

*[David: There is still repetition in this essay, and there are also some awkward or imperfect places. I have a ways to go with it. I keep working on it.]*

*This essay began as RDA's December 20, 2003, letter to Lorrie's cousin, Wesley Upton, a moderately religious man, and a good friend, who asked what this evolutionist thinks about the concept of God (last revision, 16 May 2006).*

## **The Concept of God and the Meaning of Life**

Richard D. Alexander

First, there obviously is a concept of God, and it is widespread, perhaps in some way even universal among humans. It's an important concept for that reason alone, but also because people take their personal views of it quite seriously and mold specific actions – even their entire lives -- around those views. Because of these facts, I suggest that people who deny the “existence” of God are in reality denying some particular version of the concept of God, some definition that doesn't seem to make sense to them. My stance is that there is something real – perhaps unitary, perhaps not, and almost certainly adaptive – underlying the concept of God, and merit in trying to discover what it might be. As an evolutionary biologist I regard all aspects of life, including the meaning of human life (its significance or function – including individual or personal feelings about that), as potentially accessible to scientific analysis. For me, the only restrictions involve our ability to generate and test relevant hypotheses.

Second, no one (else) has ever expressed a version of the concept of God that I feel comfortable accepting for myself (I use the term God here to include all postulated supernatural or divine beings or creators, regardless of the names attached to them). To me, an acceptable concept means one that can be explained without invoking supernatural causes, and one that has some likelihood of informing us how our views of God came about, and why the concept developed its current significance. I think biologists – indeed, scientists in general – seek to understand all existing phenomena as natural in origin (rather than supernatural), so long as that is possible. We have no reason to believe that anything in the natural world is immune to having its background or function hypothesized, and the hypothesis tested. As scientists continue their investigations of the natural world, they are also incidentally testing the hypothesis that some phenomena, or causes, are supernatural. They are doing this, whether or not consciously or deliberately, because continued success in explanation that relies entirely on natural causes inevitably moves toward falsification of at least some versions or uses of the so-called supernatural. As long as we have not reached a point at which we are clearly and permanently stalled unless we assume something beyond the natural, we have no reason to pause.

I seek to understand the concept of God well enough to be able to postulate an origin and development of the concept that meshes with reality, eventually accounting for the different ways different people, and different groups of people, have thought about the concept and used it. If the concept of God has a background in natural phenomena and causes, then plausible reconstruction of the origin and history of the concept should also be compatible with all that we know about how the evolutionary process has molded the

human species; and the concept should inform us in ways that significantly increase human self-understanding. No naturally based process other than evolution is known that has any reasonable possibility of explaining life; the evolutionary process, based on *continuance* through reproduction and *change* through differential reproduction of variants (evolutionary selection, including natural and social selection and their various components: e.g., Alexander 2006), embodies a logic that so far appears to be irrefutable and universally applicable, and has been used to clarify the patterns and functions of life in virtually countless scientific publications. Despite predictable difficulties, there have been no unexpected roadblocks that seem to deny the possibility of continued analysis of any species or any life situation.

Even though I think it behooves us natural beings to try to account for the existence and popularity of the concept of God by invoking only natural phenomena, I am also convinced that the goal of universal peace and harmony means that it will always be useful to be tolerant and attentive to all versions of the concept of God, whether premised on natural or supernatural causes. Only if people are open-minded on a broad scale is it likely that religion can shed its reputation as a correlate (or even a principal engine) of inter-group hostility and war, and extend its equally prominent reputation as a source of cooperativeness and harmony within so far limited but expanding groups, so as to make itself a major force, or the prime one, in the effort to generate world-wide, unifying, empathetic forces.

---

*A long-time university campus pastor who had just heard me lecture on this topic began his following lecture by saying that a "concept" of God wasn't enough for him: he said he needed "the real thing." I could not convince myself that it would be useful to ask how his view of God might be more or less a concept than my own, or more or less the "real thing."*

---

Until recently there was for a few years a television program called "Joan of Arcadia." It was about a teen-age girl who continually re-encounters God, each time in the form of some everyday kind of person – a cab driver, a teacher, another teenager, or whatever. The theme song of the program asked, "What if God were one of us?"

This is not a bad place to start, because the attitude assumed in this TV program embodies what may eventually be recognized as a potential source of error (or unnecessary confusion) in our efforts to understand all that we have built up around the concept of God. This potential error, or confusion, arises from the assumption that the concept of God has to refer to something like a person – not only with human traits but also a single individual, or an individual-like entity (see also below).

Religious people typically believe that God made humans in his (sic!) own image, although there are some who admit the possibility that it might have been the other way around. The first view appears to require a supernatural background -- causes that, so far as we know, have generated out of the far reaches of the human imagination and are not observable or testable in any (other) verifiable manner -- forces that are alien to our

understanding and use of cause and effect in everyday life. The second view proceeds without reliance on divine or ethereal determinations.

In the absence of specific reasons for not doing so, it is parsimonious to begin with known events and causes, or the simplest ones available, because the fewer unlikely events or causes that are invoked, the more likely it is that the correct explanation will result. So far as I am aware, there is nothing *natural* that can be referred to as God, so long as God is assumed to carry or portray the attributes of either a single human being or some other entity that is similarly singular. If we wish to pursue a natural explanation for the concept of God, rather than assuming a supernatural one, some other construction will apparently be required. The seeming exceptions to this assertion are those instances in which eventual divinity has been imputed to individuals of natural origin, such as Jesus Christ, and all other assumptions, in various religions, that figures of natural origin represent different levels or starts toward special relationships with God. As indicated below, I propose that such imputations arise from efforts to generate a satisfying bridge between ourselves and the image of an entirely supernatural being and its possible benefits to us. Thus, our view of the life of Jesus Christ provides us with a certain security that we too have the possibility of merging with the supernatural and escaping the natural ills and limitations of our finite lifetimes. This view seems consistent with Christ being declared a Son of God, his eventual labeling as "Lord," and his elevation in some religions to virtually an equivalent or replacement of the concept of God (Christ, of course, is generally considered "The Son of God," therefore is regarded as incorporating a supernatural element from the beginning, though undergoing a painful death inseparable from that of ordinary mortals).

