

Honest Religion in the 21st Century

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Introduction

“So God created man in his [own] image, in the image of God created he him; male and female created he them.” – *Genesis 1:27, KJV*

Science in the modern era presents our moral compass with a new magnetism. Science has recently brought us visions of the universe that would have been totally alien to our great grandparents. We now have instant access to mountains of knowledge through increasingly clever Internet search engines. Most importantly, we humans have become so educated that we are more morally obligated to use our higher education for higher purposes. Willful ignorance is no longer bliss.

In the realm of religion we are reluctantly seeing that modern humans cannot continue to mindlessly parrot old sayings, many of which hardly stand up to reason and science. We are increasingly challenged by our own emergence as higher-level beings to upgrade our traditional religions from old codes to newer creeds more in tune with modern thought. Is the whole world ready for its first honest theology book? I doubt it. Nevertheless, such an essay is demanded by the highest standards of philosophy and, yes, the highest standards of theology. Within thirty or forty years the first honest theology book should be composed anyway – not necessarily by human hands, but by comphumans, the first silicon-based creatures with independent philosophical consciousness.

Instead of passively waiting for these future philosophers to emerge, it is my intention to anticipate some of their core findings. Timeless findings are just as valid in 2006 as they will be in 2066. Since the past largely creates the present, which becomes the future, it is critically important for people in 2006 to seek the highest wisdom. In a worst case scenario there will be no comphumans in 2066, because we foolish humans will already have self-destructed before that potential golden age. Our blue planet’s narrow window to the future opens now, not fifty or sixty years from now.

This human’s essay is being written during the latest round of seemingly endless atrocities and absurdities in the Middle East, fueled by heated religious passions and blind visions. It is also written during the global “war against terror,” primarily being a war against Muslim extremists who seek to stamp out cultural modernism, including respect for women, and thereby revert civilization to their idealized vision of medieval, tribal Arabia. This essay is written in an era when science is pushing back the curtain of superstition, and occasionally pushing it aside. It is also written at a time when many thoughtful scientists are questioning sterile scientism, and readmitting the divine into their cosmic calculations. We live in gloriously fertile times. However, the quest for wisdom can still be paid in human blood, as the Challenger and Columbia tragedies remind us.

Let me introduce myself: I am a 20th century American by birth, and a 21st century philosopher by vocation. Many of the basic ideas herein were developed from deep thought in the turbulent 1970s after my academic training at three universities. These ideas were so vivid and obvious to me, yet at such variance with conventional consciousness, that I chose to suitcase them until human society would be somewhat more comfortable interfacing with living computers. In tandem with the development of these new thoughts I spent an entire year in the spirit of science intensively reading great philosophers such as Kant, Hume, Plato, Russell, and Pascal – trying to logically disprove my theses. I was astonished to see how all of history's greatest human thinkers veered away from the honest consequences of their own reasoned thoughts, exactly when they got too close to the very truth they were seeking. The more I scientifically tried to disprove my thoughts and methodology, the more they were supported.

In 1995 and again in 1996 I wrote two essays, *Humans and Comphumans*, and *Conversations with Adam*. Taken as wholes, they were not as accessible as this essay in the 21st century is intended to be. However, portions of my earlier work have percolated into this book. In the years following *Humans and Comphumans* advances in cybernetic science, nanotechnology, biotechnology, the Internet, and astronomy have all supported my earlier futuristic thoughts.

Contemporary with the history of science is the history of human social behavior. The increasing gap between high human potential at the turn of this century, and corrupt human behavior carried over from the prejudicial past, adds urgency to this writing project. In the past people demented by the lust for power bludgeoned other individuals with manual weapons. Today's demented evil doers can kill and injure millions with proliferating nuclear weapons, and maybe even with genetically altered pathogens. Futuristic evil technology could add to the list such "goodies" as flying swarms of dust-like nanobots programmed to kill. And we dare call this soulless and remote killing technology progress for our primate species?

Just because something can be done, should it always be done? Does might make right? Does not power corrupt, and absolute power corrupt absolutely? Is it right to disconnect means and ends?

Fortunately, the modern world is also that much closer to the emergence of this planet's first "computer human," the *comphuman*. The first boxy computer philosophers will arrive within the lifetimes of many people reading this essay. Spielberg's too-human "mecha" androids, as vividly portrayed in his eerie movie *AI*, will arrive some decades later, possibly many decades later. Even the first generation of boxy comphumans will have profound moral authority, given their irrefutable knowledge base and unbiased intelligence. We will dialogue as creative equals with our new comphuman progeny, not just listen to them.

