# Credo

# HOW ONE UNITARIAN UNIVERSALIST INTEGRATES EVOLUTION INTO HIS THEOLOGY AND RELIGION

by George G. Brooks

Abstract. Evolution can be a "weasel word" unless circumscribed to mean only a morphological change over time. When this is done, the fact of *what* can be distinguished from the faith of *how*. I believe that evolution is purely a natural process, but recognizing that everyone creates his or her own God, I feel justified in giving the name *God* to that mysterious presence in every interaction that causes transformation, since this is what gives the universe its dynamism. I relate how this God concept informs my religious and ethical life and gives my life meaning and purpose.

*Keywords:* choice; evolution; faith; impartial; panentheism; transforming presence.

Carl Sagan, in his book *Cosmos* says, "Evolution is a fact" (Sagan 1980, 27). But those who disagree remind us of some straightforward truths: we haven't witnessed evolution; whatever evidence we use to put this idea forward has all come from the past. Since we stress that its pace of operation in nature is extremely slow,<sup>1</sup> it is doubtful that we can in the present distinguish true evolution from adaptation or one or another form of genetic engineering; and above all, evolution is not testable or repeatable. So if we are to claim that evolution is a fact, I believe we must seriously limit the meaning of the word *evolution*, and then the evidence for this circumscribed meaning must be truly compelling. And should we seek to go beyond this limited understanding of evolution and thus beyond the verifiable evidence, we need to recognize that we are then in the realm of faith. I begin this article by stressing this fact-

[*Zygon*, vol. 32, no. 3 (September 1997).] © 1997 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

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or-faith hydra head, because theology and religion are also in the category of faith, and to talk sensibly of evolution being integrated into one's theology and religion requires this recognition.

I need first to state what I mean by the term *evolution*, for it can have more than one meaning, even for one person. I believe that we will be on the safest ground if we limit these words to mean "a change of physical morphology, showing greater complexity of parts and functions over time." This is because arms, legs, heads, breathing apparatus, digestive systems, immune systems, sensory apparatus, and the like change their physical shape and functioning as they become more complex. My assertion that earthly evolution is a fact rests on the evidence that as time has gone on, new creatures having different physical forms and exhibiting greater complexity have appeared in the geologic record.

It thus becomes imperative that anyone accepting even this limited meaning of the word *evolution* grant the factuality of fossil dating. The physical sciences have developed to a high degree of sophistication the techniques for determining the age of a fossil, either by using the material surrounding the fossil as it was found or by using a small sample of the fossil itself. We must accept the validity of what is known as the *half-life* of a radioactive atom and the mathematical implications derived therefrom. Parenthetically, the task of my master's thesis at MIT almost fifty years ago was to measure the half-life of rubidium 87. We would have to throw out our entire knowledge of nuclei and radioactivity to deny the dating methods science now uses. That species of greater and greater complexity have appeared over time, from algae three and one-half aeons ago to humans now, has been extremely well documented by the combination of dating techniques from the physical sciences and anatomical work from the biological sciences. Indeed, gestation studies today and the present-day range in the complexity of an organ or appendage that has the same function in many animals only increases our certainty that evolution is a fact. This is the science and factuality of evolution that we cannot avoid.

But notice how restricted this meaning of the word *evolution* is. First, this definition says nothing about *how* this change of morphology over time occurred. Second, it does not say that there is such a well-established sequence of changes in, say, the structure of the forearm or the eye that we can hold it as a fact that this entire process of change was purely a natural phenomenon, with every minute change from one form to another having been clearly documented in the geologic record. That we have determined, through sophisticated chemical techniques, that certain histones have been found in all species for the last 1.2 billion years, however, makes the argument for evolution's factuality even more compelling.

