

Chapter 5

The Correlated History of Social Organization, Morality, and Religion

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Abstract Morality and religion have evolutionary and cultural roots in the social behavior of our ancestors. Fundamental precursors and major features of morality and religion appear to have changed gradually in concert with social transitions in our history. These correlated changes involve trends toward increased breadth and complexity of social interaction, leading to a stepwise extension of the scope of human sympathies to more inclusive social categories, and eventually the universalization of moral and religious concepts, practices, and explanations. These changes can be integrated provisionally into an eight-stage model of human social history, beginning with nepotism and dominance that are characteristic of many social mammals, and culminating in the intellectual ability and (sometimes) social freedom of modern human individuals to examine moral and religious conventions, to modify or reject them, and even to propose new ones.

5.1 Introduction

In the last 2 million years, several unique traits have evolved in the human lineage: extraordinary intelligence, an unprecedented capacity for cultural transmission of ideas, morality, and religion. These traits are unlikely to have arisen by coincidence in the same species over the same period of time. In fact, evolutionary biologists have recognized important functional relationships between these traits (Alexander 1979). If a consensus is emerging as to the evolution of these features of modern humans, perhaps it can be encapsulated as follows: human intelligence evolved as a social tool, facilitating cooperation within groups in order to more effectively compete between groups; the ensuing intellectual arms race selected for rapid cultural innovation and transmission of ideas; cooperative norms within social groups were formalized into the institution of morality; and religion grew out of obedience

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to social authority and fostered group solidarity (Alexander 1990; Tomasello 1999; Irons 2005; Flinn et al. 2005). Much of the theory and empirical work to support this developing picture is based on traits in contemporary human societies; whereas all of these traits presumably evolved by small steps from ape precursors in a sequence that is much less well understood.

In this chapter I relate this functional analysis of morality and religion to the evolutionary history of human sociality. I consider morality to be the individual cognitive faculty of setting, modifying, and (sometimes) following ultimate standards or priorities for life and thought. Religion I consider to be the faculty of entertaining ultimate explanations for morals, life, and often the rest of the universe, especially with respect to their essential nature and purpose. Thus I consider cooperation to be a fundamental aspect but not definitive of morality (Lahti 2003), and a belief in the supernatural to be a common element but not definitive of religion. Moreover, I broadly define morality and religion as individual traits, while recognizing that they gain most of their content and currency not individually but in social groups. My goal is to present a provisional account of the gradual formation of morality and religion in a changing social environment. This proposal is guided by three expectations: (1) that morality, religion, and human social structure function in a mutually compatible way at each stage of human evolution; (2) that the form of these traits at each stage be consistent with the anthropological and archaeological record; and (3) that each major change in morality and religion in our lineage be facilitated by a particular change in social environment.

Presenting such a general sketch requires simplifications of human evolutionary history and cultural traits. For instance, I present a single trajectory of trait change with the benefit of hindsight from an endpoint in contemporary urban civilization; this lineage-specific focus neglects many human groups past and present. Moreover, I ignore the question of the mechanism of trait change. We can assume that human traits have changed more via genetic evolution over long and ancient periods and more via nongenetic cultural modifications over short and recent periods. For example, the capacity for modern social intelligence surely arose by biological evolution, whereas the modern tenet that all humans are created equal arose through nongenetic cultural change. I do not attempt to distinguish between these modes of change here, and indeed we know too little to make many specific conclusions of this sort in the large gray area between these two examples. In this chapter, then, I use the term “evolution” in a very broad sense, encompassing changes in genes as well as changes in experience including social learning. Incidentally, we can explore possibilities for an environmental fit, or adaptive value, of human trait changes regardless of the mechanism of change. Thus a particular social modification can be adaptive in a biological sense (i.e., beneficial, and ultimately conferring reproductive advantage, in a particular environment), even if it arises and spreads solely by nongenetic means such as social learning. In fact, we might expect widespread socially learned traits commonly to be adaptive if human plasticity has evolved for the same kind of reason as it has in other living things: as a way to behave adaptively in a rapidly changing or unpredictable environment.

5.2 A “Bottom-Up” Hierarchical Model of Human Social Evolution

I propose that as human social environments change, the nature of conventional morality changes with them, followed closely by changes in conventional religious attitudes and behavior. Thus a central hypothesis here is that “lower” cultural traits such as social aggregation and cooperation have been the predominant drivers of change in the “higher” traits of morality and religion; and that moral change has been the predominant driver of religious change. The rationale behind this hierarchy follows from the developing picture of the adaptive functions of these traits. The natural environment, a social group’s neighbors, and a group’s own cultural history are likely to most directly influence basic social features such as the distribution of wealth, means of subsistence, social group size, mating system, number of children, and the degree and kind of cooperative and competitive activities. These in turn are the raw material for morality, which tends to institutionalize and foster rules that resolve conflicts between and within people with respect to these features (Alexander 1992). Presumably, the operation of morality can only change the external influences on a group very gradually; so for morality to continue to serve anyone’s interests in a changing environment, it must instead keep pace with environmental change. Ultimately, the deepest explanations and purposes that underlie social relationships and moral codes – the stuff of religion – will follow suit, harmonizing the new social environment and its moral dimension with the people’s conception of the universe and their place in it. Despite the predominance of this causal hierarchy, synergistic changes and feedback loops among all of these traits may also be important.

This rationale does not imply that changes in morality and religion are smooth or necessarily follow the interests of all the individuals whose ideas are changing. Rather, power differentials are likely to play a major role here just as in more basic behaviors such as finding food and mates (Lahti and Weinstein 2005). Accordingly, the distribution of the benefits of moral and religious change among individuals will be skewed, just as biologists talk of reproductive skew associated with mating systems (Summers 2005). Perhaps, the most important limit to these power differentials is the dependency of even the most powerful people on their social groups. Theory suggests that group stability becomes fragile under excessive within-group competition, and powerful individuals stand to lose all if they compromise the stability of their social groups in the face of external threats (Lahti and Weinstein 2005).

