Paper Title: Transformations: A Proposal for a Global Religion that Integrates the Great Religions through Science
Author: Williams, Patricia A.
Institutional Affiliation: none

This paper was prepared for "Science and Religion: Global Perspectives", June 4-8, 2005, in Philadelphia, PA, USA, a program of the Metanexus Institute (www.metanexus.net).

Abstract:
The project of integrating science and religion is a theological and philosophical stew, especially if we toss non-Christian religions into the pot. In general, the great world religions offer world-views, ethics, and practices (e.g. fasting, rituals, meditation). This paper proposes a united religion that adopts science for its world-view, human salvation through transformation as its aim, and religious practice as its method.

Science's contribution is to provide the epic of evolution, the story of origins beginning with the big bang and reaching (currently as far as we know) to the evolution of human beings. This is a story of transformation as the materials from the big bang transform into hydrogen and helium, hydrogen in stars transforms into the heavier elements, and these eventually (on Earth at least) transform into organic beings that become increasingly complex (on the whole), culminating (for now) in the human brain, the most complex organ known, and human society, the most complex entity known. Broadly, the purpose of the universe (if it has a purpose) seems to be to increase complexity through constant transformation (and therefore destruction as well as creation) of existing material into more complex material.

This epic allows for a creator and designer, even suggests one, but does not logically require one. Thus, this world religion allows theism, but also nontheism, including religious naturalism.

People may join in the universe's purpose through their creativity, but also through human transformation from creatures following their evolutionary dispositions (see below) to beings leading ethical/spiritual lives.

Science retains its universal narrative and methodological naturalism, but must reject philosophical naturalism and attacks on religion.

Religion's contribution is to provide the transformation of people from superficial and egocentric creatures who chase after the 4Rs evolution inculcates as dominant dispositions—resources, reproduction, relatives, and reciprocity—often pursued inordinately in destructive ways, to people who care for others, the ecology, and God (if they believe in God). Such personal transformation assures salvation after death (if there is an after-life).

The method derives from the existing great religions, retaining their traditions of meditation, ritual, exhortation, literature, etc. Religions retain their traditions and their ethics of compassion, but give up religious narratives and beliefs that contradict the epic of evolution and cease their attacks on science.

Therefore, science and religion unite at the basics. Science supplies the narrative of origins and world-view. Human transformation, if achieved, fulfills the moral injunctions of the great religions and provides or leads toward salvation. Religious

practices furnish the methodology for that transformation and for worshiping God (if the religion has a God).

This religion retains the traditional God of theism for those who wish, yet the epic of evolution allows nontheists to worship nature or humanity, instead, if they wish.

This proposal encompasses all the characteristics of religion listed in the *Encyclopedia of Philosophy* under "Religion" (vol. 7, p. 141-2) without demanding that any person's or group's religion possess all of them.

Biography:

Patricia A. Williams is a philosopher of science and philosophical theologian. She has published in various referred journals, collections, and encyclopedias. She is the author of two books, *Doing without Adam and Eve: Sociobiology and Original Sin,* named "Outstanding Academic Title" by *Choice* magazine, and *Where Christianity Went Wrong, When, and What You Can Do About It,* based on historical Jesus scholarship. She is currently writing a trilogy on Quaker theology. More information is at her website, www.theologyauthor.com. Her email is theologyauthor@aol.com

Paper:

Modern science and religion have conversed since the sixteenth century. Today, all the great religions participate, which stretches the conversation toward chaos. To focus the dialogue, I propose a model for unification. The proposed model unifies the great religions themselves through integrating them with science.

I know unification presents dangers. Few want to meld religions until the result is one massive conformity. And although some would like all religions and science, too, to adhere to their shrunken notion of their own religion, history proves this unlikely. Instead, in a globalizing world that seeks peace, we must learn to discover the core commonality in our diversity rather than prodding our differences until they provoke division, mutual incomprehension, and war.

Ideally, we could integrate science and religion without relinquishing much of either. I propose a model that integrates science and religion to produce one global religion while maintaining most of the traditions and diversity of the great faiths. Speaking generally, the great world religions contain origin stories, world-views, ethics, and practices. This paper proposes a united religion that adopts science for its origin story and world-view, human salvation through transformation as its aim, and religious practices as its method. To effect such integration, it is necessary to understand what religion is.

What religion is

Philosophers of religion agree on at least one thing: no one can define religion precisely to subsume all the recognized religions, and only those, under a single definition. Moreover, no one can develop an exhaustive list of attributes such that something is a religion if it possesses these and only these. The religions are far too diverse. Nonetheless, religions bear family resemblances to each other. It is possible to list characteristics of religions so some items in the list characterize one religion and some another, with overlap. The *Encyclopedia of Philosophy*[1] offers a list of family resemblances similar to those in textbooks of philosophy of religion. Here it is.