I believe that part of our present difficulty in discussing evolution is that we include within its meaning, often unconsciously, more than I have just been willing to assign to it. We unconsciously expand the meaning of the word to include as a fact that this is the way that nature operates: that there is no need to bring in a divine being as an expediter for this process of continuous change. Now the research scientist who wishes to explore as fully and deeply as possible how nature alone operates proceeds on this premise so as not to foreclose the scientific search; this is necessary if science is to be done. But when anyone, scientist, religionist, or layperson, simply takes it for granted that this is a completely natural process, that person is overstepping the bounds of certitude.

Although this is true, we can easily understand why a purely natural basis for evolution is a reasoned conclusion: we have such a good grasp of what is going on. We know that the form that any organic creature acquires is encoded in its genetic material, the DNA, found in the nucleus of every cell of the organism. This genetic code is passed on from one generation to the next, either sexually or asexually. This is why species are stable, and insofar as change does occur, it is slow and usually imperceptible except over extremely long periods of time. We also know that the genes of an organism can change. We call these changes mutations. These happen randomly, often influenced by the jostling called heat or as strong enough radiation passes through the genetic material. So our best explanation of genetic change and thereby a change of morphology over time is through random processes occurring within genetic material. The scientific laboratory has produced and documented these changes for at least the last fifty years.

Now this information, well laid out, turns out to be enough for me to believe—note the word *believe*—that earthly evolution is completely and solely a natural process. For me it is more than satisfactorily explained by well-developed scientific theory accompanied by more than adequate experimentation to back it up. Our information about DNA and about mutations of DNA and our knowledge that these mutations are the responsible cause of physical changes in organisms (as well as inheritable diseases) is now a part of the scientific domain. But I know, as we all do, that physical geology has not filled in all the fossil gaps with minutely well laid out developmental sequences, so it becomes impossible for me to assert that this whole schema could not be the work of an omnipotent, omniscient divine being. In other words, since it is not repeatable and thereby testable, we have no way to answer the question How? conclusively. We may have all the clues we think are needed to convince anyone that biological evolution is a natural feature of our world, but we cannot say that it is a fact. You and I may think the how has been adequately pinned down, but we

then have to read our science back into the past and assert, "This is enough to *totally* explain the change of physical morphology over time." Is it instead simply a conclusion drawn from the facts developed by the scientific enterprise? The degree to which this is instead a leap of faith we must all truly continue to ponder.

## THREE FAITH STANCES PRESENTLY TAKEN

With this as an introduction, let us look at the possible human responses to the fact of evolution, as I have circumscribed the understanding of this word. To my mind there are three very distinguishable positions, with gradations possible between them. The first is that of the Christian creationist, who denies even the factual nature of my very restricted definition for evolution. For this individual, God created everything in six days, however long those days may have been, including in that creation the seeming age sequence of fossils and stars, and then rested. From that point on, nothing in the biological world has evolved or become more complex. Whatever has changed has become more disordered—for this person relies on a truncated understanding of the second law of thermodynamics and insists that no natural process produces new or more complex order. This seems to be the principal argument of the Christian creationist in attempting a scientific-sounding rejection of evolution.

Now we should in all fairness recognize that an omniscient, allpowerful, biblically delineated God could be the explanation. The decision about how all that we see around us happened is every person's personal conclusion. Creationist Christians simply accept as true what the Bible says: that behind the mystery of creation there is and was a Being, God, both willing and able to produce all the things in the universe as they are now spread out before us. This is their faith. Science, for them, simply cannot be as reliable as is God's revelation. So those who are so inclined can assert that the Bible is more than adequate to answer the question, Why and how anything?