5.3 Categorizing the History of Morality and Religion

Two important axes in the history of morality and religion are the forms of the relevant behaviors or ideas, and the scope of moral consideration. With respect to form I suggest that much of morality is rooted in *pre-moral sociality*, a broad category including any tendency to cooperate with other individuals (Fig. 5.1).

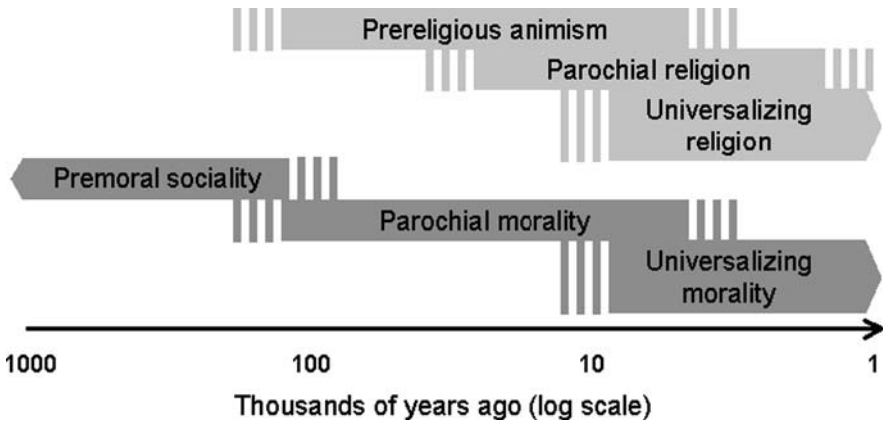


Fig. 5.1 Hypothesized timeline for the history of broadly categorized forms of morality and religion and their precursors. Both *prereligious animism* and *parochial morality* are likely to have arisen with the evolution of language; *parochial religion* likely arose later as indicated by social group dynamics, burial practices, and art; and *universalizing morality and religion* probably spread with increased intergroup communication, population density, and control over nature associated with the agricultural revolution. Points of extinction of trait forms are particularly speculative, so each bar should be seen as representing the time period over which each trait form may have characterized a significant proportion of the human population

Many social organisms express this trait to some extent. At its most intense, premoral sociality can involve radical self-sacrifice in service to the social (kin) group, when such behavior contributes to the maximization of the individual's genetic representation in subsequent generations. Regardless of the intensity of cooperation, we have no reason to believe that nonhuman organisms consciously prioritize life goals or construct, share, and follow explicit rules (de Waal 1996). Morality, on the other hand, is a more cognitively demanding suite of traits apparently restricted to humans that involves the conceptual formulation, explicit communication, and mutual enforcement of rules or priorities for attitudes and behavior (Lahti 2003). In *parochial morality*, these standards are perceived as arising within a social group and having relevance only within that group. The bases or motivations for adhering to guidelines in parochial morality are limited to practical concerns such as reputation, appeasement of the powerful, and group stability. On the continuum of *universalizing morality*, on the other hand, the origin and basis of moral standards are considered to transcend the social group to some extent, and so moral standards are considered to apply outside of the group. Although practical bases or motivations can still be significant or even overwhelming, universalizing morality makes possible the rationalization of moral standards, their integration into a general world-view, and even a skeptical investigation of their importance and relevance.

Broad categories in the evolution of religion can be laid aside those relating to morality. Parochial morality can simply involve following the dictates of group

members; however, it is also compatible with *prereligious animism*, where people recognize inscrutable entities or powers that may require appeasement. *Parochial religion* is a further development where unseen powerful entities, especially dead ancestors at first, become a resource for explanations for their demands as well as for natural events and objects. Coincident with the universalization of morality is *universalizing religion*, where a favored deity or power emerges, eventually becoming the single arbiter or author of the universe in both its natural and moral aspects for the great world religions. Fully universalized religion generally entails that religious entities and the explanations and moral norms they provide should apply in all times and places.

With respect to the scope of moral consideration, a longstanding perspective in the history of ideas is that our moral obligations are diverse and organized into social levels. As Cicero wrote,

Part of us is claimed by our country, part by our parents, part by our friends. . . The union and fellowship of men will be best preserved if each receives from us the more kindness in proportion as he is more closely connected with us. (Cicero *De Officiis*, I.xvi).

Darwin enlarged upon this view by proposing that the history of morality and its ancestral social instincts has been characterized by the gradual extension of our sympathies to ever more inclusive social categories (Darwin 1871):

Finally the social instincts, which no doubt were acquired by man as by the lower animals for the good of the community, will from the first have given to him some wish to aid his fellows, some feeling of sympathy, and have compelled him to regard their approbation and disapprobation. Such impulses will have served him at a very early period as a rude rule of right and wrong. But as man gradually advanced in intellectual power, and was enabled to trace the more remote consequences of his actions; as he acquired sufficient knowledge to reject baneful customs and superstitions; as he regarded more and more, not only the welfare, but the happiness of his fellow-men; as from habit, following on beneficial experience, instruction and example, his sympathies became more tender and widely diffused, extending to men of all races, to the imbecile, maimed, and other useless members of society, and finally to the lower animals – so would the standard of his morality rise higher and higher. (p. 282)

In the scheme that follows, I build upon Darwin's idea of the extension of sympathies to ever larger social circles (Fig. 5.2) but I provide a different perspective on the mechanism. Darwin, in Victorian moral progressivist fashion, implied that once "small tribes are united into larger communities," the diffusion of sympathies is the result of unbiased social learning and reason in an apparently constant and stable social environment (Darwin 1871). I hypothesize instead that each important and widespread extension of moral scope is facilitated by a particular change in social environment, and that humans as a rule have broadened their scope of moral consideration only when it has become adaptive to do so (Fig. 5.2). By "social environment" I mean primarily demography and resulting patterns of social contact. Thus I propose that factors such as group size and density affected the criteria for