1. Belief in supernatural beings (gods) [belief something is ultimate].

2. A distinction between sacred and profane objects.
3. Ritual acts focused on sacred objects.
4. A moral code believed to be sanctioned by the gods [or by whatever is ultimate].
5. Characteristically religious feelings (awe, sense of mystery, . . . adoration). . . .
6. Prayer and other forms of communication [communion] with gods [or the ultimate].
7. A world view . . . and the place of the individual therein. This picture contains some specification of an over-all purpose or point of the world and an indication of how the individual fits into it.
8. A more or less total organization of one's life based on the world view.
9. A social group bound together by the above.

For the sake of religions without gods, "the ultimate" or "the central organizing principle" may substitute for "supernatural beings" and "gods." Because "communication" implies language, "communion" may substitute in the more mystical religions, for they claim their experiences of the divine incommunicable.

In addition to having some, but not necessarily all, these characteristics, religions come in three types. Sacramental religions focus on sacred objects and rituals, thereby emphasizing items two and three. Prophetic religions stress moral codes, thereby concentrating on item four. Mystical religions accentuate mystical experience and personal transformation, centering on item five. All the great religions contain items seven, eight, and nine. The proposal offered here loosely retains all the items, with item seven based on science, as explained in the following section.

Science's contribution

Science offers two contributions to a possible global religion: a narrative of origins and a world-view that includes an understanding of some basic human dispositions. Familiar is its origins narrative, known as the epic of evolution, that stretches from the big bang 13.7 billion years ago to our own evolution on planet Earth. To put the big bang at the beginning and us at the end is not to imply the universe culminates in us. According to best estimates, it will continue to exist for billions of years, if not forever. What might develop? We have no idea. Nor do we know what evolution on Earth might produce before the sun swells into a red giant star and swallows the planet some four to five billion years from now. Moreover, we are ignorant of life on other planets, which may be more intelligent, more technologically advanced, more moral, and more spiritual than we are. Within the limits of the information available, the human brain is the most complex organ known and human society the most complex entity known, by objective measurement.[2] Because the universe grows in complexity (see below), the most complex things known should logically appear at the current end of its saga. This does not imply the universe exists for us. We may be but a poor and passing species. Nonetheless, within the limits of our knowledge, here is the epic of evolution, greatly simplified.

Science says the physical universe began with an unimaginably large explosion, the big bang, some 13.7 billion years ago. Out of the big bang the elements hydrogen and helium formed. The universe then and now contains about 75% hydrogen and 25% helium. These gasses became distributed somewhat unevenly, and soon gravity began to condense the thicker portions. As they condensed, they formed galaxies and, within the galaxies, smaller masses coalesced, heated, and eventually lit the universe as stars. Upon

heating sufficiently, the stars destroyed some of the initial hydrogen, ripping its outer electron from its nucleus. Then naked nuclei crashed into each other and, because of the laws of physics, some adhered. By such a process, with unmentioned intricacies, the heavier elements formed.

So, the stars created the heavier elements. Some stars were large enough to explode in supernovae and send the elements rushing outward into local portions of the universe, ready to coalesce into stars again or into planets. Planets like Earth are more complex than stars. Stars and the galaxies in which they reside are more complex than hydrogen; hydrogen and helium are more complex than their constituents are. Thus, as time presses forward, complexity in the universe increases. Variety and structure also increase as elements multiply from zero elements to two, then from two to some ninety-two. The universe begins starless and becomes star-studded, begins without planets, but develops them.[3] The process is creative—the universe is self-creating—but only through processes of destruction. Hydrogen must disintegrate (ionize) before the heavier elements form, while some of them, in turn, lose their electrons and combine their nuclei to create even heavier ones. Meanwhile, supernovae destroy stars as they spew their constituents into local space. I call the process *transformative,* because elements transform into others, while stars transform into other stars and some previous star-material forms planets.

Planets like Earth form in the near vicinity of stars whose heat boils off the gasses to leave the denser elements to coalesce. Planets far from stars retain their gasses and, so, remain constituted mostly of gas. Again, variety, structure, and complexity increase.

Then, on Earth, life appears. At first, it is simple, composed of single cells. Some of these cells ingest other cells but fail to break them into useful food. The inner cells become cellular nuclei. Now, complex cells exist. In their turn, these form multicellular organisms, simple at first, but becoming more complex over time. Backbones and nerves evolve, neurons and brains—more complexity, variety, and structure. As in the physical world, so in the organic, creativity reigns, but only through destruction, as cells ingest other cells, herbivores consume plants, and carnivores prey on other animals. Moreover, the very process of evolution depends on destruction, for evolution will fail to occur unless more organisms come to be than survive to reproduce. Again, the process is transformative, using materials at hand to produce novel organisms and species.