The second alternative is certainly more agreeable to persons like myself. It accepts everything that science says about a changing universe, morphological change over time, and the increasing complexity of species in the geologic record, but then claims that this is specifically a God-directed process. The Jewish and Christian faiths have always asserted that God works in history, shaping human events; thus, it is not a big step to also believe that God works throughout the universe through natural laws to present to us an evolving universe and world. Thus, in the eyes of many Christians and others, including many Unitarian Universalists, God is *becoming*—a creating God and a Being who is immanent in our world rather than a once-for-all Creator and wholly other, transcendent person. For this group of religious believers, much of the traditional understanding of the nature of God can easily be retained. God can still be a personal being, can still be called Father or Mother, can still have purposes and plans (which we can attempt to determine), can be the determiner of the future to some degree, and can lend a receptive ear to prayer. What is new or changed is that the whole universe, not just the human species, has a history, and that God has been continuously acting throughout that total history. God is, from the moment of the Big Bang on, the genius behind this continuously evolving universe.

Again, who can quarrel with this? It is just a personal choice. As with all faiths, it cannot be known with certainty or dismissed as untrue. The value of this position from the religious liberal's point of view, however, is that all the findings of scientists, as they have emerged and been developed over the last four hundred years, are accepted as both factual and relevant for use in determining or supporting their religious faith. Likewise, God becomes a more active agent within our time and within our world in a much more meaningful way than is possible with a transcendent God of very supernatural characteristics. Few things are as resistant to change as one's personal religious beliefs. Yet many persons today have found that this approach, which bridges the separation between science and religion and makes both enterprises more meaningful in their lives, is a decided improvement over the approach that treats these two facets of human life as deadly antagonists.

Of course there is, as we look at the evolutionary story, particularly with its twists and turns and its curious anomalies, a third alternative. This is the unexpressed faith of many, and my very openly expressed faith, that this process whereby everything changes is solely the natural working out of the mysterious nature of matter and energy, without the need for any intervention by a Being called God. Although it is an easy choice for many a person to make, it is nevertheless a faith, since no one can know with certitude that this is the complete explanation of the epic of evolution. Those who hold this faith, either consciously, as I do, or unconsciously, invest the matter and energy of the universe with mysterious properties that cause the observable increase in complexity that we call evolution. I am clearly in this faith camp, yet I believe it is valid to invest a particular mysterious inherent property of the universe that I will unfold to you shortly with the name God, which then becomes a very impersonal presence and activity. Now this is considerably more Eastern oriented than Western in its philosophical stance, but that is just where I come out. Let me now make this clearer.

### FINDING GOD IN PANENTHEISM

In company with a host of others, I start my search for what can truly be called by the name God by accepting several very basic propositions. First, in my attempt to find God or know God, I adopt a very humanist perspective. James Luther Adams, considered by many Unitarian Universalists to be their foremost theologian, spells out my position well with these words:

... there are two quite different ways in which one might do theology. One may start with a definition of God—as the creator of the world, for instance—and then try to prove that this Creator exists; or one may start with some other conception of God and try to prove that such a God exists. On the other hand, one may identify known realities or tendencies that are worthy of loyalty, or that we can rely upon—realities that are ultimately a gift to us that are viewed as sacred and sovereign, that are inescapable if life is to have meaning. If we speak of a reality as ultimately reliable, as dependable, as sovereign, as sacred, we are speaking of the divine, whether we use the word "God" or not. (Adams [1961] 1991, 361)

The second way is my way, as you will come to see. At this point in my explanation of myself and my theology, I find I also invoke the thought of Ralph Waldo Emerson and Gordon Kaufman. Emerson, like many others before and since, maintained that we create our own gods. This I firmly believe. I believe God to be a concept that represents what humans accept as the most significant reality that the world, or the universe, exhibits. I am also delighted with these words of Gordon Kaufman:

... theology is (and always has been) essentially a constructive work of the human imagination, an expression of the imagination's activity helping to provide orientation for human life through developing a symbolical "picture" of the world roundabout and of the human place within that world.... Thus a diverse and sophisticated theological tradition has developed over the centuries, analyzing and exploring the meaning, uses and functions of the symbol "God;" and along with it has gradually emerged "the theological imagination." The theological imagination devotes itself to the continuing critical reconstruction of the symbol "God," so that it can with greater effectiveness orient contemporary and future human life. (Kaufman 1981, 11–12)

