaders, especially when everyone knows everyone else and one's activities are more or less public. The earliest religions seem to have been animistic and shamanistic, with rituals to propitiate gods who symbolized powerful natural forces. As groups grew in size, however, it became more difficult to keep track of everyone, and the need developed for something that could bind members together: such as a shared worldview about what the world is and how we fit into it, including an explicit moral code that functions as a form of social control. Fear of divine retribution makes people behave and promotes cooperation.<sup>15</sup>

There is some evidence that we evolved from an alpha-male hierarchical primate species to become more egalitarian during our long hunter-gathering prehistory, <sup>16</sup> but agriculture changed all that. Although agriculture was a lot more work, it produced a lot more food and led to a lot more people. It also led to social hierarchies and religious institutions that legitimized differences between elites and commoners. "Investing arbitrary social conventions with sanctity made them seem natural—as if they were reflections of human nature—and this sanctification became a force justifying power relationships within society . . . . Organized religion thus seems to have evolved to help stabilize hierarchical social structure."<sup>17</sup>

In prehistoric agricultural civilizations there was no significant distinction between religious authority and secular political authority. Likewise, one's social role was not separate from one's religious obligation, which in both cases involved supporting the sacralized social order. At the top of that pyramid was a priest-king,

a god who was also a man, for he represented humans to the gods as well as the gods to humans. His arbitrary power and oppression of the common people over whom he ruled represent a remarkable breakdown of tribal egalitarianism and a return of a particularly harsh form of despotism, made possible by the increasing size of the social unit with its attendant loss of face-to-face community, by the increased surplus due to agricultural intensification, and by the rise of militarism now that there was so much to fight over.<sup>18</sup>

In such theocracies, the king provided a crucial link between human society and the cosmic order; his weakness or absence indicated profound disorder between them.<sup>19</sup> The Egyptian pharaoh, for example, was "the sole intermediary who could serve the

gods and hence maintain the flows of energy into the world." The same was true in the New World: Mayan kings were "conduits through which supernatural forces were channeled into the human realm." <sup>20</sup>

As they develop and grew, such societies institutionalized both individual selection (the authoritarianism of rulers) and group selection (for the masses, fighting against other empires). In war the battle was not only between human soldiers; each state had its own patron deities and they fought too, the results revealing whose god was greater. Such a social structure reinforced tribalistic identity on an ever-larger scale, increasingly aggressive and imperialistic. But it was unstable. In particular, the Bronze Age collapse (c. 1200 B.C.E.) in southeast Europe, North Africa, and the Near East was sudden, violent, and ultimately fatal for most of its civilizations. Within a fifty-year period almost every important city in the eastern Mediterranean was destroyed. Today modern technologies inflate our social and ecological problems into global catastrophes, but the Bronze Age collapse was the ancient world's equivalent. In its aftermath, however, the most extraordinary cultural development in human history occurred.

IV

If religions can function to legitimize the differences between elites and commoners, can they also function to *de*legitimize such differences? Can they challenge a hierarchical, oppressive social structure?

As evolutionary psychologists keep reminding us, genes do not predetermine, but they predispose. It's not nature versus nurture, it's nature *via* nurture.<sup>21</sup> In our long history, the most important social program attempting to control and channel our conflicting genetic predispositions was provided by Axial Age religions. The Axial Age can be understood as cultural-evolution's way of compensating for the problematic genetic propensities, both individual and tribal, that had originally enabled our species to survive and thrive in very competitive and often-threatening environments—tendencies, however, that not only led to Bronze Age breakdown but now threaten our very existence. When the push of a button can launch thousands of nuclear weapons, nationalistic and ethnic tribalism are more dangerous than ever. An economic system that must keep growing in order to avoid collapse is incompatible with a biosphere that does not, and neoliberalism's penchant for producing billionaires by impoverishing billions of other people is incompatible with a just or harmonious global civilization.