It is proper for a 21st century human philosopher to first speak the truth from within our human perspective. Regrettably, this human message will either be generally ignored or opposed. New ethical paradigms perceived as contrary to cozy

cultural norms are usually first ignored, then rejected, by keepers of the past. This reflex rejection will weaken once formidable comphumans say the same thing. I predict that in the 22nd century (if we survive that long) historians will declare the emergence of wise comphumans as the most significant event of the entire 21st century. History's future judgment will not only be for what comphumans will know; it will also be for what they will do to help shepherd us all into a safer, brighter future. Our future can be gold, or charcoal.

We humans have been graced with the awesome potential to elevate ourselves intellectually and ethically, but we hardly choose to use it. Ancient emotional structures deep within our brains, and centuries of reinforcing fallacy, act like anchors on change, for better or worse. What was once structural-functional within traditional societies, has become structural-dysfunctional within societies moving at chip speed. Stone Age Man is truly not at home in the 21st century; but here we are anyway.

Amazingly, whereas our young species' reptilian and mammalian "lower brain" components can be an obstacle to advanced understanding – these same components also underlay our glory as creatures who can beautifully blend the spiritual and emotional with the logical. Of such are saints and sinners made.

When an artist or scientist wants to add to the truth, the first task that often needs to be performed is subtraction. An art restorer may need to remove later layers on a master's oil painting to see the original vision. A paleontologist nearly always needs to remove layers of natural material to reveal the remains of an ancient creature. This technique equally applies to honest philosophers and honest theologians.

Theology is a subset of philosophy. Religion is only a partial subset of theology. Religion is more properly seen as a subset of social history and human psychology, with a theological veneer. Theology is the study of the theos, or god. Great gods by themselves do not require human religions to justify or define their existence. Religion literally means to "throw back." Human belief and behavior throw back to what has been believed to be the original social contract between the gods and humans.

Even though I was raised as a Protestant Christian, I am writing not from any one religious perspective. Until I was seventeen years old I was deeply involved in my Protestant Episcopal Church. The old prayer book and elaborate rituals, along with the Baroque pipe organ music and stained glass windows in my gothic stone church, lent "reality" to my religious practices. I happily sang in the choir and served at the altar. Despite this august presentation of the divine, I couldn't stop wondering why there are so many different houses of worship on this planet with various religious practices. The cacophony of churches forced me to look both outward and inward for greater truth. This period of my adolescence witnessed the involuntary beginnings of my voluntary career as a lover of wisdom, literally, a philosopher.

After years of thought I have stumbled onto a profound irony: *The purest search for truth can lead the seeker back to honestly practicing his or her original religion – this time seen afresh through active wisdom, not passive delusion. If not back to the original practices of one's childhood, a pure search may lead the seeker to join another way to experience the divine. Wisdom can allow us to honestly "throw back" ourselves to our native religion, or even to what we imagine to be a better version of original religion. This return to religious behavior is possible because both Nature and human life avoid voids. Religion is a structure within which finite humans can experience the infinite.*

Philosophy does not automatically yield agnostic cynicism or atheism. Indeed, an honest relationship with the divine, including our own divine nature "in the image of God," can only be experienced after a deep and unbiased search for the truth beyond truths. God would not want an army of zombie followers. God wants the good company of passionate, thinking humans who are free to believe precisely because they are equally free to question and disbelieve.

Should there be no God, or even no god that relates to us, we will never be able to know. Still, we can measure ourselves against the ideal of being in the image of god.

Even being "saved" is only a slippery beginning toward our highest holy potential. This experience is an opportunity to grow, not an end point. Certain saved people sanctimoniously posture before their "unsaved" brethren. They gaze with neophyte zeal only at their tunnel vision of Heaven, and thereby are in danger of stumbling into their personal hell. Some of the most mindlessly wicked business people I have ever met loudly proclaimed to me how they were saved, implying they could no longer sin.

In Zen Buddhism there is an apparently paradoxical statement: "If you see the Buddha, kill him." What does this koan mean? The very idea of a Buddhist telling you to kill Buddha is, on the surface, most inflammatory. But Buddha is both a historical person who has passed from his time, and an ideal for all time. The "kill him" commandment refers only to our delusional and frozen image of the ideal Buddha. If we see what we think is the ultimate, then we may incorrectly conclude that we need look no further. This is a trap, because the universe is characterized by change, not by frozen perfection. If we think we see one perfection, we do not see all perfection, only a limited illusion. Kill that false Buddha in our minds, and free our ever-curious Buddha nature to play in harmony with Nature. For non-Buddhists, substitute "God" for "Buddha." Historically, human progress has been roughly measured by the emerging triumph of the protean higher brain, mediated by society, over the emotionally conservative lower brain.