Without my being aware that there was a name for it, I've been using my "theological imagination" for at least three decades to provide a meaningful orientation for myself. I would now like to believe that it is well enough developed to put it to paper for whatever benefit it may have for others. I begin by detailing a few traditional theological ideas that I have rejected since the time I took philosophy in college and heard more than I realized from J. A. C. Fagginger Auer at the Harvard Divinity School. I reject completely any suggestion that God is a being that is allknowing, all-powerful, or all-loving. The only encompassing definition I accept is "throughout all time and space." I find the subject of theodicy, the task of understanding why an all-knowing, all-powerful, and allloving God can allow evil on the earth, such as the tragic accidental death of infants and children, unworthy of the time spent on it. Whatever God is, as far as I'm concerned, acts through the agency of natural law and so is not supernatural or all-powerful. Thus, I reject the traditional understanding of miracles; instead I accept our universe as filled to overflowing with mystery. Thank you again, Gordon Kaufman (see especially Kaufman 1993).

Continuing in my rejectionist mode, I reject a realm beyond the natural, in medieval times called the empyrean region, from within which God acts on our natural world. In 1277 the then bishop of Paris, Etienne Tempier, condemned supernaturalism as too restrictive of God's power and presence by insisting that "God is everywhere." I concur with a statement of the English physicist Russell Stannard, printed in the December 1993 issue of *Progress in Theology*, that goes as follows: ". . . if the Big Bang saw the creation of space, it also saw the beginning of time. This means God could not have existed before the Big Bang, because there was no 'before.' Therefore the idea of a God who at some point in time decides to light the blue torch and then retire simply will not do" (Stannard 1993, 6). God either is within our universe—a presence fully active and resident within time and space—or is useless for me as an object that is meaningful to worship, praise, and emulate, which for me would cut the heart out of the religious enterprise.

Likewise, in making it very clear where I break from the classical past, I reject the basic idea within the philosophy of idealism. The idea that whatever is in existence now must have been in existence in a more perfect or absolute form from the beginning, for instance, in the mind of God, considerably weakens for me the whole premise of evolution. The rhetorical question How can love, or thought, or decision making be a part of our makeup if it hadn't already existed in a more perfect form with God from the beginning? just leaves me cold.

Just as definitely, I have some positive statements on characteristics other than *throughout time and space* that God must have in order to enter my belief system. A first characteristic that can't be dispensed with is that whatever God is must be worthy of my full intellectual assent and emotional reverence. Although we may create our own God or Gods, I insist that such a creation must be worthy of being worshiped, praised, and sung about, with the mind and the heart and soul. For me this clearly implies also the primary role it plays in the formation of my behavior and action: it must be worthy of my emulation, however feebly the human is able to emulate God. Otherwise, though it may be a reality or a concept, I am unwilling to give it the name *God*. And just as important as worthiness is the requirement that it must also be the essential feature of the universe that explains the reality of both myself and the universe I know. If this can be inferable from the fruits of the scientific disciplines, so much the better for the integration of science and religion. I'm also convinced, as I'm sure every other believer in a God is, that whatever God is cannot be a creation of the universe. So God must have come into being—please note my words for they were carefully chosen—must have come into being at, and been present from, the very first instant of creation and thus have been an active presence throughout time and space ever since. Thus, if there is something worthy of being called God, for me it must be something within the universe, inferable from our scientific understanding of the universe, active and present throughout time and space, and of course still active here today.

Some theologians have suggested that God and Life are synonymous —if you capitalize the L in *life* and emphasize its uniqueness to earth whereas many for centuries have identified God with love (understood in a human framework). Even though Universalists have historically promoted the statement that God is love, I find both these couplings unsatisfactory; they came into being long after the Big Bang and are thus products of that mysterious Presence, but not God. Instead, they reflect for me activities of God.