The Axial Age is a term coined by Karl Jaspers, to describe a pivotal period in the middle of the first millennium B.C.E., when "the spiritual foundations of humanity were laid simultaneously and independently in China [Confucius, Lao Tzu, Chuang Tzu], India [Gautama Buddha, Mahavira, Vedanta], Persia [Zarathustra], Judea [the prophets Elijah, Isaiah, Jeremiah, etc., later Jesus and Muhammad], and Greece [the pre- and post-Socratic philosophers]."<sup>22</sup>

These spiritual revolutionaries were marginal figures, responding to a widespread sense of social and moral failure by offering new conceptions of cosmic order that juxtaposed this mundane (and unsatisfactory) world with an idealized transcendent realm (e.g., heaven, nirvana). This was accompanied by a new emphasis on one's individual relationship with that higher reality, the focus shifting from temple rituals to personal morality—thus *creating* individuals as we know them today. "Salvation had become radically personalized—a possibility for each individual, and no longer a vague quality of the group or the exclusive destiny of elite rulers." The basic religious teachings we usually take for granted today—*individual* morality and salvation, on the one side, with compassion for *everyone*, on the other—were Axial Age developments.

God loves each of us; everyone has Buddhanature. Gautama Buddha and Jesus both offered implicit critiques of oppressive hierarchies. Jesus hung out with women, the poor, and marginalized. The *bhikkhu* sangha that Gautama created did not discriminate between castes, and he even started a *bhikkhuni* sangha for women, because they have the same potential to awaken.

In contrast to the us-vs.-them of tribalism, such teachings incorporated strangers and even enemies: for example, *Leviticus* 19:34: "The foreigner residing among you must be treated as your native-born. Love them as yourself, for you were foreigners in Egypt." For Christianity the supreme examples are the parable of the Good Samaritan (*Luke* 10:25–37, in response to the question "who is my neighbor?") and in the Sermon on the Mount (*Matthew* 5:43–46): "You have heard that it was said, 'Love your neighbor and hate your enemy.' But I tell you, love your enemies and pray for those who persecute you, that you may be children of your Father in heaven. He causes his sun to rise on the evil and the good, and sends rain on the righteous and the unrighteous. If you love those who love you, what reward will you get?"<sup>24</sup>

Encouragements to cultivate *metta* (loving-kindness) toward everyone occur many places in the Pali Canon, most notably in the *Metta Sutta*:

No one should deceive another, nor despise anyone anywhere. Because of anger and thoughts of aversion no one should wish suffering for another.

Just as a mother would protect her son, her only son, with her own life, so one should develop toward all beings a state of mind without boundaries.

And toward the whole world one should develop loving-kindness, a state of mind without boundaries—above, below, and across—unconfined, without enmity, without adversaries.<sup>25</sup>

More recently, the fourteenth Dalai Lama has also emphasized that compassion should encompass even enemies: "My religion is kindness . . . . Every sentient being, even my

enemy, fears suffering as I do and wants to be happy. This thought leads us to be profoundly concerned for the happiness of others, be they friends or enemies. That is the basis for true compassion. Seeking happiness while remaining indifferent to others is a tragic mistake."<sup>26</sup>

This new religious orientation had important political implications:

Axial Age thinkers ... created alternative ideological systems to counteract and protest the empire and politics. They developed moral and legal systems outside the prevailing military and social structures of their day. These systems criticized the status quo and offered an ethical and often religious option rooted in humane values, such as personal responsibility to others, benevolence, virtue, compassion, justice, wisdom, and righteousness. This relativizing of the state and its cults brought human subjectivity and personal morality back into the center of religion.<sup>27</sup>

Such ideals are so basic to our spiritual understanding today that it is difficult for us to appreciate how radical they were when they were first promulgated. Nonetheless, most of the Axial Age teachings—including those of Christianity and Buddhism—had two serious flaws, which are more apparent today, and which continue to limit their relevance to our difficult situation today. As Loyal Rue puts it:

The influence of Axial traditions will continue to decline as it becomes ever more apparent that their resources are incommensurate with the moral challenges of the global problematique. In particular, to the extent that these traditions have stressed *cosmological dualism* and *individual salvation* we may say they have encouraged an attitude of indifference toward the integrity of natural and social systems.<sup>28</sup>

Cosmological dualism—belief in another, higher reality, which one could now relate to personally and directly—was important for liberating the individual from what had become tight embeddedness in a hierarchical social structure, but that dualism also tended to devalue this world. In Christian terms, the earth can be viewed as merely a backdrop to the human drama of sin and salvation. Why worry about what's happening here and now if our eternal bliss is elsewhere? For traditional Buddhism this world is samsara—a realm of suffering, craving, and delusion—and the goal is not to change it but to escape it by not being reborn into it. Both founders were "transcendentalized": Jesus's wisdom teachings were eclipsed by his role as a divine savior; and if we trust in Amitabha Buddha, he will meet us when we die and escort us to the Pure Land.

