

THE GIFT OF PEACEFUL GENES

Warren Johnson

I appreciate the opportunity to participate in this conference. I grew up in a world shaped by the rational processes of science, and my mind still functions in that way. But now I think of myself as firmly on the religious side, and mainly because of the matter of love, the focus of this conference. All the great faiths ask for selflessness in one form or another, with love the form Christ asks for in the Great Commandment, to love others as ourselves. It is the one all the other commandments are based, but our society is moving in the opposite direction, toward the ever greater importance of the self. It is what drives the free market economy that has grown important in organizing our society, but it is broader than this. The essence of the modern consciousness is to be liberated from the forces that held the individual back in the past. Together, they have created great wealth and power, but its costs have been high in terms of insecurity, anger, and conflict, and at all levels, from the personal to the international. From the perspective of its demands on nature alone, it is unlikely that it can be sustained, not for long at least. The only proven alternative is the selflessness of the great faiths, and finding satisfactions in the social, emotional, and spiritual realms rather than the material and competitive. This is the case I will try to make.

Old Plagues and New

I grew up during the fortunate years after World War II when it seemed we were overcoming the age-old plagues of humankind, of want, disease, and ignorance. Trade and communications were pulling the world together, and I personally benefited from the opportunities to enjoy nature, travel, and be educated at a fine university. Having done well in math and science, I was directed toward engineering, and after spending a year traveling around the world with my new wife, we settled down to a career with the National Park Service, one that seemed perfect for our mutual interests in nature. I had been raised in a neighborhood church, but religion did not seem to have much to contribute to the powerful forces for good that were at work in our society, and the world as a whole.

Now, however, these same benevolent forces are creating new plagues, ones that are less amenable to the rational scientific methods that worked so well against the old plagues. It was bureaucratic infighting, even if under a facade of civility, that sent me to graduate school for a doctorate in natural resources, and pure good fortune that led to a teaching job in a geography department, one of the few disciplines that still offered a place for the generalist. Teaching natural resources and cultural geography was a constructive combination since it made possible combining concerns about the heavy use of resources with the ways of life in Third World countries based largely on renewable resources but often more at ease than in the U.S. The gains of economic development are real, but everywhere they are leading people to deal harshly with each other and the environment. Because the U.S. pioneered many of these ways, we are pressing them insistently, and resist thinking about where they may be taking us. This left me a disillusioned scientist/humanist/modernist—however it is termed, and that there is profound truth in the religious heritage that sustained traditional societies through most of history.

I still have great respect for science, and know that it shapes my thinking, but now I see it as having been captured by the culture of self-interest that is taking us toward catastrophes on an unprecedented scale. This is not so much because of the weapons of mass destruction (all of which were invented and first used by the West), but because of the positive achievements of the modern, including the capacity to feed the world's growing population. We are proud of this, but close our eyes to the fact that increasing amounts of energy are needed to produce additional increments of food, and also the studies reported in the premier scientific journals that point to the peaking of world oil production soon, either in this decade or the next. (See "The End of Cheap Oil," *Scientific American*, March, 1998, and *Science*, "The Next Oil Crisis Looms Large—and Perhaps Close," September 11, 1998.) We are, in effect, farming with oil, and this is not just the fuels that go into the tanks of our impressive farm machines. Much more important are the chemical fertilizers, especially nitrogen made from natural gas, that increase yields substantially, four and five fold at least, and continuously year after year without having to rest land. They also make infertile soils productive, just as pumped water makes dry ones productive. The pastures that in the past were needed to feed draft animals are now producing crops instead, as are the woodlots that were formerly needed for fuel for cooking and heating. Transportation of farm products now uses as much energy as growing the food in the first place, but means lands can be put to the crops they are best suited for and shipped to where they are needed. Preserving food provides similar benefits, and uses similar amounts of energy.

If oil is most important in this, it is because it dominates transportation, making it the lynchpin of the global economy. It moves food and much else to the cities that have a central role in the global economy but require so much energy and materials for their metabolism. The village-based traditional agricultural societies being displaced were based primarily on solar energy but would not be able to support the present world population. We are moving farther out on the limb of dependency on the fossil fuels that are being depleted, and with no viable replacements on the scene. There are low grade fossil fuels available, not only coal but tar sands and heavy oils, that can be made into synthetic oil and gas, but this is expensive and generates much more of the greenhouse gases that cause global warming—the wild card in the increasingly dangerous game we are playing. The other forms of energy that have been investigated promise only small amounts of energy compared to the concentrated, convenient, and inexpensive forms of energy that now drive industrial society.