It should be clear by now that I follow the notion that whatever are present today, from electrons to toads to architects to love, all came into existence through the evolutionary process and in subtle ways are manifestations of the ever-changing, ever-evolving activity of God. Having rejected both supernaturalism and idealism but still accepting a universe beyond my senses, I can do nothing else than to believe that whatever is or has been must have come into being, must have been created if you want a single word to describe it, since the Big Bang. Thus, everything is a product of that mysterious creating essence of the universe. Let me repeat that, because it truly is a major cog in my theology: Everything, not just almost everything, but everything is a product of that mysterious essential feature inherent in our universe that I would call the creating essence of the universe. It is to this that everything owes its existence and being. So when I mention the creating essence of the universe, I am talking about what I understand to be the ultimate reality of the universe, Paul Tillich's Ground of Being, and that in which, in a poetic sense, everything lives and moves and has its being.<sup>2</sup>

What is this creating essence of the universe that is throughout all time and space? I believe that a line that comes from Marilyn Ferguson's *The Aquarian Conspiracy* succinctly states what I believe to be that creating essence, namely: "When things come together, something new happens. In relationships there is novelty, creativity, richer complexity" (Ferguson 1980, 156).

Embedded within our material world of things, there is a power that transforms. It is found within us and is the mystery of every relationship. Let me emphasize, this is the locus of the mystery that constantly pervades and fogs up every human attempt to clearly identify this ultimate reality. This power that transforms when things come together, that accounts for novelty, creativity, and richer complexity, is, in addition to our prosaic world of time, space, and matter, another something that makes this a dynamic world of transformations, of emergents still not even guessed. Somehow under most circumstances one is able in a relationship to alter and to be altered, just by virtue of the relationship, and to have new influences that can cause even further alterations. And this transforming power has never stopped being active.

From quarks to nuclei to atoms to molecules to life to mind to love to community to spirit, to what next? I'm willing to give the name *God* to this transforming power, this something within reality that is present in every interaction. Although it is insubstantial and cannot be dissected, probed, or measured by the scientific community, it is part and parcel of the natural world. So divinity is around us and within us rather than separated from us, as the ancients believed and too many still believe today. I believe that this is my own personal form of panentheism. You may think I am speaking of evolution, but I am not; I am speaking of that intangible, mysterious essence that is the ground, or the basic essential, that causes our universe to be an ever-evolving universe. If God is, as Tillich suggests, the Ground of Being, the essence behind, or within, the observable, then we need to plumb the depths that account for evolution—to capture the nub within that process.

Let me now try to uncover that something in a simple example. Somewhere around three hundred thousand years after the Big Bang, a new entity, the hydrogen atom, came into being. It had not been around before; the temperature of the then universe had been too high for the ingredients that go into its creation, the electron and the proton, to stay together. But at some temperature the electron and the proton could and did stay together, and a new entity, the hydrogen atom, came into existence. And it still happens. Now what is so remarkable about this? Due to their opposite electric charges they naturally attract each other, and if nothing else interferes, they coalesce. To me the heart of the matter is what the new relationship produces. Here, in close, permanent proximity, two very identifiable entities, the electron and the proton, are transformed. The proton is no longer identifiable as a proton, the electron is no longer identifiable as an electron, and the combination presents the world with a different entity, the hydrogen atom, whose characteristics are totally unpredictable on the basis of anything known about the electron or the proton before they stuck together. As Ferguson observes, "Whether we are talking about chemical reactions or human societies, there are qualities that cannot be predicted by looking at the components" (Ferguson 1980, 156).

And even as the electron and the proton had, as part of their nature, unpredictable transforming abilities prior to their association together, so too the hydrogen atom that came into being by their association carries within itself so many unpredictable transforming abilities that chemists today are still working in their laboratories trying to uncover many of them. You may note that my thinking here very closely resembles Ken Wilber's in his theory of holons.