These processes, both physical and organic, involve a certain amount of chaos or the creation of novelty would be impossible. If there is a plan to the universe, it is not a blueprint, and if there is a Planner, God is not an engineer. Yet, the universe is highly structured, is itself creative, and is remarkably fine-tuned.[4] Some sort of creative mind may well be behind it. But such speculation is not a contribution from science, which limits its investigations to the material world.

In this remarkable universe composed of matter and energy, something currently inexplicable happens. Intelligence and the ability to choose evolve. The ability to choose is simply the ability to make decisions between A and B that make a difference to the organism's life and to those around it. Like other evolved attributes, intelligence and choice appear gradually and, like other characteristics in the universe, emerge as novelties and increase over time. Plants seem to lack both intelligence and choice, but mobile animals have both. Herbivores have only some, perhaps, although those that survive certainly recognize and choose the nutritious over the toxic. In contrast, being a

successful carnivore requires knowing much and choosing often. Carnivores, like other sexually reproducing animals, must recognize the kind of animal with which to mate—a species member of the opposite sex, not too closely kin—and then chose the best among these. But they must also decide, learn, and know which species make good prey and what their habits are. Do they linger in the forest by the flooding stream at dawn or near the quiet, shaded pool on the savanna in the heat of the day? Do they return to the highlands annually during lowland heat and drought?

The evolution of intelligence and choice provide signs of increasing freedom in the organic world. The evolution of freedom culminates now, as far as we know, in us. For all their sophistication, carnivores like lions and omnivores like chimpanzees never attend the opera or the fashion show, nor write operas nor create fashions after having attended schools where teachers explain their intricacies. Although not predictable in detail, their lives are circumscribed. Ours are not. We evolved no wheels, but we roll faster and farther than the fleetest, most resilient animal runs; no wings, yet fly, no bulky winter coat, yet survive the Antarctic. Moreover, we choose how to do these things. Some prefer the safety and predictability of a scheduled, professionally piloted aircraft; others develop and file their own flight plans, and then pilot their own airplanes; others enjoy hang gliding or sky diving; still others ascend in baskets attached to balloons. In our freedom, we are a remarkably creative species, adding structure, variety, and complexity to the universe. Yet, in all our freedom and creativity, we remain animals, the products of evolution. We naturally tend to follow evolution's basic dispositions.

We are animals, mammals, primates. Had we not shared certain basic dispositions with other animals, other mammals, other primates, our species would have gone extinct. It did not. With simplification, I call our basic dispositions the 4Rs. As will become obvious, they are fluid, not unalterable. I indulge no hint here of our being inflexibly determined to pursue them. Instead, I highlight our freedom.

We share the most basic disposition with all other living organisms. All living things must seek resources to remain alive. They must also avoid dangers. To seek and to avoid here clearly apply to mobile organisms able to advance and flee, but also to sessile ones that seek, say, by stretching tall into the sunlight, beyond the shade of surrounding plants, and avoid attack through growing tough bark resistant to invasion. Our African ancestors sought ripe fruit and avoided hungry predators or they would not have survived to be our predecessors. We seek burgers and fries or, perhaps, swordfish and broccoli, but also shelter from sun and rain, cold and heat: we clothe ourselves and erect houses. In a monetized economy, this seeking and finding requires money.

That we have a monetized economy entails our being symbol-wielding creatures. What would a wild chimpanzee do with a dollar but, at most, wipe ripened juice from its masticating jaw? Only we know what the dollar symbolizes. However, our symbolization reaches beyond money into everything we do. Thus, when we choose broccoli over fries, we not only consume the healthier food, but also symbolize our values. When we purchase a house in a gated community, we symbolize our success and our desire to proclaim it to the world. When we choose Bill Gates or Bill Clinton rather than Mohandas Gandhi or Desmond Tutu, Martha Stewart or Sandra Day O'Connor rather than Mother Teresa or Dorothy Day as our role models, we select the symbol of our values.

So, resources are mere resources: we may eat them, inhabit them, or wear them. But they are also symbols. Moreover, our desire for resources is fluid, not determined. We may indulge in greed, squandering resources as status displays, or live simply, conserving resources and disregarding reputation. However, if we want to survive, we cannot ignore them. The disposition to seek resources is fundamental to all living organisms. It is the first R.

The second R represents the disposition to reproduce—we pursue sex. In our technological society, sex and reproduction are separable, of course, but not in our ancestors. And, again, unless our ancestors successfully reproduced, they would not be our predecessors. In sexually reproducing creatures like ourselves, reproduction is basic, for evolution is not fundamentally about survival, but survival to reproduce.

Charles Darwin introduced sexual selection after natural selection as another mechanism driving evolution. Organisms not only seek sex, they also seek sex with the most fit partners. Those that chose weak and sickly partners produced weak and sickly offspring, at best, and failed to become ancestors.