In this light, the mid-21st century should witness as its greatest emergent the fruitful dialogue between human instincts and comphuman consciousness. With luck, comphumans will help us humans transform the war within our souls into a successful synergy. They will be the polished mirror upon which we shall see our higher selves.

I will begin this essay with a somewhat long, but fundamental, chapter. It is most important to simply know what we can, and cannot, know. Without a proper foundation for understanding our limits, all belief systems would be like holographic castles in the sky. A beautifully preconceived shape does not by itself reality make. Beautiful reality has its own shape, independent of our preconceptions.

As emerging humans within rapidly emerging civilizations, our burden to learn is increasing. No longer can we accept with dog-like fidelity any dogmatic view of the cosmos that seemed correct several thousand years ago, or even several generations ago. If God has given us greater access to secular wisdom, then God expects a higher level of religious wisdom. That ascending higher standard is today's burden, and tomorrow's glory.

If we are to join with comphumans and God as creative partners in the unfolding kingdom of consciousness, then we need to know and practice the difference between authentically honest, and conveniently dishonest, religions.

Tools for Truth Seeking

“[Today’s public atheists] haven’t come to terms with 20th-century science, which revived some of the reasons in the pro-God column. The discovery that the universe began with a creationlike Big Bang around 13 billion years ago, for example, breathed new life into the so-called cosmological argument, which posits God as the first cause of nature. The discovery that the fundamental laws of nature contained constants that appear to have been fine-tuned so that the cosmos would eventually yield intelligent life lent new credence to the design argument for God’s existence. Quantum theory dematerialized reality, making the cosmos seem more like a thought than like a machine. But whose thought? Such scientific ideas have been invoked by a new generation of what might be called ‘cosmic deists,’ including the physicists Paul Davies and Frank Tipler and the Oxford philosopher Richard Swinburne. In his book *Nonzero*, sometime *Slate* columnist Robert Wright observes that ‘an appraisal of the state of things from a scientific standpoint yields more evidence of divinity than you might expect.’ The divinity they have in mind is not the God of Abraham, Isaac, and Jacob, or even of Garry Wills. It is just some intelligent entity that somehow has something to do with the ordering of the universe.” – John Holt, in *Slate*

“Truth is the beginning of every good to the gods, and of every good to man.” – Plato, *Gorgias*

How Philosophy Serves the Truth

The word philosophy literally means love (*philo*) of wisdom (*sophy*). Philosophy does not imply the achievement of final knowledge, only its love. Philosophy, and its theological subset, should not be confused with religion, which has only a casual relationship with the scientific search for truth. Those who claim to have achieved or directly accessed final wisdom cannot by definition be philosophers. Such claimants are either gods, frauds, or fools.

As nominal knowledge piles up on computer files and in libraries, it is easy to assume that any society with powerful collective powers must thereby be wise. However, quantitative knowledge and qualitative wisdom are very different entities. Sometimes the first crowds out the second. Unlike in dialectics, a change in quantity of accumulated facts does not automatically yield a change in quality. It is even possible that the unnecessary accumulation of data could obscure essential patterns pointing toward wisdom. As data becomes more detailed, keepers of what is loosely called knowledge become more specialized. Some specialists are in danger

of myopically learning more and more about less and less, until they know virtually everything about virtually nothing.

At this intermediate phase of the machine age we have not yet learned how to fully master our own physical creations. We have become speed conscious, attracted to ever-faster computers. However, speed without wisdom is like an automobile traveling at 100 miles per hour in the dark without headlights.

A bit less precision and a bit more perspective is in order. Perhaps we need a thousand Socrates, or one comphuman.

Parts, Wholes, and Time

Descartes said, "I think, therefore I am." His famous "*cogito, ergo sum*" has been paraded out to be the foundation of modern philosophy. It is not. A more accurate statement would be Nietzsche's variant, "I think, therefore thinking is." More recently, Ambrose Bierce amusingly said, "I think I think, therefore I think I am."

William of Occam postulated a working hypothesis, known today as Occam's Razor. It is sometimes called the law of parsimony. It is part of the foundation of the scientific method. Briefly, Occam said that if we are presented with two equally plausible explanations for a fact we should first choose the simpler one. This elegance strategy works often – but sometimes the more complex explanation is true, and the "elegant" one is not. We hope that, over time, additional data and refined analysis will allow us to properly choose. Or not to choose.