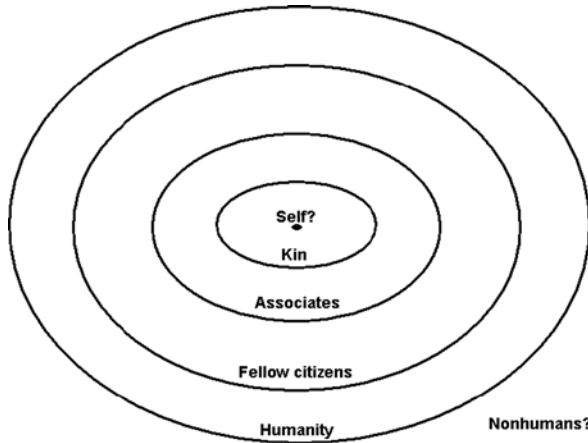


Fig. 5.2 Hypothesized schematic of the extension of social and (eventually) moral sympathies to ever more inclusive social categories in humans and their ancestors. The circle of *kin* would have been the operative social group until mutualism became advanced in the great apes (as well as other lineages) and resulted in cooperation with *associates* with only limited regard to kinship. Subsequently in the human lineage, social group size increased, cooperation grew in complexity, and parochial morality arose; however, the circle of moral consideration probably did not expand again categorically until human social groups began to establish group alliances, creating a category that may be loosely termed a *fellow citizen*. The notion of duties to *humanity* was likely introduced with the increase in communication across social groups and the freedom of some individuals to communicate (especially in writing) their philosophies about the basis of moral norms. Also since that time, two further loci of moral consideration have occasionally been argued: one's *self*; and *nonhuman* entities such as sentient animals, living things, or nature

membership and status in a group, and the degree and nature of interaction with other groups; and that these in turn influenced the nature of cooperation, and ultimately aspects of morality and religion for these groups. Moreover, to a lesser extent, these changes in morality and religion may have prompted adjustments in demography and social interaction, resulting in a mutually reinforcing correlated history of social organization, morality, and religion. Certain individuals, especially in a stable and wealthy situation, may of course extend their own moral scope at will, as Darwin suggested, regardless of their social organization. However, I argue that major moral reforms or revisions have generally transformed human society only when the social environment renders such changes adaptive or advantageous to individuals in that society (especially powerful individuals). Incidentally, my suggestion that each stage in the evolution of morality and religion is functionally appropriate to a particular social environment lends no support for the idea that one stage is morally or otherwise superior to others in an objective sense. I follow many other researchers in proposing, from the vantage point of our current culture, that social evolution has tended to proceed in a particular order. Nonetheless, extant human

groups today may reside at various stages, their morality and religion being likely appropriate to respective features of demography and patterns of social interaction.

5.4 An Eight-Stage Model for the Correlated History of Social Organization, Morality, and Religion

5.4.1 *Nepotism and Dominance in KinGroups* (Premoral Sociality)

Perhaps, the most ancient of behaviors that hindsight would place in the ancestry of morality is aid to close relatives. Humans have always lived in kin groups and spent much of their lives aiding kin, a trait we share with many other organisms including invertebrates, thus placing its origin on the order of hundreds of millions of years ago. In terms of emotional bonds, mammalian nepotism seems to derive from the mother–offspring bond, which would have coevolved with lactation and is thus at least 135 million years old (Clutton-Brock 1991). Thus one could argue that the eponymous trait of mammals, maternal care of offspring, is a major reason why advanced sociality and morality eventually evolved in the mammalian lineage rather than in lizards or fish, for example. In the primate lineage, kin groups have grown larger and nepotism more complex (Chapais and Berman 2004). In many monkeys and the great apes, kin recognition at least of maternal relatives up to the level of half-siblings and grandmothers–granddaughters ($r = 0.25$) can function in social interactions. Major further advancements in nepotism, however, do not appear until after our split with the chimpanzee lineage about 6–7 million years ago. Since that time, for instance, our ancestors evolved to recognize, and to cooperate differently according to several gradations and pathways of relatedness beyond the 0.25 level, including aunts, uncles, cousins, grandparents, and grandchildren of both sexes. Care of offspring by fathers is also derived in the human lineage among apes. To the extent that a move toward monogamy is indicated by reduced sexual dimorphism and in turn facilitates paternal care, the intensity of paternal care likely evolved gradually over the last 6 million years. Increased paternal certainty would have increased the likelihood of nepotism toward paternal as well as maternal relatives during this period (Alexander 1990; Reno et al. 2003).

In many social mammals dominance relationships play a large role in determining behavior, and these relationships in the great apes are the ancestral foundation for the hierarchical power structures evident in human societies (de Waal 1996). Moreover, these relationships can interact with nepotism; for instance, individuals may prefer to associate not only with kin but also with others of a similar age-rank (Chapais 2001). Appeasement behaviors and the systematic manipulation of benefits from others, which together form another important evolutionary root of human cooperation, are known in the other great apes as well as other primates (Ghiglieri 1987).