I suggest that an appropriate initial question about God might be, not, "What if God were one of us," but, "What if God were, in some way, all of us?" "All of us" in this question does not necessarily mean (to us as individuals) every member of the human species, even if we would like that to be the case some day. In practical terms, and across all of human history right to the present day, it could mean all of us in some particular cooperative or unified group, which could be our nuclear family, our clan or circle of relatives, our immediate community, our church membership, our culture, our nation, everyone in our particular religion all across the earth, or everyone in an alliance of nations or religions. For some purposes it could mean several or even all of these units. Among all forms of life humans appear to have the greatest ability to "belong to," and serve and gain from, an almost indefinite number of different social organizations at the same time. All such groupings are in some sense consistent with how I speculate the concept of God came to be, and came to be used. So is the idea, or hope, that such a group, or such groups, can in some sense, some day, be extended so as to comprise the entire human species. We like to believe this is true, in some sense, even now, and we promote it in various ways. But, curiously, up to now this interesting and difficult proposition – or goal – has never been achieved in a general way, and may never have been approached by organized religion. Humans are depressingly adept at dividing the world into we's and they's. I will return to this question, which is actually central to this entire essay.

"All of us" also does not have to mean all of any of us – the concept of God doesn't have to refer to everything about anyone. The concept of "all of us" could depend on some

particular component or aspect or trait of each of us, some tendency or ability compatible with the commonly heard statement that God is “within” all of us – something that enables empathy, good will, cooperativeness, and harmony. I will also come back to this feature, discussing it as a moral capability or sense.

Suppose the concept of God is attached to a “circle of social significance,” in the way suggested above. Perhaps most often, across human history, this would be the circle of kin, because there are good reasons for the prevailing opinion among anthropologists that across most of their history humans lived primarily in kin groups of up to 200-250 individuals, including spouses of kin. If so, then serving God becomes (at least historically) serving the kin circle or kindred – a possibility that is implied in fervent (and seemingly unequivocal) statements expressing variations on the idea that, “Family is everything.”

The prevalence today of cooperation in the context of social reciprocity with distant or non-relatives, in addition to nepotism (kin help and cooperation), describes another dimension to cooperativeness, making “circle of significance” a more appropriate label for modern cooperative units than “circle of kin.” In considering the relationship between kin help and social reciprocity, it is relevant that kin recognition – in the sense of generating deep commitment to social investment – is apparently developed through social learning, which is why we so easily adopt offspring (especially when they are adopted at birth, thus fulfilling the maximum possible set of learning experiences associated with producing and rearing a child). Sometimes – particularly in evolutionarily novel learning situations – we absorb genetically unrelated friends into our circles of cooperative “kin.” Appropriate partners in social reciprocity also can be identified only as a result of social learning, though through learning that is often more conscious than that involved in recognizing kin.

Serving the circle of kin is indeed what evolutionists see -- from theory, evidence, and logic -- as the evolved function of the individual human. Serving kin is the evolved function of the lifetime in all organisms, always in a simpler way for non-human species, in most species involving only mother-offspring or parent-offspring relations. The heart of this matter is that serving the circle of available kin is the only way human individuals living in kin groups can maximize the reproduction of the particular genes that have facilitated and perpetuated complex and extensive human kinship systems (and, by extension, those responsible for the overall nature of the human species) across the succession of environments in which humans have lived during their history. Only humans, apparently, among all forms of life, are able to distinguish a large number of different relatives and treat them appropriately to their differing genetic overlaps with self (i.e., able to invest in relatives according to a set of multiple fractional probabilities that every gene in the investor’s genome is also in the individual to receive the investment – known as Hamilton’s Rule). Except in severely novel environments, all normal humans probably do this, in what anthropologists refer to as organized and often rather complicated “kinship systems.” Seeming exceptions to Hamilton’s Rule are often – and perhaps will eventually be discovered *always* to be -- owing to mistakes, as with (1) evolutionarily novel environments, especially during social ontogeny, such as those leading to accidentally imperfect knowledge of relatedness by either observers or

participants in the kinship system, (2) rules that take a biased form because of differential power among the participants, (3) the confusion of social reciprocity with nepotism by either observers or participants, or (4) ineradicable pleiotropic (concomitant) effects of adaptive mechanisms (3) (for examples, see Alexander 1979, 1990, 2006; Chagnon 1979; other references to be added).

---

***We are the twigs, You are the vine.***

*Words on a wall cloth in the United Methodist Church in Manchester, Michigan, November 2005 -- an example from the very large number of everyday usages that are remarkably consistent with the notion of God representing the circle of kin.*

---

To the extent that the concept of God actually arose as an unconscious metaphor for the kindred, or circle of kin, then – perhaps surprisingly, at first -- the evolutionary version of the meaning of life becomes synonymous with the religious version of the meaning of life. *In both cases the meaning of life is to serve God.* Of course, informed, thoughtful, and determined humans surely have significant capabilities to set (or adjust) the meanings of their own lives deliberately, according to their personal and conscious desires, even if they are very likely (whether consciously or not) to end up either entirely or partially serving some version of the evolved meaning. Also, the above-listed sources of errors or incidental effects – such as any causing (evolutionarily) “mistaken” social learning, or social reciprocity, that leads to non relatives being treated as relatives -- can result in life patterns, with respect to meaning, that are not likely to be judged consistent with evolved tendencies unless the nature and effects of the error are carefully taken into account.

It may seem a huge – even preposterous – leap to go from the ancient and widely used concept of a humanoid or anthropomorphic God with a supernatural origin, that created us in some unknown and mysterious way, to the everyday group of kin who figuratively (and sometimes literally) “surround” us and make up the principal or sole source of the succor and support on which we depend for virtually everything required for continuing life. Nevertheless, it is an obvious fact that part of the circle of kin – at minimum that part comprising the collection of our direct lineal ancestors -- is *entirely* responsible for our existence – for actually “creating” us as physical entities. Moreover, the air of mystery associated with phenomena leading to phrases such as “the power of God,” and with the almost surreal flows of social information, especially within groups – and particularly regarding private and personal affairs with moral significance -- may be a result of our having evolved with some kind of non-conscious knowledge of the central role of the kin circle in promoting the perpetuation of genes. We had no conscious knowledge of genes until just over a century ago, and because of that and other areas of ignorance, the budding intelligence of our ancestors caused them to formulate explanations of themselves and the rest of the living world that understandably incorporated incomplete, misleading, and sometimes faulty information. These formulations, many of which remain with us today, may be responsible for the seemingly multiple rather than unitary nature of the concept of God. Our evolved capability and tendency to serve the circle of kin remained largely unconscious, requiring efforts by biological scientists to make them

conscious (often reluctantly!). At the same time, our consciously formulated explanations (via the concept of God) of ourselves and the universe in which we exist have not meshed completely with our attention to the kin circle – have not fully accounted for our feelings and our expressions that “family is everything.” Indeed, it is more than a little intriguing that these two realms of thought typically seem more antagonistic than accommodating.