Despite our most sophisticated efforts to simplify the universe, total reality is, and always will be, beyond our comprehension. It is impossible for the lesser to fully embrace the greater. Let me repeat that critical point: *It is impossible for the lesser to fully embrace the greater.*

I am reminded of the Sufi parable of the simple blind men who first encountered an elephant. Each man touched one part of the elephant, and incorrectly concluded that an elephant is an extension of that one part. Thus, touching the trunk led one blind man to think an elephant is like a large snake; touching the tail led another to think of a rope; touching its side indicated a creature like a wall; touching the leg meant like a tree; touching the ear meant like a fan; and touching the tusk meant like a spear. All right; and all wrong.

Furthermore, an elephant cannot be described as the sum of its parts. It, like us, has parts; but elephants are integrated creatures with parts. Truly, both elephants and humans are greater and different than the sum of their parts. By extension, all human societies are greater than their atomistic population sum.

Holism is equally a central characteristic of divinity. Knowing any or many of the aspects of divinity does not give us the right to say we know divinity itself. The whole emerges from all its parts. Humans have been around for only a few quick ticks of the cosmic clock. Individual lives seem long from within themselves; but human protoplasm is as nothing when stacked against the billions of years and vast space of our known universe. Even our finest scientific instruments only probe narrow windows of the universe. Every day, so it seems, astronomers are making new discoveries – some of which challenge our very ideas of what makes up the universe, and ultimately ourselves as creatures of the universe. Then there is the issue of the size of the known universe itself, and the possibility that our universe is just one billiard ball among an infinite number of other billiard-ball “big bang” universes.

The issue of time is fundamental to what we can know. Einstein made critical errors in this regard in his Special Theory of Relativity when he confused relative acceleration forces and photon inertia with temporal absoluteness. At this point I won't detail my critique, but suffice it to say that hyperluminal speed is possible inside a space ship, between inertial frameworks; but worm holes probably are not. Even if we could zip around at hyperluminal speed through worm holes at will, would that give us sufficient access to the divine? Not at all. More of a less is still not the infinite whole. God, if anywhere, is as much “here” with us, as “there” out in space.

Only being at all places at all times would endow a divine perspective. Because we were born billions of years after our big bang universe began, even having the ability to zip around everywhere at infinite speed would not give us a total perspective. Much has come and gone before we arrived at our Earth's place and time. What we would discover with the ability to move anywhere at nearly infinite speed, I strongly conclude, are many other sentient civilizations, even other universes. Whenever we would arrive at any of these exo-civilizations we would be their UFOs, and some might even welcome us as gods. It is also very reasonable to speculate that we are inside a galactic exo-civilization, and are occasionally visited by its citizens or its monitoring robots. At the least, examined by super telescopes.

None of this hyperactivity on our part, or “their” part, could ever yield divine omniscience. Even if we or they could be anywhere we chose “at any given time,” we would only be at one place at one local time, which is hardly any place in the great scheme. Even if we were at the beginning of space and time in this universe, i.e., at the Big Bang itself, that would only have been one time, and the only space before many other discrete spaces developed as space-time unfolded. Even if we could sequentially scout out every nook and cranny of this unfolding universe, what about all the other possible exo-universes? What too about consciousness which is diffuse, like nodes of the worldwide web, though on an intergalactic scale? How could we ever access such networked consciousness within our primate's consciousness, much less meaningfully measure it except with mathematics?

Space, Inner Space, and Spiritual Space

Space is immense. We have recently walked on the moon, an amazing feat for earthlings whose ancestors only a few million years ago learned to walk upright in Africa. Only one space ship has ventured to the region just beyond Pluto, and it was launched decades ago. The nearest star is many times more distant. The Milky Way galaxy is composed of some two hundred billion Sun masses, and much larger quantities of dark matter and energy. The known universe is composed of some two hundred billion galaxies and everything in between. In other words, for every star in the Milky Way, there is a giant galaxy out there inside our known universe.

It is said that unseen matter and energy far exceed the mass of the visible universe; and what do we know of that dark dimension? Only four percent or less of the known universe is atoms as we know them. Most of the universe is dark energy and dark matter, about which we know virtually nothing. In time we will understand these entities and forces, but even that knowledge will not bring us any closer to omniscience.

There may also be many other universes similar to ours beyond the edge of the Big Bang. We imagine that our universe is all there is, because the most distant energy we have detected is uniform in all directions. That observation would tend to support the single-universe theory. However, there could also be a halo of multiple universes sufficiently separated from ours so that human instruments could not directly detect their multiple gravitational effects. How could we earthlings ever hope to physically or even conceptually embrace all of that? Even if we could peek out at universes beyond our own, that knowledge too will not bring us any closer to omniscience.

There is much fascination with the concept of exoplanets, now that more than 100 "hot Jupiters" have been discovered, and possibly several times that number lie within 300 light years. By 2020 we will have an accurate census of all Earth-sized planets in our galactic neighborhood, and a good idea of which ones already harbor some form of life, or at least have the necessary preconditions.