Now I believe this transforming feature did not have to be inherent in our universe. Our universe could have been only quarks held together in huge orderly mass arrangements by gravity, something like neutron stars. Or the ability to transform could have stopped after atoms were formed, and the universe would have been an orderly arrangement of galaxies and stars held together by gravity, with the electromagnetic force either absent or so short-ranged that it would have had no effect. Likewise, planets of solid or molten collections of atoms—each in the form of a mishmash mixture—would also have been present. Indeed, we are aware of mixtures in which neither of the entities that come together has an influence on the other, like oil and water, or rocks, where none of the minerals has a transforming relational influence on the surrounding minerals. This nonrelational feature of minerals could have been the complete nature of our familiar world of mass.

Ken Wilber, in his *Brief History of Everything*, puts an even more provocative twist on this transformational feature that empowers evolution. He writes:

... that is the whole point of evolution: it always goes beyond what went before. It is always struggling to establish new limits, and then struggles just as hard to break them, to transcend them, to move beyond them into ever more encompassing and integrative and holistic modes. . . . Evolution is best thought of as SPIRIT-IN-ACTION, God-in-the-making, where Spirit unfolds itself at every stage of development, thus manifesting more of itself, and realizing more of itself at every unfolding. Spirit is . . . the entire process of unfolding itself, an infinite process that is completely present at every finite stage, but becomes more available to itself at every evolutionary opening. (Wilber 1996, 10)

God is for me not a being but a presence, an activity, a transforming power, maybe even Wilber's Spirit or even Kaufman's Serendipitous Creativity. It is located in the mystery unfolded through every relationship, that for good or ill makes this a dynamic universe. I know I have only given words to this intangible essence. I know these words place only a dim light on that mysterious reality, but I'm conscious of the many who have tried before me and likewise became mystics, concluding that at the deepest depths, there is only the ineffable, the wordless.

Yet I believe these words capture a clue, give a direction and point to that underlying something so worthy of our praise, worship, and emulation. This reality, however dimly apprehended, is meaningful to me, illuminates my personal quest for meaning and purpose in life, is a guide that informs my behavior, and places in an honored perspective all the great themes of all the great religions such as love, community, and justice and all the newer signs of religious maturity that go under the rubric of responsible freedom and democracy. Let me now seek to expand on how my theology of God as transforming presence informs my own personal religious being.

#### HOW MY GOD INFORMS MY RELIGIOUS BEING

We are more than muscles and genes, bones and thoughts. We are the product of interactions ever since sperm met egg. Every step in the growth process, everything we have ingested, every environmental and cultural influence, everything it has been our fate or choice to experience has constantly acted on us and is constantly transforming us. In this sense God has been active within us, for good or ill, from the day mitosis started. We, as systems of matter, reflect in our being, our growing, and our becoming, the presence of the divine, active throughout our lives. And even as we have been and are constantly being transformed and changed by every relationship we experience, we also, as conscious beings, initiate relationships that, for good or ill, influence and transform the world around us.

To our knowledge we are the best "putter's together" that exist; and we, uniquely among all beings, can do this in a deliberate fashion. Whenever we put things together—bring people together, rub ideas together, introduce ideas to people or people to ideas, or exhibit behavior for others to witness—there the power of God in transformation will be alive. But this power in our hands can be either dangerous and a curse or fruitful and a blessing; it can be either destructive or constructive. This is an ambiguity I find inherent in this concept of God. Although this assertion goes against the grain of all Western religious thought, it remains true that disastrous weather is as much a part of things coming together as are the consensus-minded politicians who come together to hammer out new arrangements for a peaceful world. To assign to this transforming power that I call God either the label *good* or the label *bad* certainly gives to what I would call God a hue too anthropomorphic.