5.4.2 Mutualism and Reciprocity in Nomadic Bands (Premoral Sociality)

The first major extension of social sympathies from the kin group was cooperative interaction with associates in dyads or small groups. Initially such interactions would have occurred among close relatives, but subsequently mutualisms would have evolved that did not require kinship. The simplest “by-product” mutualisms, where individuals benefit each other incidentally while pursuing their own benefit, are widespread in the animal world. These situations evolve greater complexity and cooperation when individuals *invest* in those incidental benefits because of the dividends they return (Connor 1995b). Many instances of primate cooperation can be explained as two or more individuals cooperating to gain a benefit none may gain otherwise, and where benefits to all are simultaneous and the risk of being cheated is negligible (Reeve 1998). Even cooperation between closely related individuals may have evolved not only by kin selection, but also because siblings are preferred collaborators due to their familiarity. Recent research shows that chimpanzees are adept at choosing associates in complex cooperation on the basis of compatibility or efficacy in collaboration (Langergraber et al. 2007; Melis et al. 2006). This kind of cooperation involving “partner markets” (Hammerstein 2003) among nonrelatives is thus at least 7 million years old in the ape lineage, although mutualistic relationships in modern human groups obviously represent a vast increase in complexity from the chimpanzee form.

Not all cooperative ventures in a social species can provide simultaneous benefits to all individuals. Grooming of necks and heads, for instance, requires that one individual be a recipient and one be a donor at any given time. In these situations, which are present in many primate species and some other animals such as ungulates, social conventions can evolve to minimize the risk of cheating. For instance, benefits are given in small doses (parceling) and an individual must first groom in order to be groomed (Connor 1995a). This can be seen as a rudimentary form of reciprocity or exchange of benefits where there is a delay between the investment and return (Trivers 1971). In this simple form where cheating is not a significant risk, reciprocity is likewise many millions of years old because we share it with grooming apes.

More advanced or high-stakes reciprocity where interactions are risky because of the possibility for taking a significant benefit without returning it is apparently restricted to humans. A plausible explanation for the transition from chimpanzee to early human intensities of reciprocity is the following: Social groups were likely maintained in our lineage by selection at first for predator avoidance, and later for cooperative group-hunting (Alexander 1989). Early Australopithecines were similar to chimpanzees in relative brain size, and probably were chimp-like also in that survival and reproduction were strongly limited by both predation and competition with conspecifics. It is also parsimonious to expect that, again like chimpanzees, our early ancestors would have had a “second inheritance system” besides the genes. Traditions in social interaction and practical technology would have been innovated and transmitted by social learning (Whiten 2005). The combined

dangers of predation and competition within and between hominid species would have fostered an increase in intelligence, which must eventually have permitted socially learned traditions to accumulate over time: the formation of a cumulative culture. Perhaps, it was when our ancestors' innovations were able to build up in this way that they accomplished what chimpanzees still have not: They reduced their susceptibility to predation and between-species competition to the point where conspecifics became the main determinant of an individual's reproductive success (Alexander 1990).

This situation would have produced a cascade of interacting effects. As competition among human groups became the primary function of group living, selection would have ever more strongly favored cooperation within groups in order to foster group solidarity in the face of competition with other groups (Alexander 1990). Service to the group would have become adaptive, and would have rendered otherwise risky cooperative ventures less so, since all members of a competing social group were likely to share a common fate (Alexander 2005). Chimpanzees may have embarked on this trajectory as they regularly engage in murder of nongroup members and occasionally war group against group (de Waal 2005). The intensity and stakes of these phenomena increased greatly in our lineage, however. For instance, group extinction is much less common in chimpanzees than it appears to have been for early humans, where it may have been routine (Bowles 2006). Intense group competition would have favored not only more cooperation but also larger group sizes. As group sizes grew, the complexity of social interactions and the intensity of competition within groups would have increased as well, moderated by the need for group stability for effective between-group competition (Lahti and Weinstein 2005). Competition with conspecifics would have fostered a "Red Queen" situation where natural selection for outwitting and assessing one's fellows would have intensified in the species, resulting in a steep increase in intelligence (Humphrey 1976). The extent to which within-group competition vs. between-group competition contributed to this intellectual bloom is an open question, but certainly within-group competition would have been tempered by relatedness and the benefits of cooperation, whereas between-group competition would have been relatively unfettered to the extent that groups were nomadic and forged few confederacies with other groups.

The explosion of tool use in early *Homo* around 2 million years ago (Susman 1994) also marks the beginning of the first acceleration of brain size in our lineage (Ruff et al. 1997). This suggests that nomadic bands of the period may have been experiencing fiercer competition than their ancestors, selecting for increased intellect and technology (Flinn et al. 2005). It is plausible that along with these innovations an increase in the complexity and integration of cooperation also evolved, perhaps including direct reciprocity. Perhaps, only with such enhancement of our cognitive faculties could our ancestors process and retain the information required for high-risk delayed-benefit reciprocity to function (Hammerstein 2003). Group members would have been repeatedly encountered, and with advanced facial recognition and a long-term memory of past interactions, one could effectively choose reliable associates and friends among a large pool of

group members, and could retaliate against or avoid those who fail to cooperate (Trivers 1971).

A still more advanced form of reciprocity is indirect, where multiple communicating individuals interact such that rewards for cooperating and punishments for defecting can be administered by any other individual in the group or the group as a whole (Alexander 1979). The most common vehicle for the return of these rewards and punishments today is reputation, but in its early form a general, infectious emotional disposition toward or away from certain people on the basis of their actions would have been sufficient. I suggest tentatively that indirect reciprocity in a basic form could have operated with limited nonverbal communication and third-party observation and copying, and so may have been well established 500,000 years ago, when homes became more lasting and social groups consequently more stable (Potts 1992; Brace 1995). From this time onward, our lineage experienced the second great acceleration of brain size evolution (Flinn et al. 2005), suggesting that major intellectual advancements accompanied these social changes. As humans grew in social intelligence and sympathy and began to accumulate and act on impressions of others, an implicit trust would have emerged in close-knit groups, multiplying the opportunities for mutually beneficial interaction with associates; no longer would cooperation have been strictly confined by the relatedness of aid to kin, the equivalence and immediacy of benefits from mutualism, nor the risk assessment involved in direct reciprocity. For instance, 100,000 years ago, humans had probably switched to big game hunting and certainly embarked on long distance travel (Key and Aiello 1999), two behaviors that must have intensified between-group competition, requiring cooperation with high stakes, significant communication, and strong interpersonal relationships. The growing importance of communicating social information in the context of indirect reciprocity around this time may have been a major selective factor driving the evolution of our complex language.