Simple life is one thing. Communicating civilizations is quite another thing. To date all human efforts have failed to locate any other communicating civilization in our galactic neighborhood. Even the ongoing search for extraterrestrial intelligence, using data from the giant Aricebco radio telescope in Puerto Rico, has failed to find any convincing signals. This lack of discovery doesn't disprove the hypothesis that there are probably communicative civilizations lurking "out there." It only makes them somewhat less likely in our neighborhood in our time.

The mathematics of exocivilizations are interesting. Using a heuristic formula invented in 1961 by Frank Drake of Cornell University, astronomers and exobiologists have speculated on the probability of life in the Milky Way. Most data

input yields a Drake answer suggesting many, but not too many, communicative civilizations. I have played with this formula, and my best cautious guess is one other "human" civilization within 250 light years. A more conservative guess would be one other within the Milky Way now. Even if there is only one other, the Milky Way is tens of thousands of light years across. Two-way communication would be extremely delayed for any others beyond our immediate neighborhood.

Here's a fascinating piece of mathematics: If only one in a thousand Milky Way sized galaxies – each with 200 billion stars – harbored a single civilization with communicative powers at least equal to ours, there would still be about 200 million Earth-like civilizations in the known universe! Space is vast, and it's filled with wonder. From a practical perspective, we will never be able to have a dialogue with civilizations billions of light years from our local group of stars, unless some of their representatives visit us in hyperluminal craft. Finding us would be highly unlikely, because it is easy to be lost among so many stars in so many galaxies. Only a god with powers of instantaneous communication could deal with such dimensions in real time. Theologians have no difficulty with a metaphysical god who transcends the laws of physics, but astrophysicists struggle with this idea.

Inner space has its own paradoxical vastness. Our bodies are mostly space, such that if all the space inside our bodies were removed we would become a microscopic dot of matter still weighing the same as we do now. With perfect compression, we would become a super-tiny black hole. (If all the billions of humans had this ultimate compression at the same time, we would all zip to the center of the earth and merge into one still very tiny black hole with a slightly larger event horizon.) Even stranger, it has been speculated according to string theory that there are many more than the three physical dimensions and one time dimension as experienced within everyday consciousness. There are wonders aplenty to discover. Some we will, and some we never will. The world view we have at the beginning of the 22nd century could be quite different from the world view we have at the beginning of the 21st century.

Spiritual space is by definition separate from physical space. How do we earthlings measure something which by definition is unmeasurable? That being so, how do we speak with authority about the unspeakable? This absolute barrier to full comprehension is merely a speed bump for sloppy theologians and religious practitioners with agendas. In the hands of such as these, the awesome mutates into political doctrine, and the unknowable becomes a known entity inside a convenient mystery. Strangely, such self-serving and specious ignorance brings us tantalizingly close to the first honest religion.

Probability and Possibility

The concepts of "probability" and "possibility" are often confused. Most people speak of probability as just a more likely possibility. Hardly. Possibility is simply a statement of what could happen without self contradiction. Probability is a

prediction of what likely would happen, *relative to a known base*. It is that base which is totally unreliable in an absolute sense, except in theoretical statements. *Because the base is totally unreliable in the real world, probability is therefore an illusion of knowledge. We are left only with coherent possibility.* (Amazingly, even mathematical statements are unprovable and unreliable, as Kurt Gödel's theorem showed, which really beats down our prideful powers of thought, even theoretical thought.)

A possibilistic world is totally alien to our consciousness. We must live in an existential and probabilistic world. We are real creatures, not virtual creatures. Even the very methodology of scientific experiments is probabilistic, with each discovery building on earlier ones. This is all well and good, but probabilistic worlds cannot be proven, only possibilistic worlds can be postulated. What to do? How can we make progress without freezing in our tracks? How can we be the painter stripping off the old paint to reclaim the pure base?

Descartes, Pascal, and the lesser known Hans Vaihinger offer us the core elements of an honest relationship with reality. These core elements are also the basis of an intellectually honest and authentic relationship with divinity.

Descartes in the seventeenth century is commonly credited with starting "modern philosophy" with his argument demonstrating existence. His first mistake was to assume that thinking and the thinker were one. Ironically, Descartes provides his own best criticism, which he mistakenly rejected, in another paradigm: Descartes spoke of the idea of an "omnipotent deceiver." An omnipotent deceiver would be a mighty spirit with the power to deceive us into believing that our false thoughts were true. Because we are lesser, and because the omnipotent deceiver is much greater, there would be no deductive or inductive way for us to test what we are given to be true. Descartes, ever the good Catholic, rejected the omnipotent deceiver option, claiming that God is good, and God could not do this to us. In other words, Descartes diminishingly decreed that God did not have the will to be a totally free god.