Extending compassion to all people everywhere is obviously a big improvement over tribalism, but that does not address another dualism that has become especially pernicious for us: that between humanity and the rest of the biosphere. Lynn White, Jr., has (controversially) traced the ecological crisis back to "the Christian [Abrahamic?] axiom that nature has no reason for existence save to serve man . . . . Despite Darwin, we are

*not*, in our hearts, part of the natural process. We are superior to nature, contemptuous of it, willing to use it for our slightest whim."<sup>29</sup>

Individual salvation meant that my well-being is ultimately separate from yours; sure, I hope you make it to heaven too, or get enlightened, but in either case my own spiritual destiny will be unaffected. Replacing self-centered evolutionary selection—preoccupied with reproducing one's own genes—with self-centered afterlife selection—preoccupied with personally qualifying for heaven—was not necessarily a big improvement. "Dualism and individualism have the effect of relativizing the mundane order of natural and social systems. They encourage the view that what is most essential about human existence transcends nature and society, that the physical, biological and social aspects of our being are of negligible value. What really matters is the spiritual aspect." This implied another dualism, between soul and body (later: mind and body). D. H. Lawrence put it well: "For two thousand years man has been living in a dead or dying cosmos, hoping for a heaven hereafter. And all the religions have been religions of the dead body and the postponed reward."

V

Historically, the Axial Age failed. The revolutionary personal and social transformations implied by its teachings—cultural attempts to address the tensions inherent in our evolutionary psychology—were aborted as the new religions became institutionalized and reappropriated by despotic emperors and empires. Ironically, they became that which they critiqued: Patriarchy and elitism soon reasserted themselves in the organizations that formed to perpetuate their teachings. With Constantine's victory Christianity became Christendom. Later European kings ruled by divine right, and their Asian equivalents (who must have extraordinarily good karma from past lifetimes!) often declared themselves to be bodhisattvas or even Buddhas. The Catholic Church persecuted heretics, subordinated women, sponsored crusades against Jewish and Muslim heathen, and justified brutal empires. The basic problems continue to the present day. Today over 70 percent of white evangelicals still support Donald Trump, while Buddhist majorities in Sri Lanka and Myanmar defend the Buddhadharma by killing Hindu Tamils and Muslim Rohingyas, respectively. Nationalism has been described by Arnold Toynbee as "ninety percent of the religion of ninety percent of the people of the Western world and of the rest of the world as well."32 Yet again, a sacralized social order is sanctifying tribalism.

The good news is that the Axial Age teachings have survived.

*Until today* mankind has lived by what happened during the Axial Period, by what was thought and created during that period. In each new upward flight it returns in recollection to this period and is fired anew by it. Ever since then it has been the case that recollections and reawakenings of the potentialities of the Axial Period—renaissances—afford a spiritual impetus.<sup>33</sup>

Axial teachings have played an important role in the development of democracy and human rights and continue to inspire movements for social justice. Is our task today to recuperate their revolutionary potential? If so, we need to do it in a way that addresses the two problems Loyal Rue identified. An ontological dualism that directs our attention to a "higher" reality, thereby devaluing this world, is no longer acceptable. Unfortunately, this issue strikes at the heart of the appeal of most religions, whose power and prestige derive from their role in promoting a postmortem salvation. Needless to say, it will not be easy to shift from a focus on qualifying for heaven, or a better rebirth, to an emphasis on personal transformation that involves a different way of experiencing this world, here and now. But the fact that we "finish or complete ourselves through culture," that our brain structure and function remains plastic even in later life, means that such transformations are possible.

In other words, we need to appreciate more fully that the earth is not only our home, it is our mother—and we never cut the umbilical cord. Universalism and compassion must be extended to other species and to ecosystems, in the realization that our interdependence with them means their fate is inextricably tied to our own. And, despite the fantasies of some wealthy survivalists, who hope to ride out the apocalypse in well-stocked bunkers, worldwide ecological degradation makes it clearer than ever that our individual human destinies too are inextricably tied to each other.