5.4.3 Persisting Rules in Hierarchical Bands (Parochial Morality, Prereligious Animism)

Three major social changes likely to be relevant to morality and religion appear to have been important between about 100,000 and 70,000 years ago: an increase in the complexity of language, burial of the dead (perhaps with ceremony) and the strengthening of hierarchies or leadership within social groups (Dunbar et al. 1999). Although the evidence for the precise timing of these developments is scarce, their coevolution with each other and with early morality and prereligious animism is plausible.

As humans achieved the ability to represent people, objects, actions, and attitudes in language, previously vague and ephemeral commands with little symbolic content could eventually be formulated as general rules for behavior with increasing clarity, specificity, and permanence. This rule-following would qualify as (parochial)

morality, especially insofar as rules were viewed as communally accepted standards instituted by leaders, as opposed to self-serving demands of the leaders (i.e., rules enhancing group stability rather than rules deriving from dominance relationships, although these certainly would have overlapped). Labels could be attached to people in the form of names and relationships, facilitating kin recognition and deepening the complexity of nepotism and the ease with which family membership and precise pathways of relatedness could be assessed. Indirect reciprocity, which would have promoted the development of rules of behavior, would also have been more effectively practiced with the evolution of language (Alexander 1979). Individuals would be able to share and store much more social information than they could ever observe, including assessments of the relative commitments of others to cooperation and group service. In this situation, rewards for a good reputation (and punishments for a bad one) could be more far-reaching and accurate than previously. As these rewards and punishments grew in intensity and pervasiveness, behavior in service to the group that would previously have been sacrificial would return ever-increasing benefits through enhanced reputation. Moreover, since primate social group size seems to be limited by the mental capacity to monitor social relationships within the group (Barton 1996; Aiello and Dunbar 1993), each increase in the power and complexity of language probably increased the number of individuals that could be monitored, resulting in larger group sizes and subsequently a greater need for leadership. This having been said, the scope for the action of indirect reciprocity at this stage would have been somewhat limited, since people still lived in close-knit kin groups.

Before the advent of complex symbolic representation, communication about arcane powers or spirits would have been difficult. Individuals may have had capacities for imagination, but not until language formation would imaginations have become cumulative and communal, likely leading almost immediately to some form of prereligious animism – that is, an animism that recognizes powers or spirits but does not yet consult them to answer deeper questions of existence. In line with much animism in the historical period, these entities were probably perceived as mysterious agents, potentially either hostile or friendly, before the rise of ancestor worship, but they would have had no particular recognized leadership role that would have competed with the elders – such an extra-group source of leadership would have been unprecedented.

Burial practices may originally have protected the group from disease or wild animals, but between 100,000 and 70,000 years ago burial patterns appear to have taken on a greater significance (Smirnov 1989). Some have claimed that the use of red ochre and other ritualistic burial practices indicate the belief in an afterlife. Modest ceremony and limited decoration might also indicate merely a reverence for the life of a social group member or an awe of death, which would not imply the presence of beliefs (Chase and Dibble 1987). These attitudes may have resulted from increasingly formalized rules of cooperation and group service, since respect for the dead may correlate psychologically with respect for the living. It is likely that our ancestors were fascinated, as we are today, with death and the loss of loved ones (Pinker 1997). Once sentiments like these arose, they can be expected to have

left a trace in the disposal of the dead, especially considering the increased ability to communicate emotions.

5.4.4 Ancestor Worship (Parochial Morality and Religion)

An evolutionary perspective on traits tends to follow Darwin's dictum that evolution proceeds by small steps. Therefore a working assumption in an evolutionary anthropology should be that radically new traits such as religion descended gradually from functional precursors. I suggest that the crucial cultural step in the evolution of religion was not the sudden recognition of previously unknown spiritual entities, but rather a subtle psychological slide from remembrance of and reference to the dead, to the concept of an afterlife. The conceptual distinction between "Grandfather *would have wanted* you to do this" and "Grandfather *wants* you to do this" would not only have been slight in a linguistically simple culture, but community norms would be much more effectively upheld by the stronger latter claim. As soon as elders began to be perceived as remaining powerful and offering advice *post mortem*, the society can be considered to have entered upon parochial religion by the definition offered here (Steadman et al. 1996). This development would have further strengthened the community not only by ensuring the maintenance of traditional rules with reference to a past leader, but also by rooting them in a person who was to some extent superhuman. Thus I argue that religion has not co-opted moral norms, as some social theorists claim; rather, moral norms themselves favored the evolution of religion, and in its most rudimentary state religion's social function was not primarily as a source for explanation of events or existence, but rather as a basis and bulwark for morality (Roes and Raymond 2003). Nevertheless, once leaders suggested that ancestors could be consulted, the matters on which they would have weighed in would have extended to the future and the humanly unknowable. For this reason I defined religion earlier in terms of the provision of explanations for the biggest questions, rather than the supernatural per se.

When ancestor worship first arose is debated, but perhaps the best indication is grave goods. Valuable objects buried with the dead suggest that the people might have believed the objects would be used in an afterlife. Grave goods appear first to have become important between 40,000 and 30,000 years ago (Gowlett 1992), and it is possible that ancestor worship in a less developed form arose even earlier.