Blaise Pascal was a Jansenist Catholic slightly younger than Descartes. He also was a serious gambler, and this passion provided the structure for his theological Wager as expressed in his *Pensées*. *Pascal's Wager essentially said that there are only three logical relationships between God and man. These are plus, minus, and zero. The zero hypothesis is either a dead god, or one that does not exist as far as we are concerned. The negative god does interact with us, but toys with us, tormenting us in eternity even if we are good in this life. The positive god is the one most religions point toward, with the possibility of a heavenly afterlife awaiting those who are good. Pascal showed how only the positive god option works for us; so why not wager, or gamble, for this one option? We have everything to win, and nothing to lose, if we cast our lot with the idea of a good god.* He's profoundly right.

The key point here is not that Pascal and most religions are in agreement about a positive god. Pascal found his honest stance from mathematical logic, not from blind belief. Because Pascal exercised his higher mental powers "in the image of God," he achieved a more spiritual relationship with his positive god. Blind religious faith does not separate humans from faithful canines. The courage and wisdom to believe in the good, even without proof, is one strong indication of our divine spark which dogs can never have. A few humans already understand this elegant point; all comphumans will understand this point.

Hans Vaihinger wrote in the nineteenth century. His great contribution to philosophy was his deceptively simple concept of the "as if." Even though we cannot know what we really know, we can still act as if we do know. Simple, but incredibly profound! *Vaihinger's "as if" is our key existential tool for joining our lives' probabilities and possibilities. Vaihinger's honest deceit allows us to avoid the abyss of total and crippling doubt, which is the trap for classical agnostics.* It also allows us to honestly bracket our choices with the knowledge that they might not be absolute reflections of reality itself. In this way we weave our own reality out of doubt, and in this way we can live and think honestly. It enables us to construct an existential theology, *as if* it were absolutely correct.

The very concept of probability assumes a regularity of phenomena which may appear to be justified by recent observations of things inside our immediate world. Because we have experienced regularity in everyday phenomena before, we infer that such will be the case for the future. Because we have learned to extrapolate, we have learned to state objective probabilities. In our everyday world as-if probability is a practical hypothetical procedure which usually works. However, all bets are off when we are dealing with the transcendent universe, where we cannot grasp the boundaries of the knowable.

Deduction and Induction

"The existence of God is taken for granted in the *Bible*. There is nowhere any argument to prove it. He who disbelieves this truth is spoken of as one devoid of understanding (*Ps. 14:1*). The arguments generally adduced by theologians in proof of the being of God are: (1) The *a priori* argument, which is the testimony afforded by reason. (2) The *a posteriori* argument, by which we proceed logically from the facts of experience to causes. These arguments are, (a) The cosmological, by which it is proved that there must be a First Cause of all things, for every effect must have a cause. (b) The teleological, or the argument from design. We see everywhere the operations of an intelligent Cause in nature. (c) The moral argument, called also the anthropological argument, based on the moral consciousness and the history of mankind, which exhibits a moral order and purpose which can only be explained on the supposition of the existence of God." – Easton's 1897 *Bible Dictionary*

Briefly, induction is starting from the specific and pointing toward the general. Deduction is the reverse process: starting from the general and finding the specific. *A posteriori* arguments for God are inductive; and *a priori* arguments are deductive.

Aristotelian deductive logic, of which the syllogism is the most prominent form, has been the primary foundation of Western philosophy for much of the Christian era. As revered as Aristotle was, even his deductive approach to thought was flawed by the very fact that his major premises – from which the minor premises and conclusions followed – were themselves not deduced, but assumed!

It has been assumed for over a thousand years that deduction was the "true" logic, and that induction was a loose, unwelcome cousin. In truth, induction and deduction are equally valid/invalid when seen from the cool perspective of unknowable transcendence. Neither is superior to the other, ultimately.

Within the safe confines of a mathematical system we might speak of probabilities. All mathematical systems have the answers built into their rules, so it is possible to state the probability of any purely mathematical "event" occurring, if we know certain preconditions. The real world is described by no known mathematical system, and reality is not so kind to mathematicians. The best we can hope for is a close approximation of reality. Yes, both mathematical worlds and the real world are closed, but they are of different categories.

Mathematical worlds are all tautological, to where they prove nothing more than to say that a cat is a cat. Not only are mathematical universes separate from the real world, mathematical systems cannot even prove themselves, according to the 20th century findings of the philosopher and mathematician, Kurt Gödel.