Many sexually reproducing organisms generate dependent offspring. Typically among mammals, the father departs and the mother raises the young. This arrangement makes sense, not only because she bears the young, but also because she invests the most in them: her egg is larger than the male's sperm, thus requiring more energy to produce, and she carries the fetus in her womb, nurturing it for a species-specific period, then feeds it milk from her own body. Moreover, compared to the male, she cannot generate many offspring, so to be an ancestor, she must enable those she bears to reach reproductive age. In contrast, as long as they can mate successfully, mammal males generate numerous offspring. If some fail to reach reproductive age, others succeed. By frequent mating, he assures he will be an ancestor.

Behaviors change if the offspring require two parents to raise them successfully to reproductive age, as in many birds. Then the parents either bond for a season, their attention on their mutual offspring rather than each other, certainly a successful strategy, or they bond for life, their attraction to each other, but again raising mutual offspring, also a successful strategy. If using the second strategy, both birds must choose fit partners if they are to become ancestors. The ability to make careful choices becomes increasingly important. In either case, if the male defaults, the young die and neither bird becomes an ancestor. Only males with strong dispositions for nurturing their dependent offspring became ancestors.

We are sexually reproducing mammals with unusually dependent offspring who form bonds between partners. As with other mammals, the female gives most to the offspring because she provides the large egg, carries the fetus in her womb, and feeds it with milk her body produces. She needs to choose her partner wisely, one fit in her environment, with adequate resources, and likely to stay to help her raise their offspring. If he stays and fertilizes only one female, he needs to choose wisely, too. However, he has another option. He can choose wisely and stay to raise their mutual offspring while fertilizing other females. Thus, he can pursue the strategy of raising offspring with a partner and fathering other offspring that may successfully reach reproductive age without him. Hence, he has a double chance of becoming an ancestor. Unless, of course, his partner finds out and kills him.

Thus, our disposition for reproduction is complex. It carries with it the potential for bonding through attraction to a partner, for wisdom or folly in choosing a partner, for caring for our children, for philandering, jealousy, and murder. Moreover, it is fluid. Most people have sex; many enjoy multiple partners even where laws and customs dissuade. However, others maintain monogamy and others are celibate. Economics matters. Wise farmers generate many children, for they are an economic asset and provide insurance in old age. Urbanites limit their number of offspring, even without artificial birth control, because children are an economic burden and plans like social security provide insurance in old age. Again, our behavior is underdetermined, but the disposition for sex is strong, as is that for reproduction.

Reproductive behavior may also become symbolic, as in marrying trophy spouses, decking the female in jewels to display the male's economic prowess, and hobbling her in high heals or bound feet to show he, unaided, can provide for the household.

Reproduction generates the third R, relatives. Relatives favor one another. Not only do parents provide for their offspring without return, but near-relatives provide for one another without return. Favoring relatives is an observed fact in many species. Now we know why. There are two routes to becoming an ancestor. One is to raise offspring successfully to reproductive age. The other is to help relatives successfully raise their offspring to reproductive age. Although using either strategy does not require the organism know about genes, understanding the strategies does. Offspring and near-relatives carry many related genes, and to become an ancestor is to have copies of one's genes pass down the generations. Helping near-relatives survive to reproduce and their offspring survive to reproduce means becoming an ancestor by proxy.

Clearly, human beings do more for their own children than they do for other peoples' children. Yet, in the case of an epidemic like AIDS, where people with dependent children die, relatives, often siblings or grandparents, raise the dead couple's children to reproductive age. In contrast, people do not often raise strangers' children.

The R disposition to care more for one's relatives than for those non-related results in children being loved and raised successfully, so it is a valuable, necessary disposition. However, it has its dark side. It may result in nepotism, in tribalism, and, reversed, in genocide. And, again, it is fluid, not deterministic. People adopt non-relatives, even those from different ethnic groups. Some people beat their childern, some murder them. Economics matters. In modern, technological culture, young women who become pregnant without a stable partner often seek abortions—and for good evolutionary reasons. Imagine a twenty-year-old woman who has just started her junior year in college. Tempted one night in a bar to have sex, she becomes pregnant. She hardly knows the man, and he turns out to be impoverished, ill educated, and unstable. To marry him, were he willing, would be to share his economic circumstances and, perhaps, later suffer abandonment. In either case, raising the child to reproductive age would be difficult. To raise the child alone would require her to leave college and get a job. But this means impoverishing herself and her future, both bad for the potential of the child. Moreover, it would limit her marriageability. Typically, men do not want to pour resources into other men's children, so she is not as marriageable as she would be without a child. Moreover, being less educated, she is less likely to attract a well-educated male—one with extensive resources.

In contrast, if she aborts, she finishes her education, meets a young lawyer, marries, and bears three children, all of whom also marry people with abundant economic resources who will raise their children successfully to reproductive age. Having an abortion young enables her to become an ancestor. From an evolutionary perspective, she chooses wisely. The flexibility of her disposition to bear her child or abort enables her to do so.