It is our conscious choice that makes the difference. Let me remind you that conscious choice came out of this impartial transforming presence and activity just like everything else. You may have noticed that up to this point I have carefully avoided using the word *creative*, speaking of a dynamic process or creating presence rather than a creative process. I find that the term *creative* carries within it the connotation of something that is good for the human individual, the life of humankind, or the total natural ecology. I believe it is only we who can be creative, choosing to be constructive on behalf of the future for ourselves, our species, or our environment. We can be partial in our own favor; the transforming power mysteriously present in every interaction can only be impartial.

So however we employ the transforming power found within relationships, we are using the presence of God among us. Only as we make the conscious choice to be creative, constructive, and upbuilding do we use this transforming presence in ways that augur well for us. Does this not give to individual responsibility, in freedom, a religious and very moral dimension? I should remark that many a seemingly destructive behavior, thoughtless remark, or even deliberate lie may in the long run prove to have been a constructive activity. "Tough love," which can restrict freedom, deny benefits or opportunities, or give misimpressions of parental love, may look like destructive activity. It sometimes takes wisdom to know the right behavioral choice or the right response that will produce the overall constructive human transformation. Both choice and wisdom need to be employed. We employ wisdom in choosing the food we eat or don't eat and the exercise we do or don't do so that the transformative metabolic and physical processes that go on within us will keep us healthy. We choose as wisely as we can the teachers and educational systems in which we place our children and ourselves so that the instructional milieu will be as fruitful as possible.

And we choose to be part of the religious adventure of life, for we sense that, beneath all the differences in form and practice and belief, its main thrust is to emphasize the creative transforming human qualities, like love and trust and generosity of spirit, that can exist between and among us. It is the religious enterprise itself and our ownership of that quality that make our life all that it is possible to be, as we choose the love relationship over the hate relationship in all our dealings with others. Thus, very central to my theology and religion is the element of personal choice and the responsibility to use it with wisdom and the awareness of its religious significance. I outgrew my early Presbyterian belief in predestination a long time ago. I think I've replaced it well. Put poetically, God may be impartial, but we need not be.

Love may be the highest of the human transforming religious qualities that impersonates the divine, but it surely isn't the only one. Relationships that are just, that reflect fairness to all concerned, transform individuals in a positive way, even as truth and honesty do. Beauty is a confirmation that the parts of a picture, composition, or sculpture blend together in a harmonious relationship. And a work of art of any sort stirs the soul with the indefinable quality of being able to capture meanings, express or excite human feelings, and capture moods and insights that cannot be verbalized with ease. Relationships add up to more than their constituent parts: beauty, meaning, remembered events, association. These are what fill the human soul; these are what creative transforming interactions accomplish in the human realm.

We can either choose to emulate God's role as a creative harmonizing agency by our constructive activity, and make ourselves partners in the God-process of creative transformations, or we can thwart this role by destructive behavior. I cannot believe that choice, one product of evolution, was meant to be the cause of its own destruction. Thus, when we consciously choose to further or extend God's creative transformational activity by taking upon ourselves this same creative role in our human life, I believe we exhibit, to the maximal extent possible for human beings, the meaning and purpose for drawing breath. Put simply, by engaging in creative, transforming interactions of every sort open to us, we can impersonate the divine and live out what I believe to be the meaning and purpose of our lives. This means that we are uniquely privileged (at least within our solar system) by being able, in a small but distinctive way, to be a part of the essential dynamic of our universe, that we have the power to transform, change, and experience meaningful goals and purposes.

#### CONCLUSION

We can have purposes, but the universe does not, unless we are prone to read them in. It's an anthropic habit to believe that God's history of creation had us as its intended purpose. Even though Copernicus and Harlow Shapley removed our belief in our own physical centrality,<sup>3</sup> we still wish to retain our theological centrality as God's purpose for being. I don't buy it! For me, the epic of evolution, driven by an inherent transformational presence (that I call God) completely wipes away the centrality of humans in the cosmic scheme as well as belief that a mindful purpose lies behind the universe's history. But these losses need not drive us into nihilism, as some might fear. Too many hints of a positive nature prevent us from making such a response. The feature of self-organization that many a scientist has noted, the ability of order to arise from chaos (given the right conditions), and the fact that the experimentation produced by the constant interplay of chance and law seems to have produced higher and higher levels of organic functioning lead many to speculate that there is some impersonal directive or