5.4.5 Fellow Citizens and Gods in Priest-Led Tribes (Parochial Morality and Religion)

Between-group competition is expected to have intensified in modern humans throughout the Pleistocene – with each other in Africa and Asia, and also with Neanderthals in Europe. Land and large mammals were among the resources that

would have brought groups into direct competition with each other, especially as technological advancements, art, and perhaps larger group sizes tended to keep groups in one place. Contact between our species and Neanderthals in Europe may have been the cause of their extinction by 30,000 years ago (Mellars 2004), the last of several hominid extinctions that may have been the result of niche overlap with our species and its ancestors (Alexander 1989). War would have become an increasing determinant of survival in human groups across the world. In the historical period, war has been perhaps the strongest stimulant to technological growth, and apparently the Paleolithic was no exception: stone tool technology advanced at a tremendous pace between 40,000 and 10,000 years ago (Jurmain et al. 1997).

Not all contact between Paleolithic human groups was hostile; in fact, in a growing population new groups would form by fission and their members would be related. Consequently, one important development in this period was the formation of alliances between neighboring groups, which would have mitigated competition and perhaps facilitated communal defense against other groups (Alexander 1978). The result was a loose-knit society of interrelated kin groups in a regional population linked by marriage and meetings for rituals and hunting (Landers 1992). Furthermore, as similar groups in the historical period indicate, leadership in such a society may have depended somewhat less on inheritance, and competition for leadership would have become increasingly important.

I suggest that the rise of a multigroup society resulted in the first major categorical increase in the scope of moral consideration that *Homo sapiens* had ever undertaken (Fig. 5.2). Although the nature of cooperation had changed tremendously – indeed, morality had evolved – since the ancestors of humans diverged from the other apes 6–7 million years earlier, the fundamental social level at which sympathies were appropriate had always been the clan or band, within which all individuals would have been known by all others (Landers 1992). It is likely that neighboring groups, especially if they had formed by fission, would have been tolerated to some extent throughout human history. However, not until approximately 30,000 years ago, when humans had spread throughout the globe and art and ritual were widespread and rapidly advancing, has evidence indicated systematic contact and corporate relationships between groups. This social situation would require a standard of treatment for people in affiliated bands, a novel category of those to whom some duties, though fewer than to one's own group, were required. I suggest that the concept of a “fellow citizen” (although etymologically associated with cities rather than loose regional populations) adequately reflects the moral status people would have given members of these other groups. The mutual expectations would likely have included aid in war and other emergency, tolerance of religious differences, some participation in shared ceremony, respect for each others' leaders, and acceptability as mates. Indirect reciprocity and the role of reputation would have been vital in this new situation, for instance in ensuring that daughters were married into good families, and that individuals in neighboring groups could be trusted in hunting or war parties.

Ancestor worship generally evolved into or coexisted with an emerging polytheism, with magic and local spirits common. I suggest that this development was predictable, given the social and moral changes that were occurring. With the weakening of hereditary leadership and the increased contact between groups, the ancestors of one group would not necessarily continue to hold sway, and so they would have to gain power or else be supplemented or replaced by other powers. As ancestors “broke the ice” for belief in supernatural persons who were interested in human affairs and could be consulted for leadership, local and regional gods could have taken their places, or ancestors could even transform into them. Magic, including shamanic medicine, would have attracted and strengthened commitment to these spirits. Spirits could be appropriated for all aspects of life, as witness the proliferation of fertility figurines. Shared rituals between groups could invoke spirits that all participating social groups revered, cementing social relationships and a common moral commitment. Thus, with an increase in the extent of communication among social groups, both morality and religion became accordingly less parochial, which I suggest is a general theme on the whole of human social history.

5.4.6 Favored or Chief Gods in Agricultural Societies (Parochial to Universalizing Morality and Religion)

The agricultural revolutions that began to occur about 11,000 years ago resulted in population centers with a greater diversity and number of interacting people, and a greater degree of control over nature than had ever been customary for humans (Hole 1992). One of two alternative cultural strategies could have been adopted in these situations: isolation or integration. Smaller regional groups that were not at the helm of the new agricultural civilizations but lived near or within them may have chosen to preserve their traditional social and moral structures by avoiding external influence, strengthening old dispositions to mistrust outsiders and to associate preferentially with those who are closely related. A ruling state, however, would have found greater advantage to being integrationist, as its culture would spread and strengthen by influencing and incorporating more groups (Lahti 2004).

As for social structure within the agricultural society, leaders would have been relatively ineffective if they depended on kinship ties to give weight to commands in a cosmopolitan social environment, so political expediencies were necessary to facilitate social order. A strong social hierarchy or class system appears generally to have been imposed (Twiss 2007). Moral and legal standards were more generalized and less parochial than those of tribal cultures, a trend that became especially evident upon the development of writing. For instance, most of the laws in the Sumerian Hammurabi Codex (c. 1760 BC) begin with the generality “If any one...,” although some are class-specific (“If a chieftain...” or “If a slave...”). Citizens of city-states would encounter and depend upon various kinds of people,

including many known only by name and reputation. Therefore, indirect reciprocity in such a cosmopolitan situation would have assumed paramount importance in the enforcement of moral standards in a community of peers (Alexander 1979). Leaders and their law codes could encourage and intensify indirect reciprocity by enhancing public dissemination of social information, ensuring its accuracy, and formalizing reputational rewards and punishments. For instance, the Code of the Assura (c. 1075 BC) lists “ruining of reputation” as one of three nonlethal forms of punishment for breaking laws (I.57). Likewise, the *Teaching For Merikare* (see Table 5.1) demonstrates that indirect reciprocity was so central by 4,000 years ago in Egypt that the impacts of reputation even after one’s death were considered a primary reason for being good in this life.