For all of this, however, we have our eyes tightly shut. Such barriers are inconsistent with the powerful economy that is the basis of our national pride, as well as our military power. It is not necessary to use more pejorative terms to explain my disillusionment with the directions that self-interest is taking us. Freedom may be our defining national ideal, but it is degenerating into the self-serving ways that are increasingly necessary to get by in a society shaped by the economy. Traditional societies have relied on markets for their value in allocating goods and services, but the values of the marketplace were felt to be too base to be shape all of society, and we are beginning to experience the reasons for this. We are no longer free to be small farmers, for example, or craftsmen or shopkeepers, or to live in a community based on face to face relationships. Instead, ever more of our emotional energy is being drawn into an economy that is so efficient and competitive that it leaves few other choices. The competitive drive created gives this nation tremendous power, but everywhere it is leading to antagonism and conflict.

It was teaching cultural geography over the decades that a useful way of thinking about these matters emerged.

The Original Gift

The textbook used when I started teaching was organized around methods of livelihoods, beginning with hunters and gatherers, moving to traditional agricultural societies, and then urban industrial societies. I had to learn more about hunters and gatherers, and was surprised to find that they were so peaceful, and happy, too, even when living in the harsh environments—tropical rain forests, deserts, and the Arctic—that were the only ones left to the by more powerful and numerous people. All they owned was what they could carry with them when moving from place to place to find the food they needed.

How they manage to make life good under these circumstances was something I was curious about, and it led me to a seminal article by the anthropologist Marshal Sahlins, “The Origin of Society,” in the June, 1960 issue of *Scientific American*. Sahlins compared the differences between hunters and gatherers and the chimpanzees, our closest primate relatives, and concluded that the key difference was that hunters and gatherers controlled sex. As with most animals, the male chimps fought for the dominance that enabled them to mate with the females. This makes sense from the Darwinian perspective, since the genes of the strongest male are passed on to all the band’s offspring, but it entailed a good deal of wasted energy in fighting, injuries, and death. Over millions of years of human evolution, hunters and gatherers managed to gain control of the instincts for dominance and sex, and in ways that left the family the peaceful, productive core of human society it has remained ever since. Sahlins argued that the incest taboo was critical in this, since it not only kept sexual tensions from disturbing the family but also required that genes be spread throughout the band that created blood ties between its members. And since most bands were small, intermarriage with neighboring bands occurred as well, so blood ties helped control conflict with them as well. The peaceful cooperation that resulted turned out to be more constructive than the quest for dominance of the primates. It necessitated language, for instance, and the larger brains that enabled humans to occupy all of the world’s habitats, while the chimps remained restricted to the one they originally occupied. The capacity to work together left humans more fit in the evolutionary struggle.

How this result was achieved cannot be known; bones and stone artifacts tell us little, other than the process took millions of years, and with many of them still marred by violence. In thinking of what was accomplished, keep in mind how disruptive the urges for dominance and sex that we still carry with us can be; 98.5 percent of our genes are the same as those of the chimps. But somehow, the individuals with the stronger aggressive instincts fell behind the more peaceful. Perhaps the killers killed each other off in fighting, or failed to raise offspring as effectively as those with the more peaceful urges.

However it was, the peaceful groups gained. Things went better for them, and this turned out to have extraordinary evolutionary value. One way of appreciating it is to observe the pressures generated in nature by the struggle for survival, for food and to mating especially. Among hunters and gatherers, in contrast, sharing became a universal characteristic, and monogamy close to it. They also found ways of controlling their numbers when the alternative was the conflict over territory that threatened their peaceful ways. So improbable is this achievement that it suggests some form of divine intervention. I understand how others can see the process as fully natural, and have no interest in debating the matter. Speaking for myself, I am so alienated by what I see as the arrogance of humanism—and the catastrophes it is taking us toward—that I have a strong urge to see it as a gift, pure and simple, rather than something that an all-knowing, all-powerful humanity can claim credit for itself.

In effect, human nature has two sides, an aggressive side inherited from our primate ancestors and a peaceful side that came out of human evolution. It is not necessary to claim that the peaceful genes are stronger than those for sex and dominance; almost certainly they are not. What is critical is culture, since it is through culture that peaceful cooperation is encouraged and aggressiveness discouraged. This is confirmed by continuing with the process of cultural evolution.