Although not unique to us, the fourth R especially marks humanity. It is reciprocity, the equal exchange of goods and services between those not closely related. Unlike the R of relatedness, or even of reproduction, it is egocentric. We give, and we want something of equal value back. The disposition to engage in reciprocity underlies our commercial activities and our justice system, for what is justice but receiving what a person deserves? The disposition for reciprocity underlies the strength in America of desire to maintain the death penalty. He (usually male) took a life; in reciprocal payment, he should lose his.

However, the disposition toward reciprocity is also fluid. We can forgive debts, even murder. Some do. Moreover, we prefer reciprocity not be too equal. We often strive to get more than we give and praise ourselves as clever when we do so.

Consider, then, people who follow the four Rs of our basic, evolved dispositions in our modern, urbanized, technological society. They pursue resources and, being symbolic creatures, display them by purchasing expensive houses, cars, clothes, and gadgets. They shop 'til they drop. They marry for love, with an eye on money, partly because they want to display their resource-acquisition abilities, but also because abundant resources aid raising children successfully to reproductive age, help the children acquire those things enabling them to obtain more resources, like education that, in turn, facilitates their marrying wealth. Because he is a financial success, the man is popular with women, and he impregnates several. The wife knows, but remains silent because his resources attract her, too, and he is not squandering his resources on the other women so that she and her children suffer. Caring more for relatives than for others, they spend the holidays with their relatives and loan his brother some cash so he can purchase an upcoming commercial property. They enjoy their friends, being careful to return favors with meticulous reciprocity and hold enough social evenings so everyone who has invited them receives an invitation in turn.

This is the good life, the American dream. God has blessed them.

It is not the life frenetic pursuit of the 4Rs produces. Frenetic pursuit might have turned him to gambling, cheating on his taxes, or stealing from his firm, their conclusion jail. He might have neglected his wife and chased fast women, thereby acquiring AIDS and infecting his wife whose children, in turn, are infected and die. He might have hired only his relatives rather than people of greater capability in his line of work, so his business failed. He might have competed with his friends to the point of losing them. She might have goaded him to buy more than he could afford and spent extravagantly herself, driving him into bankruptcy, ruining his commercial reputation and impoverishing the family. She might have perpetually sided with her mother against him, taken a lover more handsome and personable than he is, and borne a child by her lover. He might have divorced her for it—or murdered her. Undue pursuit of the 4Rs can go bizarrely awry.

As is clear, human beings' fundamental dispositions are flexible, not determinative. People are able to pursue them frenetically to their detriment or sagaciously to the attainment of the American dream. In realizing the American dream, people remain superficial, egocentric, and narrow in their circle of caring, successful in both cultural and evolutionary terms, but personally empty and restless.[5]

Surely not! We are evolution's creation, so how can responding to its dispositions successfully be unfulfilling? The magical answer is, because we have souls and/or because God created us to live for the divine glory. However, those answers truly are magical. They arrive unbidden, ungrounded, from above the Earth where heaven is, or was. The grounded answer is that, through evolution, we have greater capacities than those required to fulfill our basic dispositions. The capacity to bond with another for life lends itself to a deep, lasting, other-oriented relationship. In the world of our evolution, such relationships loomed more important than inordinate pursuit of resources. We necessarily treated the R of resources lightly because evolution pursued us across the African savannas where we traveled with few possessions, while our relationships constituted our lives, and losing them meant death alone in the wild. And while the R of relatives would have proved sufficient to unite a band, not everyone in the band was related. Small bands demand exogamy in order to avoid inbreeding depression, so half the adults were genetically distant. Yet, they lived together like close kin. Moreover, reciprocity hardly sufficed as social glue when lions roared in the night, hyenas sniffed close to the fire, and neighbors vowed revenge. Under such circumstances, typical as we hunted and gathered across the African savannas, profound, other-regarding relationships form, whether common genes urge them or not. For our genetic structure of, at most, 50% relatedness, we became a remarkably social species. The doyen of sociobiology, E. O. Wilson, classifies us with eusocial species. The other eusocial species are the hymenoptera, the social bees and ants, whose genetic structure of 75% relatedness among sisters binds the females irresistibly into organic cooperation.[6]

Moreover, we possess great abstract capacities. Our ancestors buried their dead, painted pictures on the walls of caves, danced and sang to hollow drum, gut string, and flute, spotted the rabbit in the moon, told stories about the stars that seem to form pictures in the sky, and developed legends about the origin of nature and humanity. Later, as we know, they took the capacity for counting that evolved for survival value, mixed it with logic, and invented mathematics. Our evolved capacity for language, plus the need to keep accounts when our resources increased and reciprocity ruled, led to writing and, so, the preservation of records. History began. Speculation about the world led to philosophy. Given such capacities, to spend life successfully pursuing the 4Rs is to remain superficial and selfish, satisfying our evolved dispositions while leaving our deeper human capacities barren. Using only our limited evolved capacities, we add little structure, variety, complexity, or even freedom to the universe. Exercising our human capacities, we increase them abundantly. Through our creativity and our transformation beyond creatures pursuing the 4Rs, we become intimately related to the universe, mirroring its creative and transformative powers, fulfilling our role in it.