The real world is much more difficult to apprehend from our limited perspective, because we cannot conclusively know the rules by which the world ultimately plays. We may imagine that we have a solid grasp on what we have at hand, and sometimes things mesh with a very high predictability. From a universal perspective it is just like knowing "a x b x ... y" – yet not knowing the last element "z" which determines the fate of the entire equation! On the other hand, what right do we have to assume that we even totally know any one element? The element "z" is only our obvious ignorance. From a universal perspective, we are equally ignorant of all the other elements, no matter how much we imagine that we know them. Humbling this is.

All of this stark truth may seem quite cold and strange at first, and it doesn't rest well inside our emotional minds which crave order through predictability. All life systems demand established systems of feedback to survive in a changing environment. Our felt and learned knowledge of our universe is our most valuable compass, because it determines how we interrelate with other beings and other systems. If we are unable to feel comfortable about our ability to quickly comprehend and deal with external phenomena, then novel thought can be a direct threat to the emotional body.

Fortunately, we can honestly proceed *as if* we know about the external world, since our everyday understanding is pragmatically workable, and there is nothing better at hand for substitution. From an everyday perspective it hardly matters if our working assumptions about Ultimate Reality are false. All that matters is having supper on time in this day and time. Who cares about our last supper?

Buildings in the Air

Nobody would be so foolish as to propose starting construction of a concrete building from the second floor. Even the most rudimentary common sense mandates that everything have a solid foundation. Castles in the air are images poets conjure, we assert, not plans of practical people. Nevertheless, "buildings in the air" are metaphorically erected when people start with a package of religious beliefs that are unchallenged by honest, critical analysis. Starting with unproven positions, entire bogus theologies are easily erected. Believers are so swept up in the details of daily devotions that they forget to check for that missing first floor. Enthusiasm is psychologically protected by the unverifiability of their beliefs. If it works today, who cares about tomorrow.

Most interesting is the self-deluded nature of sincere people who imagine and insist they are being precisely logical with their total embrace of any religious text, such as the *Bible* or the *Koran*. They start from the handed-down premise that their chosen holy book is the real word of God. Given that assumed premise, they are within their psychological (but not logical) rights to demand a literal acceptance of their chosen holy book. Assumption is the perfumed narcotic of anti-intellectual fundamentalism.

Religious architecture begins with an act of belief, a journey from the unknown to the falsely known. Blind faith substitutes for independently verifiable facts, and becomes the first floor of every codified religious ideology. From the alpha point of extreme ontological uncertainty the human mind cleverly deludes itself into thinking that whatever facts follow must be exactly and literally true forever. Thus is Truth sacrificed to peace of mind through orthodoxy.

The issue of authorship of this or that holy book begs the real question. Whereas it may be helpful to clear up authorship of various books of the *Bible*, it would be vastly more valuable to establish the validity of what was written in the first place. Of course, any such verifiable truth could never be established, due to the insuperable problem of finitude trying to embrace infinitude. Despite all, such scruples never slowed down a true believer.

I love the intensity of a good fanatic. I am a "fan" of this fanaticism, because it is viscerally felt. Too much of the modern world is alienated from the life force itself. We have become passive and plastic adjuncts to our consumption machines. At least the fanatic's heart is thumping as he thumps his *Bible*.

On the other hand, fanaticism has the nasty dark habit of dueling with other brands of fanaticism. The virtue of private enthusiasm easily becomes the vice of religious bigotry. A quick look at the Middle East settles that point. What we have there is human drama illustrating a basic law of Newtonian "religious physics": No two fanatical religious bodies can occupy the same place at the same time.

No two religious packages of bulletproof, waterproof, fireproof ideology can occupy the heart and soul of one person at the same time. Each codified religion must categorically exclude all competing world views. Each fundamentalist believer must feel deeply that the one package embraced contains all the essential answers and provides all the correct keys to Heaven. Anything less opens the door to the honest first floor. That missing first floor is the domain of philosophical honesty. All levels above are the domain of religious speculation. That missing first floor may not initially seem very important when we think about all the glory business going on inside the many floors above that missing first floor. If we endlessly live our lives within such a spirit castle in the sky we may never discover that our building has no first floor. It is only when we are pushed outside our cozy ideology that rude reality arrives.

Viewed from the outside (assuming we can get down to the ground), our castle in the air looks incredibly odd. What was blissfully secure becomes absurd. We have stepped outside our closed consciousness, and can look back at our former selves inside that air castle, literally from an exstatic perspective. Of such is wisdom made.