---

*Only genes, and other intracellular structures with similar features, persist indefinitely. They do it (1) by being extremely stable against mutations (nothing can persist indefinitely if it frequently changes so profoundly that its identity is lost, as is true, for example, with the genomes of sexual organisms, which are shuffled by the process of meiosis every generation) and (2) by reproducing through dividing into like copies of themselves. Unlike genes, individuals – and the gene groups (genomes) out of which individuals are generated in specific environments – are invariably short-lived facilitators of the replication (therefore, long-term persistence) of the genes which, in our species, survive by cooperating in the groups that we call genomes to give rise to us as individuals – individuals that in the human species function within the often long-lasting, uniquely cooperative collectives of relationship-discriminating relatives that we call kin groups. The prominence of concepts like “forever,” in association with the concept of God, apply easily and “naturally” to the kin group, which is the only means by which elements of the individual do survive indefinitely. Indefinite survival of recognizable entities or qualities (immortality?) is an essential part of what anyone devoted to family or kin group seeks to bring about. Our history of ignorance of the fact that only tiny particles transmitted from generation to generation via egg and sperm attain a kind of near-immortality, and the complex of attitudes that generate about such phenomena in our conscious beings, have not prepared us for easy acceptance of such information.*

---

The human intellect has long thrived on a multitude of metaphors more extravagant than that relating the kin circle and the concept of God. Part of the indignation this one will surely foster arises from the association of the concept of God with morality. We strive to make law and morality – that is, what we see as *right* actions, as opposed to *wrong* ones – into forms such that they can be timeless and unchanging; we recognize that there is a strong potential for injustice in the mere possibility that laws and rules can be altered too readily, for example as a result of the whims of powerful individuals or cliques. This attitude tends to cause people to view anything associated with morality and the concept of God as hallowed, divine, and sacrosanct. From this it translates easily to the concept of a supernatural power that determines and maintains laws and rules, and over-rides human failings, therefore is not to be challenged. Whatever concepts of God generate within particular social groups or religions, it is not surprising that they should take on auras of holiness, permanence, and undeniability. Unfortunately, such auras, and such convictions, are as well convenient hinges for perpetuating views and rules supposedly emanating from supernatural sources but potentially deriving from individuals and subgroups among us who may possibly have some kind of benevolent motivation (such as fostering harmony within the kin group), but also may be seeking personal power, either

within the group or for their group as a whole, regardless of the extent of their conscious understanding of their own motivation.

Faith-based beliefs and rules can become a kind of reality, and approach absoluteness, because they are based on agreement within social groups. Agreement becomes precious when cooperativeness is essential for survival. This is why faith-based reality can over-ride and displace even obvious physical realities. These considerations can help us to understand conflicts between moral and scientific facts. They also imply certain relationships between different human groups, consistent with the notion that the principal hostile force threatening human groups is, probably uniquely in our own species, other groups of humans – hence, the correlation between within-group amity and between-group enmity, and our obvious preoccupation with inter-group competition, strife, and warfare.

If faith-based beliefs and rules become reality, or approach absoluteness, because they are based on agreement within social groups, then two things follow: (1) they are essentially certain to be formulated somewhat differently in different groups and (2) such inter-group differences are likely to be seen as blasphemous and intolerable, consequently just causes for conflict, even dire and catastrophic conflict. These differences do not necessarily follow from a concept of a single God of supernatural origin.

Somewhat understandably, the favoring of stability in morality also underlies the currently frequent (and growing) hostility toward science, at least from some religious circles. Unlike morality, science probes the unknown, and, rather than leading to stability, necessarily causes knowledge to change continually and cumulatively, always raising new questions and challenges as the structure and functioning of the natural world continues step by step to be unfolded for contemplation by all humans. Moreover, the advance of knowledge inevitably causes scientific discoveries to impinge on what were previously regarded as sacrosanct moral and ethical topics. Also contributory, mistakes are inevitable in scientific investigation, and they are continually requiring correction, because this is the only way imperfect humans, investigating the unknown, can build toward an accurate, factual description of our complex world. It is easy to understand how the concept of an all-powerful moral being could have become the basis for keeping morality stable and just, and therefore how even accurate science can be regarded as hostile and inferior to religion. By its nature faith leads to belief in absolutes, while science, by its nature, is always dealing with incomplete knowledge, therefore relies on probabilities. When absolute faith is shown to run counter to scientifically gained knowledge, or when scientific knowledge provides solutions to problems that had previously been solved on moral grounds, clashes arise between religion and science. These clashes are likely to be severe whether social realities are believed to be based on internally generated agreement, or to be derived from a benevolent and all-powerful supernatural force or being. Unlike physical realities, and realities about the makeup and performance of all forms of nonhuman life and most aspects of human life, realities defined by human social decisions (e.g., faith, justice, moral rules) can be made absolute by either complete agreement or coercion arising from imbalances of power sufficient to over-ride disagreements.

The continual correcting of imperfect or incomplete scientific results – and the acceptance of 95-99% likelihood of accuracy as a definition of “fact” reported by scientists striving to move knowledge toward greater accuracy (and as sufficient reason to proceed to the next level of investigation) -- sometimes powerfully confuses those whose lives are dominated by stable beliefs, causing them to denigrate science as some version of what has recently been labeled “flip-flopping.” Knowledge, however, grows not only through accidental or incidental observations, or their more or less willy-nilly accumulation, but more effectively as a result of the formulation of risky hypotheses about ultimate functions and the subsequent testing of those hypotheses via efforts to falsify them if possible. Organized information only becomes useful as “data” when it can be used to test one or another hypothesis. Because hypotheses are often imperfect prior to systematic testing, science must always be a process of trial and error. This is an aspect of its soundness as an investigative procedure, rather than a failing. Any developed science, such as organic evolution, becomes a deeply layered hierarchically organized theoretical structure as a result of investigators accepting facts, when they have been defined as described above, and using them to proceed to the array of new hypotheses those facts have made available.