Given our capacities for depth and creativity, pursuing the 4Rs of evolution fails to satisfy us. On the other hand, we are so flexible, our lives so underdetermined, we need guidance and encouragement to live a fulfilled human life. Herein lies religion's contribution.

Religion's contribution

Religion offers guidance about how to live. I think it safe to say that the great religions all advocate lives of compassion. They advise many other things, of course, but compassion seems to constitute their core. It is the wellspring from which they draw detailed injunctions.

The detailed injunctions are a vexed matter. Certainly sacred texts such as the Hebrew Scriptures say God commands practices no longer available, such as the specifications for Temple sacrifice in Leviticus 1—7. Leviticus 13 stipulates measures against leprosy, but what Leviticus means by leprosy is not what we mean. The instructions for the Jubilee year of Leviticus 25:8-55 proved unworkable in practice. And while God might command us not to muzzle an ox treading grain (Deut. 25:4), right treatment of our tractors goes unmentioned. Yet, compassion undergirds the Jubilee instructions, the commandment about oxen, and perhaps the other commandments as well. The Jubilee year constitutes a method to keep the rich from growing richer while the poor become dispossessed. Concern for domestic animals recommends compassion because people so easily exploit and brutalize them. The problem with such ancient texts is to separate culture-bound injunctions from an inspired understanding of how to live.

For example, many historical Jesus scholars conclude that Jesus forbids divorce, despite the softening of the commandment in Matthew's Gospel (at 5:32 and 19:9).[7] But why? Scholars examined the role of women and divorce practices in first century Jewish society. To simplify, divorce harmed women and, under some rules, men could divorce their wives for trifling causes. Thus, given the culture, the scholars think Jesus advocated compassion toward women by forbidding divorce. In our own culture where women are more independent, he might have recommended equal pay for equal work, free day care, and/or adequate child support rather than forbidding divorce, considering how brutal husbands can be to their wives and children, especially if they feel trapped in the marriage.

The Gospels report that, when asked what the greatest commandment is, Jesus replies, love to God and neighbor. Matthew's Gospel adds, "On these two commandments hang all the law and the prophets" (22:40).[8] Even as a child, I interpreted this as a prescription for judging scripture, that whatever injunctions in scripture followed from love to God and neighbor were inspired, but when scripture commanded actions like the stoning those who curse their parents or commit adultery (Lev. 20:9-10), it is culture-bound.

In accord with nature as science describes it, the great religions call for personal transformation. In those that posit life after death, transformation leads to salvation from death and/or from eternal punishment or endless reincarnation. The direction of transformation is away from pursuit of the 4Rs, and certainly from frenetic pursuit. I have written about Jesus' call to people to relax rather than becoming ensnared by the 4Rs.[9] He recommends living lightly, especially when considering possessions. Certainly, he rejects the American dream with its emphasis on wealth, status, and acquisition. So does Hinduism in its call for selflessness. So does the Buddha, who is reputed to say things like "Let us live most happily, possessing nothing; let us feed on joy, like the radiant gods" and "What good is hide clothing? While your inward state is a tangle, you polish your exterior."[10] The text of Taoism, the *Tao Te Ching*, offers similar advice:

In dwelling, live close to the ground.
In thinking, keep to the simple.
In conflict, be fair and generous,
In governing, don't try to control.
and
When the ancient Masters said,
"If you want to be given everything,
give everything up,"
they weren't using empty phrases.
Only in being lived by the Tao
Can you be truly yourself.[11]

The great religions counsel avoiding frenetic, or even sagacious, pursuit of the four Rs. Yet, neither Jesus nor Buddha was an ascetic. Jesus was accused of gluttony and drunkenness (Matt. 11:19). Buddha indulged in asceticism only to discover it failed to lead to enlightenment.[12] The *Tao Te Ching* says that, in a wisely governed country, the people stay home, enjoy their families, and till their gardens,[13] hardly an abstinent existence. Perhaps asceticism continues to find the 4Rs alluring, so tempting that to reject them seems the only option to succumbing. In leading us gently from the 4Rs, the great religious call for transformation from chasing or fleeing our evolved dispositions to fulfillment in a deeper, more spiritual life. Attaining to life of the spirit either constitutes salvation or is the prerequisite to it, depending whether the religion emphasizes life lived here or life after death.

Whatever their major accent, the religions all call for personal transformation. Sacramental religions emphasize purity to participate in the sacraments. Prophetic religions highlight ethical behavior at all times. Mystical ones call us to participate in the divine.