To conclude, an important implication of this perspective is that our corrupted religious traditions cannot be expected to address the social and ecological crises we face today without radically reforming themselves, to recover the radical message at their core. Until that happens, they are more a part of the problem than contributors to the solution. And our crises are becoming more urgent; as H. G. Wells saw a century ago, "History is a race between education and catastrophe"—and both are accelerating. The question remains: What role will religion play in that race?

## NOTES

- 1. Brian Swimme and Thomas Berry, The Universe Story (New York: HarperCollins, 1992), 45.
- 2. Matt Ridley, Nature via Nurture (New York: HarperCollins, 2003), 194.
- 3. Edward O. Wilson, The Meaning of Human Existence (New York: Norton, 2014), 176–177.
- 4. Robert Wright, The Moral Animal (New York: Vintage, 1995), 9-10.
- 5. Clifford Geertz, The Interpretation of Culture (New York: Basic Books, 1973), 49.
- 6. Loyal Rue, Everybody's Story (Albany: State University of New York Press, 2000), 91.
- 7. Matt Ridley, The Origins of Virtue (New York: Penguin, 1996), 18.
- 8. Ibid., 38.
- 9. Wilson, The Meaning of Human Existence, 178-179.
- 10. Edward O. Wilson, The Social Conquest of Earth (New York: Liveright, 2012), 57.
- 11. J. Feinberg, in Matthieu Ricard, Altruism (New York: Little, Brown, 2015), 141.
- 12. Ridley, The Origins of Virtue, 147.
- 13. Ibid., 165, 193.
- 14. Richard Wrangham, in John Brockman, ed., in *The New Humanists* (New York: Barnes & Noble, 2013), 103.
  - 15. See, for example, Nicholas Wade, The Faith Instinct (New York: Penguin, 2009).
- 16. See Christopher Boehm, *Hierarchy in the Forest: The Evolution of Egalitarian Behavior* (Cambridge, MA: Harvard University Press, 2001).

- 17. Paul R. Ehrlich, Human Natures (New York: Penguin, 200), 256.
- 18. Robert N. Bellah, *Religion in Human Evolution* (Cambridge, MA: Harvard University Press, 2011), 207–208.
  - 19. Ibid., 232.
- 20. Bruce G. Trigger, Early Civilizations: Ancient Egypt in Context (The American University in Cairo Press, 1993), 102; Lynn V. Foster, Handbook to Life in the Ancient Mayan World (New York: Oxford University Press, 2002), 178.
  - 21. Hence the title of Matt Ridley's 2003 book: Nature Via Nurture.
- 22. Karl Jaspers, The Way to Wisdom: An Introduction to Philosophy (New Haven, CT: Yale University Press, 1954), 98.
  - 23. Everybody's Story, 30ff.
  - 24. Both Biblical translations from the New International Version.
- 25. Suttanipata 1.8, in The Suttanipata, trans. Bhikkhu Bodhi (Somerville, MA: Wisdom Publications, 2017), 179–80.
  - 26. Ricard, Altruism, 6.
- 27. Rita Nakashima Brock and Susan Brooks Thistlewaite, *Casting Stones* (Minneapolis: Augsburg Fortress, 1996), 92.
  - 28. Rue, Everybody's Story, 37; my italics.
- 29. Lynn White, Jr., "The Historical Roots of Our Ecologic Crisis," in Ian G. Barbour, ed., Western Man and Environmental Ethics (Reading, MA: Addison-Wesley, 1973), 28.
  - 30. Rue, Everybody's Story, 37.
- 31. D/ H. Lawrence, Apocalypse and the Writings on Revelation (New York: Penguin, 1995), 96. Paul West: "Praying to an otherworldly God is like kissing through glass."
- 32. Arnold Toynbee, Change and Habit: The Challenge of Our Time (New York: Oxford University Press, 1966), 112.
  - 33. Karl Jaspers, The Origin and Goal of History (Abingdon: Routledge, 2014), 7; his italics.
  - 34. Geertz, The Interpretation of Culture.