---

*There are actually three kinds of reality in the natural world: (1) those engendered, shaped, and maintained by human wishes and actions (e.g., social contracts), (2) those engendered, shaped, and maintained independently of human wishes and actions (e.g., relationships between planets or galaxies), and (3) those engendered and shaped independently of human wishes and actions but subject to shaping by human wishes and actions (e.g., patterns and traits of life and physical and biotic aspects of environments across the earth). To the extent that faith-based realities such as moral rules are naturally based rather than supernaturally based, they represent social agreements or contracts. They can be absolute and unchanging but are also subject to change as a result of changes in knowledge or the distribution of social power. Increases in knowledge, such as are gained during the progress of science, sometimes move category (2) realities into category (3). They can also change opinions and desires with respect to realities in category (1) by bringing to bear realities in category (2) and (3), leading to changes in, for example, social contracts or moral rules. Science also exposes evolved realities of human behavior that exist independently of conscious human wishes or actions. Sometimes these realities are easily brought into the conscious realm, and sometimes not. Prior to the 20<sup>th</sup> century humans had no knowledge of genes, hence could not be aware that social investment in the circle of genetic kin is the central means of reproducing the only long-lasting attributes of our form of life -- one's own personal genetic and other heritable particles. Even though this knowledge is today a thoroughly established fact, people are hostile to the idea and most often likely to deny it vehemently; a correlate of this attitude is that to admit or espouse “selfishness” or egoistic behavior, even in the form of reproductive effort, can engender hostility or ostracism. Similarly, it is difficult – and unpleasant -- to connect the warmth and pleasure of congeniality to the cooperativeness necessary to out-compete, fend off, or destroy similar groups within our own species. Yet patriotism is arguably the most extreme expression of social cooperativeness, partly because it alone can lead us to the*



*sacrifice of our nearest and dearest genetic relatives for the benefit of the larger group.*

---

*[David: I know the above passages contain repetition, but it'll take some time for me to convert them to the best non-repetitive expression.]*

Assuming that the concept of serving God has somehow been coordinated with the meaning of life as serving the circle of kin, we need to account more fully for the strength of the notion of a single anthropomorphic God as a supernatural Father in Heaven. Why, as well, should service to God as service to the kin group have a strong association with the question of everlasting life?

In virtually any coordinated group, from family to kin circle to nation, or even alliances of nations, a single individual is often recognized as most influential, or most powerful (included are the "highest" figures in non-theist religions). It is reasonable to suppose that such an individual tends to be the one regarded as most effective in serving the interests of the entire group – or at least of a large enough portion to acknowledge (create, grant, maintain) the influence. It is clear that we socially cooperative (and competitive) humans tend to appoint or accept such individuals, either formally or informally, in both the smallest and the largest groups. Unless their power somehow becomes prohibitive to the wishes of the main portion of the group, that main portion is likely to seek to remove them whenever strong and widespread beliefs arise that such leaders are no longer serving the interests of the group.

No one lives forever, and when a recognized and revered leader dies, there may be unusually severe social disruption. Consider the case when a father dies, leaving behind a wife and children of varying ages. Who should now be regarded as most likely to serve the interests of the whole family, in the particular way that it was served by the father? Presumably, the individual or individuals most likely to share and therefore continue the father's interests is that one whose personal interests are most likely to coincide with those of all the other individuals in the family, and who has the power, influence, and acumen to cause those interests to be realized. Whenever women are allowed to be dominant and influential, this person will surely be the wife; in other situations it is likely to be the oldest son or the wife's male sibling. Any impression that such individuals most nearly share the interests of all other family members can be enhanced by a successful claim not only of sharing the father's interests, but of having an ability to keep on understanding his interests through a continuing communication with the deceased spouse or ancestor. This is why I said in 1979 (*Darwinism and Human Affairs*, p. 249), "I do not regard it as an accident that God should have come to be regarded as a 'Father in Heaven'." It is also a potential explanation for the concept of revelation, and for claims that God commands us to do certain things.

This general situation characterizes not only small groups such as the family and the kin circle, but every level at which the interests of a cooperative group can best be served when someone (or some subgroup, including religious leaders, tribal gods, saints, angels, and all such) takes on a managerial, coordinating, teaching, or indoctrinating role. If the general argument being presented here is correct, all of these expressions nevertheless

resolve to the sharing of interests that lead to cooperative groups such as the kin circle, therefore also imply a synonymy between the concept – or power -- of God and the interests and power of groups such as the circle of kin. Although other kinds of groups obviously can share interests (e.g., members of an organization operating solely via social reciprocity), they presumably do so because (an evolutionary “because,” but not necessarily a conscious or deliberate one) it is the best way to serve the interests of the genetic relatives that comprise the kin group.

Obviously, claims about the will (interests?) of God (or leaders or creators or teachers by other names) have been reinforced by ancient writings, as in all holy books; and the claims in such writings have become the accepted basis for principles of moral behavior. That such principles often vary widely between different religions and societies – and sometimes conflict -- suggests that differences of opinion about the concept of God are likely to have arisen naturally (not supernaturally) in roughly the same way that they do in all of the other variable aspects of culture that we generally regard as emanating from differences of opinion among peoples and between generations or eras.

The scenario I have described so far asks whether the concept of God might have arisen out of human sociality, and in that way became connected somehow to morality. Now I ask whether we went astray when we invoked God, further, as (1) creator of *all forms and features of life* – that is, not limiting the concept to (or focusing it on) the unique social, moral, and intellectual condition of humanity – and (2) creator of the *physical universe*; and as well when we concomitantly began to require (or believe) that the concept of God has supernatural origins and involves many kinds of supernatural (undemonstrated, unobservable, fanciful) forces – and that this supernatural force is also necessary to explain all life and the physical universe.