Moreover, they offer methods for achieving transformation and salvation. Sacramental ones recommend sacramental participation, prophetic ones call for heeding exhortations and sacred scriptures, and mystical ones suggest turning inward to prayer, meditation, and contemplation. Most religions specify their methods in detail although, of course, the details differ from religion to religion. However, mystical techniques bear family resemblances in their stress on turning inward, maintaining silence, and distaining outward aids.

When religion and science integrate, they retain much, yet transformation occurs in both.

Transformation and retention in science and religion

When science and religion merge, they retain their respective contents and methods. Science retains the epic of evolution that, if told in detail, covers the content of all the hard sciences from cosmology to physics to chemistry to biology. Meanwhile the human science of the 4Rs, evolutionary psychology, reaches up into the softer sciences, to psychology, sociology, and economics.

The religions retain their central ethical content, the call for compassion. Importantly, theism retains its deity, for science cannot disprove the existence of God, and the orderliness and creativity of the universe suggest a creator, although they do not logically entail one. So, science allows God, but leaves room for religions like

Buddhism, Hinduism[14], or religious naturalism and humanism that reject theism but, respectively, make equanimity, liberation, nature, or human happiness ultimate.

Science and religion also retain their respective methodologies. Science maintains methodological naturalism that insists on seeking natural causes rather than supernatural or esoteric ones. The religions retain their methodologies of sacramentalism, prophecy, and mysticism. When religions center on mysticism, Ken Wilber thinks the religious and scientific method similar. Both follow the injunction "do this," whether peering through a telescope or silently gazing inward. When practitioners use their techniques well, each results in direct, personal experience. Finally, the practitioners consult their respective communities for confirmation or rejection of their findings.[15] Theoretical science and theology, respectively, then use reason to reflect on and order the experiences. If Wilber is correct, mystical religions may integrate easily with science.

Yet, in their amalgamation, both science and religion lose something, I think to their benefit. Science must jettison philosophical naturalism, the claim that nature or the material/physical constitutes all that exists, for this claim excludes the possible existence of divinity or the supernatural. Because science cannot prove God does not exist and exceeds its competence in addressing the question, rejecting philosophical naturalism makes science truer, leaner, and less aggressive. It rids it of baggage it does not need, that weighs it down with debates it cannot win. And, of course, if it is to integrate with religion, it needs to cease attacking it.

If a religion now accepts statements, narratives, or myths the epic of evolution contradicts, it must discard them, at least as literally construed. Moreover, any theory of human nature that contradicts characteristics fundamental to human nature like the 4Rs, derived from science, or holds culture exclusively responsible for human waywardness, moral evil, or sin requires change. Some religions will experience little difficulty with such requirements, others more. As the first religion to encounter modern science, Christianity has wrestled with these constraints longer than any other has and, with its traditional claim of historical verisimilitude, requires considerable revision.[16] However, it has its own internal difficulties, too, both historical and scriptural. Religions gain, of course, a more realistic, less legendary picture of the universe and a more credible concept of God. Certainly, a religion whose deity hurls hail on the heads of his (yes, his!) chosen people's enemies, killing more of the enemy than the soldiers did (Josh. 10:11), can only improve its concept of God when it incorporates modern science. And, of course, if religion is to integrate with science, it needs to cease attacking it.

Religions that adopt the epic of evolution will retain most of the attributes listed above as characteristic of religion. Naturalistic and humanistic religions already deny the existence of God and, so, already reject the gods in items one, four, and six. However, the epic of evolution fits their respective foci on nature and humanity nicely. Religious naturalists may study the intricacies of nature and greet them with awe. In this, the least transformative (and least religious) of the religions, perhaps feelings will effect transformation. However, I suspect religious naturalism needs to mature as a religion before it fits well with the compassionate, transformative ideal. Humanistic religions may study the 4Rs and the wondrous capacities that carry us beyond them, and then seek personal transformation to fulfill our highest potential. Both may organize their personal and communal lives around them, as in items eight and nine.

Hinduism and Buddhism are complex and difficult to summarize. Their more scriptural and ritual traditions will probably resist incorporating the epic of evolution more than their mystical traditions. However, Hinduism already has several origin stories and balances them nicely, so the epic of evolution should not greatly trouble it. The Dali Lama has already said Buddhists should accept whatever science offers, so he thinks Buddhism will easily survive incorporating the epic of evolution. Judaism, Christianity, and Islam embrace all nine items now, but replacing their world-views with the epic of evolution may prove difficult, as Christianity's experience suggests. These "people of the book" find loosening their grip on their revered scriptures difficult. Some in each religion so far find it impossible.

Christianity is blessed with excellent scholarship on the historical Jesus. If it places him at the center of its concern rather than the sacrificial Christ, it will find incorporating the epic of evolution easy. Placing the historical Jesus at the center already requires adopting the rationality and skepticism of critical pursuits like science, and makes Jesus the sanction of the moral code in item four, as Buddha is in Buddhism. Centralizing the historical Jesus places the responsibility for personal and social transformation on people willing to cooperate with God rather than on an event two thousand years old.