A variety of gods associated with local cultural or natural entities gradually gave way to a more generalized pantheon where gods represented less parochial objects (such as the sun, fertility, or the harvest), although these ideas were undoubtedly present in local traditions earlier (Leeming 2005). Leaders also tended to consecrate a chief god, or a god devoted to the civilization. A culture’s most significant rituals would generally be in service to this chief deity, and moral codes were most likely claimed to proceed from that deity as well (Smart 1976). Often this deity was a glorified local god, a deified ancestor king (or living king!), or a transformed favorite god in a preexisting cosmopolitan pantheon. The favoritism of a single deity above others, and the attribution of an increasing proportion of natural events and features to that deity, marks a transition from the picture of nature as chaotic and controlled by many forces (the animistic -polytheistic view) to a picture of nature as regular and reliable, as if controlled by a single personality or power. Thus a cosmopolitan social environment and increased human control of nature would have led neolithic agricultural societies at least part of the way toward monotheism and the universalization of religious and moral ideas.

5.4.7 One World, One God, One Good (Universalizing Morality and Religion)

Any culture that favored the view that nature was orderly and understandable, and that humans from different lineages could (at least in principle) agree to abide by similar moral and legal guidelines in a society, might not rest comfortably at any parochial understanding of morality or religion. A favored god could only maintain an orderly universe if competing gods had no say or no existence. Divergent human groups could only be morally similar if they shared a common origin and purpose. If this is true, it is not surprising that from perhaps 4,000 years ago, the chief god of some societies began to transform into an only god, generally responsible for creating the universe and its value structure, and establishing human life and its purpose. The earliest written evidence of such monotheism is some passages from the *Bible*, the *Vedas*, and Akhenaten’s *Great Hymn to the Aten*, all likely to have been written in the second millennium BC but probably stemming from older traditions.

Two general processes seem to have been employed to universalize religion and morality at the cultural level. Primarily in the West, the favored gods of different peoples either metamorphosed into or give way to a single universal god (e.g., Yahweh, Allah). Primarily in the East, the differences among many gods faded into the background of the religion, which placed less and less importance on distinguishing them; the emerging single entity became an over-soul or a value-laden essence of the universe (e.g., Brahman, Tao). By either process, the crucial aspect of this cultural transition is that the god is now universal and ultimate, and either above or at the heart of the universe.

Table 5.1 Classic examples of traditional moral pronouncements operating at different social levels

<p>Duties to self</p>	<p>“Above all things, reverence yourself.” – Pythagoras, in Diogenes Laertius, Lives of Eminent Philosophers. “If I am not for myself, who will be for me?” – Hillel, Mishnah Aboth i.14. “One must learn to love oneself – thus do I teach – with a wholesome and healthy love.” – Friedrich Nietzsche, Thus Spake Zarathustra lv.2.</p>
<p>Duties to kin</p>	<p>“It is upon the trunk that a gentleman works. When that is firmly set up, the Way grows. And surely proper behavior to parents and elder brothers is the trunk of goodness.” – Confucius, Analects i.2. “If any provide not for his own, and specially for those of his own house, he hath denied the faith.” – Bible, I Timothy v.8. “Nothing can ever change the claims of kinship for a right thinking man.” – Beowulf, line 2600.</p>
<p>Duties to elder kin and ancestors</p>	<p>“Your father is an image of the Lord of Creation, your mother an image of the Earth. For him who fails to honour them, every work of piety is in vain. This is the first duty.” – Janet (Hindu) i.9. “Honour thy father and thy mother.” – Torah/Bible, Exodus xx.12. “When proper respect towards the dead is shown at the end and continued after they are far away, the moral force of a people has reached its highest point.” – Confucius, Analects i.9.</p>
<p>Duties to associates (community of reciprocity)</p>	<p>“Wretched is he who has bound the land to himself. . . a fool is he who is greedy when others possess. Life on earth passes away, it is not long; he is fortunate who has a good remembrance in it.” – The Teaching for Merikare (21st century BC, Egypt), par.6. “Manifest plainness, Embrace simplicity, Reduce selfishness, Have few desires.” – Lao-tzu, Tao te Ching, 19. “It is more blessed to give than to receive.” – Bible, Acts xx.35.</p>

Table 5.1 (continued)

<p>Duties to fellow citizens (e.g., of a nation)</p>	<p>“It is sweet and honorable [dulce et decorum] to die for one’s country.” – Horace, Odes ii, line 13. “Do we wish men to be virtuous? Then let us begin by making them love their country. – Jean-Jacques Rousseau, A Discourse on Political Economy (1755). “Ask not what your country can do for you: Ask what you can do for your country.” – John F. Kennedy, Inaugural Address, 20 Jan 1961.</p>
<p>General beneficence (to humanity)</p>	<p>“If I am virtuous and worthy, for whom should I not maintain a proper concern?” – Confucius, Analects xix.3. “I am a man [Homo sum]: nothing human is alien to me.” – Terence, Heauton Timoroumenos, line 77. “We hold these truths to be self-evident; that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness.” – Thomas Jefferson, Declaration of Independence (1776).</p>
<p>Respect for sentience, life, or nature</p>	<p>“Consider frequently the connection of all things in the universe and their relation to one another.” – Marcus Aurelius, Meditations v.38. “The question is not, Can they reason? nor, Can they talk? but, Can they suffer?” – Jeremy Bentham, An Introduction to the Principles of Morals and Legislation, “Limits Between Private Ethics and the Art of Legislation” (1780). “A man is ethical only when life, as such, is holy to him, that is, the lives of plants and animals as well as the lives of men.” – Albert Schweitzer, Out of My Life and Thought (1932).</p>

Morality would be transformed by this monotheism or monism; the moral guidelines would be perceived as created by a Supreme Being and thus inherent in the nature of the universe rather than proceeding from a social group or its leadership, whether human or supernatural. Thus, leaders in such a situation would no longer be able to assume divinity, but would have to claim a special connection to God or the universe in order to deliver moral commands. In fact, moral or religious leaders (Buddha, Jesus) would no longer need to be political leaders (much to the chagrin of the political leaders), as long as the political leaders did not have such complete authoritarian power that they could enforce the religious, and thus moral, allegiance of the populace.