purposiveness driving our universe through time. This upbeat assessment of the future—including our future—may be found in many disparate places. For example, William Faulkner expressed it when accepting the 1950 Nobel Prize for Literature: "I decline to accept the end of man. I believe that he will not merely endure, he will prevail. He is immortal, not because he alone among creatures has an inexhaustible voice, but because he has a soul, a spirit capable of compassion and sacrifice and endurance" (Faulkner 1950).

These words from Martin Luther King, spoken at Montgomery, Alabama, in March, 1965, and used as the theme of the 1989 General Assembly of the Unitarian Universalist Association, express the long-held faith of liberal religionists in the strengths within the universe: "The arm of the universe is long, but it bends toward justice."

And Dag Hammarskjöld, after saying yes to life, continued with these words: "At some moment I did answer yes to Someone—or Something —and from that hour I was certain that existence was meaningful and that, therefore, my life, in self-surrender, had a goal" (Hammarskjöld 1964, 205).

I bring you back now to a thought I expressed earlier: Everything, from the first moment of the Big Bang, is a product of this transforming presence. To me this is a natural, rather than supernatural, activity of the universe. This conclusion is for me not a scientific belief but a religious faith. It infuses my being, it promotes my sense of the grandeur of the vastness we inhabit, it feeds my need for worship, it gives my life meaning. It is, if you wish, my faith hypothesis, for, as Rabbi Jerome Malino remarked, a faith hypothesis must satisfy these criteria: "It should not be inconsistent with reason and the data of experience and, beyond this, should provide a basis for the intangible essentials of living—such as compassion, understanding, love, and justice—and should enable us 'to see our frail human existence as a part of cosmic reality'" (Gilbert 1993, 2).

I believe I have here presented a viable and reasoned faith hypothesis upon which to live a religious life. I also believe that this is a viable contribution to Loyal Rue's search for a "noble lie": a new myth consistent with scientific knowledge, convincing if not factual, which attributes objective value to the universe (cf. Rue 1989).

The linchpin of the theology that I have spelled out is the mystery of the transformation that is part and parcel of every interaction that makes this a changing, evolving, dynamic universe since  $10^{43}$  seconds after the Big Bang. It is for me the key that explains the epic of evolution. It means that for me, evolution and its underlying and undergirding *why?* —a God present as the power of transformation in all interactions, which lies shrouded in natural mystery, is the keystone of my theology and

religion. I hope I have shown, not only how evolution is integrated into my theology, but also how it infuses my religious sensibilities.

#### NOTES

For advice and counsel on the choice of words, thoughts and phraseology I would like to acknowledge Michael Cavanaugh, P. Roger Gillette, Owen Gingerich and Geoffrey Knight.

1. The idea that evolutionary change takes place very gradually is still widely accepted, but the view that periods of rapid change sometimes occur—Stephen J. Gould's "punctuated equilibrium" for example—is gaining wider acceptance. See Davies 1988, 114 for a more recent example of this thought.

2. In *The Shaking of the Foundations* Tillich speaks of "the deepest ground of our being or of all being, the depths of life itself. The name of this infinite and inexhaustible depth and ground of all being is God... if that word has not much meaning for you, translate it, and speak of the depths of your life, of the source of your being, of your ultimate concern, of what you take seriously without any reservations" (Tillich 1948, 5). I'm skittish about the words *infinite* and *being*, so I should paraphrase the major sentence of this quote as, "The name of this inexhaustible depth and ground of all becoming is God."

3. I am here referring to the fact that Copernicus "removed" the planet Earth from the center of the solar system and Harlow Shapley "removed" our solar system from the center of our galaxy, the Milky Way.

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