The Fall from the Garden of Eden

If this familiar story from Genesis is read as a parable of cultural evolution, the forbidden fruit would be the knowledge of agriculture, with the penalty for eating it being the loss of the way of life that millions of years of evolution had adapted humans to so well. In its place was the curse of “painful toil,” and that “You will eat the plants of the field by the sweat of your brow.” The relaxed cooperation and sharing of hunting and gathering was undermined, since farmers could not be expected to share the fruits of their toil in the hot sun with those who had no taste for such work. Also, settled life replaced the nomadism of hunters and gatherers, bringing with it competition over the accumulation of things and a reduction in the leisure that hunters and gatherers enjoyed. And the curse was final, since farming led to the larger population that made a return to hunting and gathering impossible.

Life would forever be different with farming, but the limited record indicates that the earliest agricultural societies were still able to preserve much of their peaceful heritage. In the Middle East, however, circumstances favored other technological changes. The horse was domesticated in the open grasslands of Central Asia around 4000 B.C., and led to the rise of mounted herders who tended to fall into violent ways, much as the Plains Indians did after they learned to ride the horses that had escaped from the Spanish. In Central Asia, the mounted horsemen came to be known as barbarians because of their murderous attacks on settled peoples, and especially after another important technological advance had occurred, the irrigation that made it possible to use the dry but fertile bottomland soils of the Tigris and Euphrates rivers in Mesopotamia. As with the domestication of the horse, irrigation led to the rise of warlords who fought to control the areas made productive by irrigation, and they did not hesitate to use farmers in any way that helped with this. Those who more restrained in this were the ones more apt to be displaced by the aggressive, the “take or be taken” dynamic that has characterized the worst of times. And as in the modern era, warfare led to technological advances that resulted in the first urban civilizations for which this era is honored. For the majority of people, however, it was an unmitigated disaster—the loss of the independent ways they had inherited from their hunting and gathering ancestors. The projects they were forced to work on included the huge monuments to warlord kings designed to reinforce their claims for divine authority.

It is more than a coincidence that so many of the great religious teachers lived during the 6th Century B.C. In cultural evolutionary terms, this can be understood as reflecting the rise of a device for overcoming the warlords in order to reestablish peaceful, cooperative ways. How this was achieved is almost as miraculous as the achievement of hunters and gatherers, but somehow the great faiths managed to overcome the warlord kings. The military strongmen of the time would not seem to be the types to tremble at the threat of burning in hell or being reincarnated as a dog, but they could not know for sure, and if such beliefs were gaining wide acceptance, suppressing them could be dangerous. Not only does suppression often strengthen a religion, it could encourage a challenger to adopt the faith in order to gain the people’s support in overthrowing a despot. A wiser course of action for a warlord king, one apt to assure a long

reign, would be to accept the religion, including its restraints on his behavior, but receiving in return the respect and support of his subjects.

That this was most successful in the East could well be due to geography. Both India and China were protected from the barbarians by mountains and deserts, giving agriculturally based societies the time to become well established before the barbarians reached them. In the West, however, there was a direct route Mesopotamia, much of it over the high plateaus that horsemen could cross so easily. The barbarian attacks came earlier, and resistance to them required the military prowess that could also be used against one's neighbors, with the result being the steady stream of civilizations that rose and fell; this is the heritage that spread west with the Greeks and the Romans. Equally important were the broad grasslands of southern Russia that offered mounted warriors a broad highway west toward northern Europe. The people they displaced had no choice but to displace others farther west if they were to survive—the "take or be taken" pattern again. Europe was thus shaped by violence from two directions, leaving it backward until the technical advances of the Renaissance created a worldwide opening for aggressive ways, and they paid off spectacularly in the age of discovery and conquest. This was true with the Industrial Revolution, too, that was given momentum when the Calvinists saw economic success as a sign that they were among God's elect. This changed everything, including the creation of a new faith.