As already suggested, I think it is quite understandable that humans should have adopted these attitudes, given the number and importance of unexplained phenomena that had no possibility of being analyzed effectively across all of early human history. But the absence of observable cause-effect relations and the substitution of personal opinion based on power or authority would tend to result in explanatory efforts that we now know have little likelihood of being correct or just. I suggest that this particular kind of mis-direction set off a series of more serious mis-directions that have nurtured the competitiveness and hostility of different religions, aided and abetted our tendencies to be unnecessarily competitive and aggressive, and to go to war, and resulted in a myriad of different problems for humans. These mis-directions have unnecessarily placed religion, as currently practiced, in jeopardy as an acceptable way to think analytically, and from which to design universally just and compatible social and moral systems. At least this seems true in the modern world, in which we have means for understanding countless events and phenomena, the causes of which were never before accessible; and in which we also need to restrain aggression more effectively than ever before because its consequences are potentially so much more horrific. It seems clear that invoking a supernatural being to account for events in the physical universe, and in the nonhuman biological world, could not only have temporarily allayed fears about unexplained phenomena (including the finiteness of individual lifetimes) but as well yielded immense power to those humans who could convince others that they knew more than most about

the workings of the physical and biological world, because they had a special relationship with a supernatural God as the causal force responsible for those workings. It is not surprising that the value of keeping moral rules and laws stable within groups, regardless of the details of their different structures, would also support or exacerbate the direness of conflicts among such groups, either generating the world of hostile human groups within which we are obviously immersed today, or, more likely, reinforcing inter-group hostility and competition arising from other beginnings. By "other beginnings" I intend to refer to the emergence of groups of early humans as one another's principal hostile forces of nature, an evolutionary situation apparently unique to humans.

Here is an alternative "What if" that may possibly help account for the concept of God: What if the concept of God to some extent arose out of and represents the collective capacity and tendency of the people in any cooperative group to generate, use, and maintain moral systems – the necessary spirit of agreement or cooperativeness to manage a harmonious community or culture (originally, extended family or kin group) based on social learning, and an agreed-upon system of justice and of right and wrong (or the underlying basis for such a collective spirit)? What if -- whether or not anyone ever knew it consciously -- we developed a concept of God that actually stands for the collective and communicable will deriving from some particular feature (trait or tendency) of humanity which – more than anything else -- made us all humans. I intend to refer to a *moral capacity or capability* that could be developed or matured (meaning, adjusted by learning and other forces during the ontogeny of the individual and the continuing organization of the group) so as to allow and help us to learn how to act collectively more effectively -- so that we can survive in a world that has come to be composed of groups of people for whom the most important hostile force of nature has become other similar, competitive groups of humans. What if this moral capacity and tendency arose as a result of the differentially reproductive processes that we increasingly recognize to have directly or indirectly produced all of the traits and tendencies that characterize us – and, indeed, all features of all life?

---

*It seems evident that as a species we evolved an ecological dominance that reduced the impact on ourselves of the usual extrinsic forces of differential reproduction referred to by Darwin as the "hostile forces of nature" (predators, parasites, diseases, food shortages, climate, and weather). In terms used by anthropologists, we became capable, to some extent, of creating our own living environments: we build shelters, make clothing, domesticate plants and animals for food and work, destroy predators, and avoid or thwart parasites and diseases. As a result we have generated (or made more important) what may be a unique, even principal hostile force, in the form of humans living in groups hostile to each other and internally capable of generating incredible cooperativeness (patriotism) swiftly whenever the situation demanded. There is little doubt that the coupling of inter-group hostility with intra-group cooperativeness – and perhaps especially the need for a capability to go quickly back and forth between the two extremes of (1) patriotism and cooperation and (2) maximally effective pursuit of self interests within the group -- is a (or even the) main determinant of the directions of human evolutionary changes through natural and social selection. Surely the most*

*dramatic consequence of all these directions is the evolution of the remarkable modern human brain, now increasingly hypothesized to have evolved as a social tool.*

*The National Geographic Magazine recently reported that during the twentieth century 50 million people were killed in 48 separate instances of mass murder around the world. These killings, actually concentrated in so-called "advanced" and technological "civilizations," are aspects of group-against-group conflicts, or war, though often between peoples of different religions or other backgrounds within organized political groups. Adding homicides committed on single individuals and small groups would raise the number further. This horrific and lamentable situation is almost certainly unique to the human species. A shocking expression, or form, of what might be termed "original sin," it seems to document the most appalling aspect of the human condition. It is unnerving to contemplate that morality, in perhaps the only species that possesses it in complex and passionate form, is principally a means of cooperation to defeat and destroy our own kind; that among all species we alone are evolved to seek and cultivate the warmth and harmony of social cooperation explicitly as the means of out-competing – and sometimes annihilating – members of our own species living in the same way we do. It is not trivial that the moral uniqueness of humans, which facilitates group cooperativeness as a result of our history of inter-group competitiveness and hostility, is evidently responsible for almost the entire set of evolved distinctive and unique human traits or attributes (for discussions of these traits, and their probable backgrounds and functions, see Alexander 1990, 2005). It is difficult to deny that this dreary aspect of our evolution and social history is responsible for the most debilitating and expensive aspects of human life today. The question is: How do we mold our lives, individually and collectively, so as to minimize the pernicious aspects of this unholy paradox?*

*"A hydrogen bomb is an example of mankind's enormous capacity for friendly cooperation. Its construction requires an intricate network of human teams, all working with single-minded devotion toward a common goal. Let us pause and savor the glow of self-congratulation we deserve for belonging to such an intelligent and sociable species."*  
 – Robert S. Bigelow, 1969, *The Dawn Warriors*

---

Consider that we are the only species which plays competitively, group against group. We do it so intensively and extensively that an 18-year old high school graduate recently received a contract for almost 100 million dollars, merely to play on a particular basketball team. Yet, just as we did not evolve a conscious understanding of the significance of varying kin relations, we also did not evolve an ability to sit back and analyze dispassionately (consciously) what our profound obsession with activities such as team sports mean to us. Biologists – who explicitly seek to understand such situations consciously -- generally interpret play as practice in low- or partial-cost situations for later performances in full-cost or "real-life" situations. By this hypothesis, team play in humans may eventually be understood as practice for the attitudes and strategies of cooperativeness effective in war and other forms of inter-group hostility – our means of survival across much of human history, and the background for our abilities and tendencies to engage in complex patterns of both kin help (nepotism) and social reciprocity. It still may not be obvious that the incredible popularity of our uniquely

human activity of team sports is owing to the fact that the spectators are also practicing – more mentally and emotionally, and less physically -- for the same eventualities.