A brief look at the mystical side of Christianity, represented today by the Religious Society of Friends (Quakers), shows them rejecting the distinction between sacred and profane in items two and three from the beginning. For them as for the mystical Sufis of Islam, all is holy. Today, those Quakers who retain the original Quaker theology and mystical methodology have loosened their grip on the Christian world-view. Some have done so by emphasizing the historical Jesus rather than Christianity's sacrificial and atonement theologies and, so, might provide leadership to the rest of Christianity in placing the historical Jesus at the center of concern, especially ethical concern.

However, Quakerism has failed to develop a worldview that specifies a purpose for the world and the individual's place in it, as in item seven. The incorporation of the epic of evolution would provide this missing element. Because Quakers have always focused on personal and social transformation, the discovery that the universe is transformative, too, would afford an important addition to Quaker theology and, thereby, to mystical Christianity.

If a common scripture facilitates enrichment and unity in a global religion, the *Tao Te Ching* would prove an excellent choice. It contains nothing to contradict science, so it merges effortlessly with the epic of evolution. Moreover, it is a classic spiritual work, already popular with spiritual seekers of many religions. This is not to suggest other scriptures be jettisoned. Maintaining the religious traditions in their diversity will continue to be important.

In summary, it is possible to construct one global religion while retaining much of the diversity of the current great faiths by integrating the whole with science. Science contributes the epic of evolution, with its origins narrative and world-view. It also offers a thin theory of human nature. Transformation constitutes the center of its world-view and its humanism. Religion contributes the content of human transformation and method(s) to achieve it. The content is compassion, the methods sacramentalism, prophecy, and mysticism. Of the three types of religion, mysticism merges most readily

with science. Religion may be theistic or not. Perhaps all the existing religions integrate best by emphasizing elements they already possess that are characteristic of religion in general, in this order: (5) characteristically religious feelings; (6) communion with the ultimate; (7) the epic of evolution; (8 and 9) organizing the individual's and social group's life around these, especially around compassion and personal transformation beyond the 4Rs (4). Such transformation constitutes salvation and, if there is an afterlife, also leads to it.

References

---

[1] Edwards, Paul (ed. in chief). 1967. *The Encyclopedia of Philosophy*, Vol. 7. New York: Macmillan & The Free Press; London: Collier Macmillian, 141-2. All introductory material on religion comes from pp. 140-5.

[2] See Chaisson, Eric J. 2001. *Cosmic Evolution: The Rise of Complexity in Nature*. Cambridge, Mass: Harvard University Press.

[3] The story of increasing complexity, variety, and structure is told well in Smolin, Lee. 1997. *The Life of the Cosmos*. New York: Oxford University Press. Chaisson deals especially clearly with the rise of complexity.

[4] See Greene, Brian. 1999. *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory*. New York: W. W. Norton & Company.

[5] For a discussion based on empirical evidence rather than sociobiological theory, see Kasser, Tim. 2002. *The High Price of Materialism.* Cambridge, Mass: MIT Press.

[6] Wilson, E. O. 1975. *Sociobiology: The New Synthesis.* Cambridge, Mass.: Belknap. "Irresistibly" is somewhat strong. There is some competition among the females—they are not 100% related, after all.

[7] Jesus forbids it without exception in Mark 10:10-12, Luke 16:18 and 1 Cor 7:10. Thus, the forbidding is in three separate sources, Paul, Mark, and Q (Luke and Matthew). For a discussion, see Ehrman, Bart D. 1999. *Jesus: Apocalyptic Prophet of the New Millennium*. Oxford: Oxford University Press, 172-3.

[8] All quotations from the Bible are from the New Revised Standard Version.

[9] Williams, Patricia A. 2005. "The Fifth R: Jesus as Evolutionary Psychologist" in *Theology and Science* **3.2** (June—forthcoming)**.**

[10] Borg, Marcus and Ray Riegert. 1997. *Jesus and Buddha: The Parallel Sayings*. Berkeley, Seastone, 57, 75.

[11] Mitchell, Stephen (ed. and tr.). 1988. *Tao Te Ching.* New York: HarperPerennial, from sayings 8 and 22.

[12] Burke, T. Patrick. 1996. *The Major Religions: An Introduction with Texts*. Cambridge, Mass.: Blackwell, 60.

[13] Saying 80.

[14] Buddhism and Hinduism are complex. Some versions have a deity, some do not.

[15] Wilber, Ken. 1998. *The Marriage of Sense and Soul: Integrating Science and Religion*. New York: Broadway Books, 155-6.

[16] See Williams, Patricia A. 2001. *Doing without Adam and Eve: Sociobiology and Original Sin*. Minneapolis: Fortress.