The Market Faith

The technological advances of the modern era have much in common with those that led to traditional societies. Both offered much potential, but the initial impacts were disruptive, and necessitate cultural advances to make them widely available in satisfying forms. If the modern era is unique it is because of the steady stream of technologies that were made possible but the energy held in the fossil fuels, leading to the accelerating growth lines for population, standards of living, and the exploitation of nature; in the evolutionary perspective, they are rising at a rate that is close to vertical. This clearly cannot go on, yet we are so absorbed in our immediate concerns that there is little thought about what our children and grandchildren will face in the course of their lives, let alone later generations. To preserve our worldview, we tend to see things in their most favorable light. Economic development, for instance, is seen as the way of bringing birth rates down, which is correct, but ignores the fact that developed societies require far more energy for their metabolism than the traditional agricultural societies being replaced. We assume that new forms of energy will be found to replace the fossil fuels as they are depleted, even though three decades and billions of dollars of research have found nothing close to the fossil fuels in terms of cost, quantity, and ease of use. And as with the invention of agriculture, the larger population in the world today means that a return to renewable resources is no longer a choice for most countries—except for the United States.

We are one of the few nations with the land and resources to begin distancing ourselves from an increasingly vulnerable world trading system. Doing this would mean significantly altered ways of life but would increase the range of economic choices available. This includes ones that many people would appreciate, such as moving toward local or regional self-sufficiency and living in small communities. But our worldview does not permit such thoughts. Instead, we press other countries to follow our path, and much of this can be understood as due to the religion that is organizing our nation now, the market faith.

In teaching courses on the world's cultures, a different role for religion is encountered than the private role of our society, one that is reflected in the Latin root of the word religion,

religare, meaning “to bind.” All societies require some basis for holding together; the alternative is not unbelief but anarchy. What is necessary is the integration of a society, and this has two dimensions, a horizontal integration that provides the ethics that govern day to day life, and a vertical integration that provides answers to the ultimate questions, answers that sustain people and give their lives meaning. To accomplish these two quite different forms of integration in one religious system might seem to be a difficult task, and many religions have failed in it. But those that accomplished it most successfully gathered millions, even billions, of followers to them to form the great world faiths.

The economy is providing this integration now, and doing so quite successfully. It is especially effective in the horizontal integration it provides, since it is almost magical the way the market keeps this huge, complex society functioning, and virtually automatically by pulling everyone towards contributing to it as usefully as they can in order to earn a good living. The vertical integration it offers—wealth and status—is proving less effective, in part because there will always be others with more wealth and status, with the result being the proverbial treadmill rather than the comfort and security of other answers. But whatever one’s feelings may be about the economy, few would not agree that it is what makes this nation work, and does so with values that are widely shared. This is an impressive achievement, and should not be denigrated. It is the final stage of a long and often tumultuous process that began even before the Renaissance, and moved in many directions and involved a good deal of conflict before arriving at where we are now—the growing consensus that the free market way is what works best. It has accomplished what conservative thinkers thought was impossible, the organization of self-interest in a solid,⁴³ productive way. Constitutional democracy is part of this, but undemocratic countries have been economically successful, too, China and Malaysia for example, and even in the U.S. the economy is heavily shapes politics: “Its the economy, stupid.” The left and the right are being driven together since both must act in ways that provide the jobs, tax revenues, and profits that keep the economy strong and growing. We are all believers in the market faith now because it sustains the world we live in. Not only is it the way we know, but it has proven itself superior to all other way of organizing urban industrial society..

Threats to the Faith

The market faith is effective, but from the perspective of cultural evolution it has two flaws that could prove fatal. Most obvious is its dependence on the growth that makes the resource/environmental issues unsolvable. If it was handled wisely and effectively, the economy could continue growing for quite a while, but at increasing costs, including for the protection of oil imports. Financial setbacks are always possible, too, but we could probably deal with them, too, and they could even serve to unify the nation. The more significant flaw, in my mind, is the one that is already be causing so much stress and discomfort, a society increasingly shaped by the primacy of the self that is leading to anger and conflict, and on all levels, from the intimate to the international. Whether this is why abundance and freedom have not created the satisfactions expected is an important question, but a sensitive one, too, since it involves core values of this society, especially individual freedom, ones we have tended to avoid. When asked, however, the answers come quickly.

It seems straightforward that once we determine what is right for us that we should go for it. Only we know what is best for us, and what we do with out lives is our business; others can do what is right for them. But in pursuing what we deem to be in our best interests, others fear that what is good for us may be at their expense. Whether true or not, the tendency is to become

wary, to draw back, and take a defensive stance toward others, but creating the coldness that increasingly afflicts this society. This is especially true in the cities where most of us live but where most people we encounter are ones we have no ties with. For the aggressive, however, such circumstances present opportunities, and it is not necessary to be taken advantage of too many times before the contemporary version of the Golden Rule come into play, to “Do it to others before they do it to you.” But even those we are close to can be hurtful when thinking mainly of themselves. As trust grows dangerous, it becomes safer to go it alone.