From these arguments, the concept of God may be hypothesized to derive from a particular set of feelings that we share with members of our group: those already mentioned warm, pleasant feelings of good will, agreement, cooperativeness, commitment – and power as a result -- power associated directly with the cooperativeness of the group. Because everyone in an integrated group tends to share these feelings, all members of such a group can accept God as denoting a unifying force so real that the collective agreement upon which the concept is based can easily be expanded to symbolize a superhuman entity. That the concept should nevertheless have human qualities should not be surprising, because (1) our most critical problems arise as aspects of sociality and morality *within our own species*, and (2) we have no model for postulating a force that could solve such problems except ourselves. Social and moral problems carry with them an aura of mystery and inscrutability, which exists in part because we have had conscious access neither to the ways our behavior has been progressively molded by genetic change nor to the reasons for the details of its patterns in sociality and morality during our evolution. The sensory capacities and imaginations of individual humans are limited, and individual lifetimes are short; and the cumulative growth of knowledge that accelerated from the written word, and from the formal growth of science, occurred only within the last several centuries. Additionally, the nature of consciousness gives us the illusion that it covers everything about our makeup, or at least everything important. In fact our lack of understanding of this situation has caused us to generate explanations that, although they remain today, are as false as many that modern humans scorn as deriving from the far greater ignorance of early humans and modern peoples lacking written language and organized science.

Why isn't it appropriate to hypothesize that humans were "created" by virtue of evolving some kind of adjustable or "developable" moral module or moral capability that supports efforts to assist the kin circle? By this view, before morality became a central theme in the sociality of our groups, we could be said to be, by almost any definition today, *pre-human*, and once we had evolved a moral capacity, we were just as surely *human*. Is any other feature of humanity a better candidate for the "final step" in the forming of the human species than the implanting of a concept of God which explicitly provides a human-derived, hence human-compatible explanatory force that organizes sociality around the concept of "kin selection" (i.e., helping kin according to their proportional relatedness to us, which means, according to the likelihood that any particular gene possessed by them is also possessed by us) (Hamilton 1964)?

Religions contend that God created humans. Viewing God as the collective moral sense within (or characterizing) any group that functions as a social unit – as a real or surrogate kin circle – is, surprisingly, not contrary to that contention. God as collective moral sense is a term for a collective spirit (or its effects) arising entirely within the realm of everyday "natural" causation, and leading to morality and social harmony. In this version there need be no incompatibility between evolutionary biology and religion because (1) God (as the kin-circle-aiding compromises, or moral capability, that spread across our evolving species) is the "creator" of human life, (2) the evolutionary meaning, or function, of

human life is the same as the religious one – to serve God (as kin circle), and (3) even if different cultures or religions serve God in somewhat different ways because of different histories and different conditions of existence, God as collective moral sense evidently has the same single origin as humanity, and is at base the same trait or tendency in all human societies.

There may be a potential for harmony and agreement in this view of human life. My intent here is to ask how to explain and develop this particular interpretation of the concept of God so that anyone who accepts it can use it while minimally interfering with anyone else's approach. If religious people in general could begin to accept those usages of others, which, however divergent, do not interfere seriously with their own usage – their choices of religious expression and use -- the world would surely become a more peaceful and positive place.

I have found that if I interpret the concept of God in the way just described, a wide diversity of uses of it in human sociality (indeed, virtually all such uses) make sense -- even to people who think of God as a wise and powerful individual humanoid of supernatural origin. God is just (in the above arguments, justice means fairness within cooperative human groups); God is all-powerful (in fact, the source of all justice and power exerted within the kin group is that of the kin group itself, mediated by power differentials among competing aspiring leaders); God is eternal (because for all practical purposes the concept lasts as long as the group, and to us individuals that either makes the kin group "eternal" or creates the wishful thinking that it will or must be so, especially if we can work at helping this to come true); God is all-seeing (so many liars and deceivers forget that they are being watched almost continually by essentially the whole group to which they belong -- which, during most of human history, would have been small groups in which everyone is likely to be familiar with the traits and tendencies of everyone else within the primary social groups; in such small kin groups, deception and chicanery must have taken forms somewhat different from their expressions in today's huge modern urban societies largely made up of virtual strangers); God (our surround of kin) will take care of us; etc. In other words, the collective morality of the cooperating group – the actions and capabilities of the kin group – can probably account for all of the most important characteristics we attribute to God, without *requiring* a supernatural force in the form of a humanoid creator or overseer.

Modern biologists necessarily work as if accounting for the origin of life requires nothing except well-known biological processes, and sufficient time in specific sequences of environments. I cannot speak for theoretical physicists' view of the origin of the universe, although they apparently seek to explain it in the same kind of terms. But anyone can understand that as soon as humans came to recognize the power of the concept of God – even as "merely" the collective spirit or ability to generate and use an "ethos" – it would have become tempting to expand it to explain every unanswered question humans could identify. Moreover, once humans became willing to accept immense power surrounding the concept of God, it was only a small step to invoking extra- or super-natural causes to explain anything about the universe that we couldn't answer – and to make God's power an aspect of our own power, as individuals or groups. In turn, as already noted, once the notion of accepting supernatural causes had become prevalent and acceptable, it could be

manipulated and expanded "credibly" to explain anything humans didn't understand. Solving the specter of personal death by invoking some form of a hereafter is not the most trivial of these problems.

Tendencies to be tolerant of views of God that deviate as dramatically from traditional views as the one I propose here may be essential if the basis for genuine fellowship and cooperation within groups is ever to approach universality – ever to make us one people with one God. As an example, if one thinks of the concept of God arising and being used as suggested here, there is no longer any excuse to engage in the more or less disharmonious exercise of declaring one's self an atheist because of other concepts of God. There is less reason to become incensed, hostile, or derogatory toward anyone who uses the concept of God in any one of the diverse ways religious and non-religious humans have taken up, and more reason to ask whether the idea discussed here can modify either beliefs or behavior in directions perceived to be reasonable or desirable. One can be either a fundamentalist or a prior atheist yet accept or tolerate others who see God as the collective moral sense that, originally within the kin circle, now leads to the more widespread cooperativeness and beneficence and patriotism that we use the concept of God to promote. In terms of justice and morality, essentially the same ends are sought by people with both beliefs. So God as the vision and power of the community causes some of the reasons for controversies about religion and evolution to diminish or disappear.