The fact that in all of the world’s universalized religions the standards of morality proceed from the god of the religion might imply the admittedly intuitive conclusion that universalized religion was the primary cultural innovation, and the moral pronouncements were consequently adopted as universals. An evolutionary consideration of all previous major changes in the society/morality/religion trait suite would suggest the opposite, however: a cosmopolitan social environment rendered a

universal morality advantageous to individuals in that environment, necessitating a universal giver of morals. These morals are likely to relate to a meaning or purpose of human life, and of the universe whose order was increasingly recognized. These ideas would suggest that the lawgiver was also the universal creator. In a society for which a universalized morality would not be advantageous, I suggest that we should not expect a universal creator-god.

The universalization of morality and religion is more consistent than any previous stage with an extension of moral considerability to all humans. However, such an extension is not a foregone conclusion of universalization. In fact, universal religions need not abandon a hierarchical view of the moral value of humans, and indeed the universalizing religions arose in civilizations, all of which appear to have had strong class systems. The recurring prediction in this chapter is that humans will tend to adopt an extension of the circle of moral considerability when it is in their interests to do so, especially in terms of social organization. Perhaps, the increasing communication and migration among human groups is facilitating that advantage for contemporary humans in at least some societies today (Pettigrew and Tropp 2006). Regardless, some societies today, including all of the major developed nations, profess to be in the process of expanding moral considerability to all humans.

5.4.8 Individual Exploration of Morality and Religion

Although morality and religion were both defined at the beginning of this chapter as individual traits, all of the transitions above have been discussed at the cultural level, as if individuals are automatically conventional, or at least kept conventional by the coercion of powerful individuals and the mutual enforcement of indirect reciprocity. In fact, however, at least from the advent of writing and almost certainly long before that (as our intellectual capacities would have changed negligibly in a few thousand years), individuals have had the ability to question and investigate the form and content of morality and religion. *The Gilgamesh*, for instance, is at heart the story of a man of the third millennium BC yearning for an explanation of the human condition, for which the high goddess Ishtar was ultimately unsatisfying. At any point in the history of morality and religion among intellectually modern humans, there were likely many individuals inclined to philosophize and derive their own moral and religious conclusions. The degree to which they were free to develop these interests would depend on their status in the community, the restrictiveness of the political and religious leadership, and standards of education and health. In several societies in the last 2,500 years, the ideas of such individuals have made notable contributions to the cultural evolution of morality throughout the world. The range of such exploration includes, of course, an orthodoxy practically indistinguishable from that of unquestioning devotees, as well as the possibility of a wholesale rejection of religion, and thus the replacement of an older transcendent basis for morality

(e.g., will of God, essence of the universe) with another, such as functional (e.g., social contract) or psychological (e.g., emotivism).

Two further extensions of the circle of moral considerability have been proposed, but each remains somewhat controversial. The first is the possibility that, irrespective of effects on other people, what one does to oneself is a morally sensitive matter. This is a feature that is present in all of the great world religions, and is occasionally represented in the history of philosophy (Kant 1785; Moore 1903); the focus of contemporary secular moral pronouncements on concepts such as consent and liberty appear to leave little room for such moral relevance, however (Rawls 1971). The second proposed extension is to nonhuman entities such as sentient animals, living things, or nature as a whole. Darwin proposed that this would be the ultimate end of the expansion of our moral sentiments (Darwin 1871). Not many modern social groups appear to have accepted the intrinsic moral value of nature, but this idea has been argued strongly by a few thinkers, particularly in the last 100 years (Leopold 1949; Rolston 1988).

5.5 Conclusions

This provisional scheme charts the general trajectory that social organization, morality, religion, and their precursors may have taken over the course of our history. The hypothesis underlying the entire argument is that these three complex human traits have tended to evolve in a correlated fashion, with social environments rendering certain moral changes adaptive, and those moral changes rendering certain religious changes adaptive. I suggest that this hypothesis may explain some major aspects of moral and religious evolution, mainly those I have highlighted. Even if the hypothesis is explanatory, however, it is not likely to be the exclusive explanation, as morality and religion are both complex phenomena and appear to have different aspects that serve distinct functions (Lahti 2003; Lahti and Weinstein 2005).

Two major trends are evident in this scheme. The first is a progression from pre-moral sociality to parochial and then universalizing morality, coupled with a progression from prereligious animism to parochial and then universalizing religion. The second is a stepwise broadening of our moral sympathies to more inclusive social spheres. Unfortunately, I suggest that neither of these trends is indicative of an inherent moral improvement in society. Rather, I suggest that our ancestors tended to universalize morality and religion and broaden moral sympathies because new social environments rendered these changes advantageous to them, due to increased communication and association with distantly related people. Thus, I would predict that members of extant insular societies and even subcultures within cosmopolitan societies, though not intrinsically less moral, nevertheless may not have universalized their religion or morality or extended their scope of moral considerability to the extent that this scheme would suggest for our time period. Moreover, I would predict that if for some reason a change in social environment rendered a contraction of moral sympathies adaptive, such a society would promptly “regress.”

Still, human interaction across the globe will likely continue to intensify and spread as means of travel and communication continue to develop, resulting in ever more social pressure to universalize prosocial moral norms. We live in an uncertain age for religion, however. Many societies today seek to encourage commitment to shared moral norms, but without reference to a universalizing religion that would give them greater weight. A pressing cluster of questions follows, such as whether or how religion should operate in the public sphere, or whether the longstanding coevolutionary partnership between morality, religion, and social structure ought to be partially or completely severed, and how these alternatives would affect society. The silver lining in our present situation is the availability of the eighth stage, above: today probably a greater proportion of people than at any other time in human history are free to explore difficult moral and religious questions.

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