The primacy of the self and the market faith have freed us from the obligations of the Golden Rule, to “Do unto others as you would have them do unto you,” that is a part of all of the great faiths. Even though never fully realized, it still placed society in a framework that encouraged the security and emotional comforts that made life good. Generosity, kindness, trust, mercy, and openness were possible when they not apt to be taken advantage of, especially in the context of smaller communities and limited mobility. Is it the absence of this now that makes it feel so good when we can help a person stranded by the road side or a blind person to cross a busy street, or why volunteers seem to be almost thankful for the opportunity to help during a disaster? Could the opportunity for selfless service in a community be something our peaceful instincts respond to, even as our culturally shaped behavior pulls us in self-serving directions? Unlike success in business, sports, or politics, where there are many losers for each winner, in collective efforts all are winners. All are drawn together by the common bonds created when a community accomplishes something that all benefit from. The isolation created by a large scaled and highly competitive society could well be why there seem to be so few real satisfactions in our society, and so much discontent.

The pulls toward individual achievement in the economy are probably most unfortunate in their effects on marriage and the family. They lead to arguments over who should do what, or who is doing the most and who is being taken advantage of. Tensions in the family make the economy doubly attractive, which is loudly proclaimed to be the great outlet for self-fulfillment, the place where success is most clearly demonstrated and widely honored. Its requirements are straight forward, and its benefits reinforced by advertising and the media, while personal relationships are plagued the fear of being advantage of or being manipulated. The result is that marriage becomes difficult, and divorce rates stabilize at high levels only because marriage rates fall, with the most unfortunate effects being on children left more on their own, and anxious and insecure. The self may be what works now, but it is a lonely quest, so aloneness is renamed independence and honored, while dependency is termed neediness, and made into a sickness, a reason to see a therapist. And as winning becomes more important, failure becomes more real, so strength becomes important, as well as the single minded drive to get ahead. Some undoubtedly thrive on such ways, but the broader reality is reflected in the spreading personal problems of this society, the modern plagues that often have no solutions, even when substantial amounts of money are spent trying.

All the indications are that we will continue on this path until something breaks in the economy, with the best that can be hoped for being that the downside will not be too painful. It would be helpful if we could plan for a smooth transition toward more stable, satisfying, and sustainable ways, but this is contrary to the market faith. We are letting the economy determine where we go, even as it takes us in costly and dangerous directions, ways that are toward the quest for dominance of the primates as peaceful cooperation recedes deeper into the realm of impracticality, even unreality.

Cultural evolution is a halting process, with many setbacks and dead ends. The economy should be thought of as part of a vast cultural experiment, one that we had to follow to find out where it will take us. As it becomes clear that it is taking us in darker directions, the important question is where the better opening is and how to begin moving toward it. Fortunately, important historical insights in this have been provided by perhaps the most eminent historian of the 20th century.

After the Fall

Arnold Toynbee's monumental ten-volume *Study of History* is organized around the rise and fall of civilizations, which he approached it in terms of challenge and response—just what we face. He concludes that civilizations are rarely able to cope with the challenges they face to avoid decline, but that the seeds of the new are in the declining old.

He summarized his conclusions in the opening essay of *Civilization of Trial*, written in 1948, and points to the “Spenglerian uniformity” of “the paths which the dead civilizations have respectively traveled from breakdown to dissolution.” But how the new is created is related to how the old declines, and Toynbee points to the process by which most civilizations have peaked and declined. They “jolt along in alternating spasms of rout, rally, and rout. In the last rally but one, the dominant minority succeeds in temporarily arresting the society's lethal self-laceration by imposing on it the peace of a universal state.” This means “the lapse of freedom into automatism,” rather than the “free acts” of healthy societies that are “infinitely variable and utterly unpredictable.” The movement toward this “automatism” in the global economy is clear as it becomes harder to compete with automated machines and huge distribution systems. It is providing a unity, of sorts, but as with other civilizations, little effort is being made to deal with underlying problems. As it disintegrates, however, the faith that was growing within it becomes “the chrysalis from which a new civilization eventually emerges.” The clearest example in the West is the fall of Rome into the Dark Ages and the medieval era that emerged out of it.