Early social imprinting on topics such as God and religion can be powerful. Some of the possible changes in how they are viewed is therefore not likely to happen except with the gradual passing of generations that did not encounter a collective morality view of God early in life; changes are facilitated as generations that grow up with a "new view" merely as a possibility begin to spread a new understanding and tolerance. Patience is essential because sometimes a long period of contemplation and discourse is necessary before a new view can become well enough understood to make the decision either to reject it or to tolerate it, or to accept and support and elaborate it. There is no reason to assume that social harmony cannot be achieved as a result of widespread conscious understanding of the actual reasons underlying a new view, no matter what those reasons may be. We seek to understand genes, and all that they are up to, not so that we can follow their dictates more carefully than when we knew less, but so that we can decide which aspects of their manipulations that have resulted from the evolutionary process we are willing to go along with, and which ones we are prepared to use our evolved consciousness and moral potential to thwart. We should find ways of being prepared to accept deceiving our genes unhesitatingly, particularly when we have good reason to believe that the result will be reduction of pain, misery, and suffering in the world, and reduction or elimination of intentional acts leading to premature deaths.

An interesting irony arises at this point. Most religions teach that God is the power that watches over and guides their particular group. Gods apparently began as tribal gods ("kin circle" gods?), and it is obvious but unfortunate that in some ways they have never ceased being such, even if particular religions (in effect, large and sometimes fragmented tribes) have become huge and widely distributed (that is, God was, and still is, a way of winning by promoting a particular kind of collective good feeling that makes a group a more formidable force against threatening or competitive human groups). It would be a

powerful force for good if ideas such as those espoused here could have the potential of allowing people to realize on a larger scale opportunities to benefit from the positive aspects of religion – the warmth, cooperativeness, benevolence, and positive frame of mind that goes with unity and continuity of community – with a concomitantly larger likelihood of diminishing or eliminating the negative aspects, such as our all-too-prevalent tendencies to divide the world into we and they groups – even we and they religions.

Most (but not all) religious people think there actually is but a single God, and that achieving world harmony is mainly a matter of people in other religions coming to realize that. Typically, however, such realization is viewed as coming to understand that the only real God is the one that looks out for one's own group's interests – hence, the rise of evangelism instead of tolerance. Religions expand and become more powerful because the numbers of people in them also grow.

One might think success in a single religion through evangelism is the only or best path to the harmony of eventually bringing about the acceptance of one God for all of humanity. Practically, speaking, something quite different may be true. Human groups unified around their particular view of God (or culture) do expand and become more powerful. But so far there has always been more than one such group. As a result the probability of conflict does not disappear. Indeed, the process seems invariably to lead to successive fragmentations that re-institute the old kinds and levels of conflict.

Even worse, as religions (or cultures) become more extensive, and stronger, and the numbers of different religions and nations correspondingly diminish, the situation may actually become more dangerous and less likely, not more likely, to eventuate into a concept of God acceptable to all people, and to yield some semblance of world-wide harmony. This can happen partly because the larger the group the greater the intensity of patriotism or fervor (or governmental coercion) that keeps larger groups thinking of themselves as unitary: most large, coordinated groups of humans are capable of extreme patriotism. Nevertheless, all such groups are composed of individuals who are also evolved to compete, within groups as well as between, in all the direct and indirect ways that affect relative reproductive success. Because reproductive success is the feature of life centrally involved in the continuation of any particular genetic materials, whether or not we know it consciously -- or like or accept it if it does become conscious -- it is inevitably *evolved* to be central most of the time in our personal strivings. The size, unity, and fervor of huge groups of humans, now sometimes beyond a billion citizens, translate into huge armies, complex technologies, and what we call weapons of mass destruction – into an increasingly dangerous and massively destructive potential rather than any kind of inevitable progression toward world-wide harmony among all people and the ideal of acceptance of a single God. *It is at least possible that the closer we seem to be approaching the goal, the more deadly the whole enterprise becomes.* After all, this is the situation that during the 20<sup>th</sup> century created the threat of more or less sudden destruction of all life on the planet. There may be fewer hostile groups, but their size, destructive power, resolve, and world-wide influence may cause us to be further from our goals than ever before. And, as we have witnessed in recent standoffs between world powers, inter-group hostility can be maintained at frightening levels. This huge irony



suggests that a dramatically different approach may be necessary, one that at the very least requires acceptance of a less rigid and more relaxed view of the concept of God. The question, then, may be how to bring this about, not whether the concept of God is real, or even whether it is supernatural. Perhaps it is tolerance or enthusiastic acceptance of diversity in social and moral rules that we eventually will have to accept, and even cultivate, because we are unable to construct and maintain a single moral system that is acceptable and functional in all environmental and social situations in the world.

Nothing in this essay should be construed as an advocacy for religions to dramatically alter their existing practices or concepts of God, or to accept all of the hypotheses set forth here. Almost to the contrary, if anything at all is being advocated it is a relaxation about the concept of God and the practices of religion, in the direction of a keenly scrutinized tolerance of different (but just) views and practices, among both individuals and religions; and most of all a stronger emphasis on commonalities and fellowship among all peoples and religions. The overall purpose of the essay derives from a faith that there is value in promoting a better understanding of how and why we humans have done what we have with religion, the concept of God, the meaning of life, and the value and future possibilities of extending empathy, fellowship, cooperativeness, and good will in general among the different peoples and religions of the world.

It is not trivial that, in the view I have presented here, even a relaxed and variable concept of a single God for all people everywhere will be difficult to achieve without some increase in the underlying similarities among sets of moral rules and systems of justice, and a considerable tolerance toward whatever diversities of moral rules and laws persist. We can hope that this tolerance will eventually acquire a form that promotes the ability of all people everywhere to see themselves as members of a cooperative, harmonious collective. Given the history of the world, and the current interaction of different religions and different nations – in particular the ritualistic and representational variations among religions, and the intensity of adherence to them – probing for a better understanding of the basis and uses of the concepts of supernaturalism, God, and the meaning of human life – simply stated, a better understanding of ourselves -- surely has a chance of helping us move toward a greater harmony in the foreseeable – or possible -- future.