Toynbee concludes his essay with a profound question: What “spiritual enlightenment” will be revealed to the “displaced persons” who are the “counterparts, in our world, of those Jewish exiles to whom so much was revealed in their painful exile by the waters of Babylon? The answer to this question, whatever it may be, is of greater moment than the still inscrutable destiny of our world-encompassing Western civilization.” And with most new religious ideas being shaped by today's “spiritual marketplace,” it is more likely that it will be the great faiths shaped by selflessness that prove to be useful, at some point anyway—the faith that have been overwhelmed by the power of the market faith.

The evolutionary opening ahead is clearer, the sustainable ways that find satisfactions in the social, emotional, and spiritual realms—the circumstances the great faiths evolved in that have much in common with a sustainable future. In theory, at least, we have the time and the resources to move in this direction in classic evolutionary ways, of experimenting with ways to find out which work best. As Toynbee suggests—and current ways affirm—it is more likely that we will stay with the industrial economy as long as we can. It is what we know, and seems to be our only choice given our circumstances, but meaning that the fall, when it comes, will be more abrupt, and harsher. Well before that occurs, however, it will become clear to some individuals that the economy cannot be sustained, and they have more flexibility than societies in trying new ways. If this includes the capacity to make communities work, local self-sufficiency will become an attractive way of reducing their dependency on the global economy. It will be in such

ways that the “free acts that are infinitely variable and utterly unpredictable” will again begin to play their essential role in the evolutionary process.

This would seem offer the best hope for a long history for our species on this small beautiful planet, and it is in this process that the religious heritages of the world will be such assets. Inherent in their history is the evidence that they have the capacity of organizing societies in stable and satisfying ways. The tragedy of the present age could be that these faiths are discredited by the militant believers who, in the West especially, use everything in the Bible and the Koran except what Christ and Mohammad ask of them. The behavior of the militants reflect the anger and conflict of the age of the self, not the peaceful cooperation that comes through the selflessness the great teachers ask for. There is likely to be a wide range responses to the failing market faith, including by those who seem poised to use the abundant weapons that exist now, and it may be necessary for the killers to kill each other off again before making it clear that peaceful cooperation is the basis of evolutionary success.

There are also reasons to be hopeful about a peaceful evolutionary process. The most important evidence, in my mind, was the response to the first energy crisis in the 1970s, when individuals, corporations, and governments all took significant steps towards living with less energy, including moving both into cities and to rural areas to reduce transportation. Unfortunately, this was premature; if the high prices had been real rather than contrived, by now we would have taken other steps toward sustainable ways, and the evolutionary process would be under way. Instead, we have had the “Me first” decades of the fully evolved market faith, and this has weakened important institutions and discredited age-old values. Now it is the socio-biologists who seem to be on track when they point to the ways human behavior reflects the instincts we have inherited from the primates. This is what liberation has degenerated to; even incest is growing more common now, and with dreadful consequence. The saddest reflection of this is the impracticality, even the ridiculousness, with which age-old values are now seen. The task of relearning how to work together may be most difficult for us

After being fascinated with the Eastern religions for many years, I came to the conclusion that the form of selflessness Buddhism and Hinduism both ask for, of ceasing to desire, was alien to my mind shaped by growing up in the West. I still see these faiths as more highly evolved than the Western faiths, and that the ethics of all the great faiths are essentially the same, but that loving others as ourselves is the form of selflessness that is most right here, where love is almost universally seen as the highest good. The first official translation of the Bible, the King James in 1611, mistranslated the Greek word for love, *agape*, as charity, which was easy to do since the love Christ asks for is so akin to charity—the concern for the well being of others. Those seeking ways of distancing themselves from the self may have to almost slavishly follow the generous, forgiving words of Christ to put themselves on solid ground in the long process of moving toward stable and satisfying ways on this beautiful planet. The bitter struggles between reason and faith will come to an end when it becomes clear that, if religion is a crutch, it is one a frail humanity needs to make life good given the primate instincts we still carry with us. .

The magnitude of the evolutionary task ahead is reflected in the words of the words of the Lord’s Prayer: “Thy kingdom come, they will be done, on earth as it is in heaven.” The outcomes could range from a long, full history for our species to a small number of hunters and gatherers. Either way, the meek will inherit the earth.

Warren Johnson 74001 Dobie Lane, Covelo, CA 95428
(707) 983-6853 wjohnson@saber.net