---

***God bless the members of this congregation, and all those too ill to attend.***

*A consistent ending of the final prayer by the preacher in the church attended by the author as a child in Piatt County, Illinois (ca. 1940)*

***God bless all persons – no exceptions.***

*Sermon announcement on a sign post on the lawn of a country church in Jackson County, Michigan, July 2005*

---

*Myth does not mean something untrue, but a concentration of truths.*

■ Doris Lessing, in *African Laughter*

**Notes:**

1. I have tried in the above essay to use moral capability, or "moral module" in a way that says as little as possible about how moral behavior develops (during ontogeny), or is acquired via some kind of learning; and in a way that does not emphasize unity or universality in any mechanism, and that says nothing about specific geographic location(s) of any such structure or function, or parts of it, within the human brain. I did this because I do not think we possess a deep understanding on these issues, and I also do not think we need to acquire these details to proceed toward a more world-wide moral use of our empathetic and social capabilities. We do not have to wait until molecular and developmental scientists and nanotechnologists achieve any particular goals from studying the intricate mazes of human ontogeny that will allow them to connect genes to our most complex behavioral traits. There is no reason to believe that at any point we cannot begin with behavior and end with behavior – while nevertheless using all available information of any kind that may be helpful – and thereby begin the solving of many of our current social problems more quickly and more successfully than by any other means.

2. It makes sense that we recoil from ultimacy in evolutionary explanations (that is, evolved function) while embracing ultimacy in explanations relating to God. God (in any version) typically draws us to, and symbolizes, the pleasure of good will and social harmony within the group (though, as emphasized above, all too often fostering as well opposite feelings between groups), which in turn lead to greater group strength and competitive ability. Thinking about evolution as causal in forming our nature generally has an opposite effect (which, ironically, accounts for the evolution of a unique human moral capacity that serves cooperativeness) because it has tended to include a strong emphasis on reproductive competition at the individual level, which for much of the time remains acute even within congenial human groups: This is evidenced by the prominence and skill associated with lying and deceit, as well as the existence of cliques -- and such traits as extreme altriciality (helplessness) of infants, extreme and protracted biparental care, unusually long juvenile life, menopause, concealment of ovulation, doubled life length in humans (compared to related primates), and other unusual and unique human attributes (cf. Alexander 1990; 2005). Evolutionary explanations are often virtually anathema to the members of this patriotic, group-cooperative, war-like beast that we have become, partly because group members feel that they must serve their own interests, yet also know that they must cooperate to survive, and that those who are too intensely devoted as individual strivers will not typically be regarded as useful or effective team-players.

## References

To read two of the papers cited in this essay, go to:

<http://insects.ummz.lsa.umich.edu/pdfs/>

(1) Alexander Richard D. 1990. *How Did Humans Evolve: Reflections on the Uniquely Unique Species*. University of Michigan Museum of Zoology Special Publication 1: v+38 pp.

(2) Alexander, Richard D. 2005. Evolutionary Selection and the Nature of Humanity. In: V. Hosle and C. Illies (eds). *Darwinism and Philosophy*. Univ. Notre Dame Press, pp. 424-495.

To download these papers, add: Alexander 1990.pdf.

The third paper cited is:

Alexander, Richard D. 2006. The Challenge of Human Social Behavior: A review essay stimulated by Hammerstein, Peter (ed) 2003. *Genetic and Cultural Evolution of Cooperation*. MIT Press, Cambridge, Massachusetts, and London, England. *Evolutionary Psychology* 4(2):1-28. It can be downloaded from the following site:

<http://human-nature.com/ep/reviews/ep04132.html>

---

All citations in this essay that remain incomplete appear in complete form in one or another of the papers cited just above.

## **Addendum**

### **A Prayer for the Kindred of the World**

Dear God, we pray to you as our *personification of the common spirit of cooperativeness, empathy, and goodness which resides within the minds of all who are human, and which indeed makes us human*. Our images are reflected in this common spirit, and our understanding of goodness in the communication among us of its existence and possible consequences.

We seek your support as we strive together to emphasize and magnify the benevolent qualities of all humanity. Some of these qualities we recognize as helpfulness and cooperativeness, patience and tolerance, compassion and kindness, empathy and mercy.

We have come to realize that while the socially positive passions are pervasive in all humanity and generate the most profound and rewarding of all pleasures, inner warmth, and satisfaction, they nevertheless have been honed across history as to benefit different kindreds, clans, and tribes separately. We know that the extent to which we employ them among ourselves, even now, too often reflects conflicts of interest and reveals the intensity of adversarial attitudes toward other groups like our own.

Help us, therefore, to prevent ourselves from restricting the socially positive passions to our own families, clans, or kindreds; from using them within our groups to designate as hostile forces other such groups of our own species anywhere in the world; from continuing to keep their effects solely within our groups after we have resisted or defeated forces whose aggressiveness we felt we were unable to prevent or remove without your special help; from ignoring histories and circumstances to convince ourselves that only we are right, only our causes just; from tending to divide the world into we's and they's.

We know we need your help because we recognize that, not merely we, but all the we's and they's everywhere, must counteract tendencies to do these very things – from inclinations instilled by our history of both individual-against-individual and group-against-group competition, in some way the sources, surely, for our ideas about “original sin.”

Dear God, our God, everyone's God, help us to display the greatest possible humanity in all our dealings with others, and to utilize or resolve peacefully all our human differences, real and perceived, at any and every level.

Help us to find ways to spread among all people, without prejudice, both the material benefits and the good feelings that arise from the expressions of the socially positive passions.

Help us to turn the constant flow of social reciprocity into a mutualistic enterprise from which every participant realizes net gains, accompanied by the continuous surging of those proximate pleasures that are evolved to inform us of rewarding outcomes.

Help us, indeed, to enjoy extending all such good feelings reasonably to all living creatures that might have sensory capabilities appropriate to them.

Reveal to us your greatest potential, therefore our own, by blessing all sentient beings

Everywhere

Equally

Amen.