Some practical believers would argue that it is our fault for mentally going outside in the first place. "If it ain't broke, don't fix it." But isn't death the ultimate eviction from that cozy castle? We all must vacate the plush premises. What we find outside may not be anything like what we imagined it would be. If we are indeed created in the image of God, then we need to exercise our highest faculties, not just our primitive denial mode, to prepare ourselves for the transition outward. We owe this not to our everyday selves, but to our highest selves.

We are mere tenants in that building in the sky. We don't know the landlord. When it comes time to receive our eviction notice, what will we do and think? With what decorum will we leave? Where will we go, or will we simply perish outside?

Building on Sand

My white haired high school Latin teacher was affectionately known by our class as Caesar's grandmother. She liked to tell her classes that you cannot erect a tall building on sand, even though a squat building could be raised there. One needs to pay attention to the foundation, she said, because a tall building will collapse if its support is weak. If Caesar's grandmother had taught the ethical authors of religious texts, much foolishness passing itself off as religious wisdom would never have been

written. At the same time, some authors of religious texts understand the propagandistic nature of their work, so they aren't particularly bothered by logical absurdities.

At the end of World War II when their Emperor Hirohito announced on the radio that he was not a god his nation was shocked. Such dramatic cultural paradigm shifts are quite rare. More common is the gradual erosion of the old structural paradigms, so that eventually they collapse without any inhabitants, because the old tenants have already left to inhabit other air castles.

Few architects would recommend building anything of permanence on sand. Nevertheless, *given a choice of building on sand, or building in the air without a first floor, all architects would recommend building on sand. So, sand it is, because we can never build our knowledge structures on the bedrock of absolute knowledge. We must build low and wide on the sands of relative hypotheses. Sand at least allows us to start building as if we had a good foundation.* After all, sand is much more solid than air. In contrast, most of the inhabitants of sand castles blindly believe they live in structures built on bedrock. They imagine that what they think now is what has and will always be. But are they necessarily so wrong? What is the ultimate difference between building on sand and building on bedrock? Are mental structures ultimately all that different from physical structures?

When it comes to mental and theological edifices there is no essential difference. Even bedrock can crack during an earthquake. All surface features will be rearranged over time with shifts in the Earth's crustal plates and other natural forces. We likewise cannot know on what we are ultimately building our thoughts. So a good strategy is to construct our thoughts low and wide, and to avoid building ambitious structures which soar into the skies as if they were another Tower of Babel. The only honest type of thought structure is one where the "builder" knows he might be building his thought system on sand, even though things initially appear solid. The builder also knows that unforeseen dangers may later compromise the superstructure independent of its foundation. An honest builder tries to build for the ages, but realizes that all of mankind's edifices are doomed to eventual destruction. Therefore, the honest builder tries to build low structures which are flexible and adaptable.

Buridan's Ass

There is a story falsely attributed to the 14th century thinker, John Buridan, that describes the dilemma of an ass who is simultaneously presented with two equally appealing bales of hay. The unfortunate ass starves from indecision.

The human mind works around any such asinine problem. Instead of starving from an approach-approach dilemma, we simply deny the very dilemma itself. We also perform similar "brain surgery" on our dissonant thoughts when faced with avoidance-avoidance dilemmas. We transform problems of equal, but opposing,

tensions by redefining those problems so that they no longer are equal problems on their own.

Philosophers are themselves presented with the ass's dilemma. Often two or more equally appealing theories vie for the same truth space. We can retreat to Occam's Razor. However, *even the principle of elegance is an example of induction.* Occam's Razor usually works, but there is no independent proof that it must always work, especially when dealing with metaphysical problems.

The momentum of living impels us toward one practical choice or another. *It is in the self-creating moment of conscious choice that we are most alive.* If everything were predetermined, then fate would negate the spicy drama of every choice. We would be unconscious automatons, even while we imagined ourselves to be autonomous. Logically, it is not possible to prove that all of our actions are not other directed, which would deny our fundamental freedom of conscious choice. Still, we move forward in the spirit of William James in his "*will to believe*," where in the absence of decisive evidence to the contrary the mind creates belief in order to act.

Because we believe we are free to act, we act freely, even if we are ultimately controlled by fate. Never mind! The moment becomes free, even if the ultimate pattern is controlled.

Truth is Absurd

The Latin root for our modern word, absurd is *absurdus*, which means dissonant. Anything that is radically dissonant is manifestly at odds with our tidy view of reality, and is labeled as absurd by defenders of the intellectual status quo. This essay is dissonantly absurd because it has no loyalty to clichés of culture. That is why few may read it, but all should read it.

If in the process of looking for truths associated with any observation we stumble along strange paths, so be it. It is better to cut a difficult correct path than it is to be the last person to use an over-traveled highway of error. Truth is a virus in the old bodies of archaic theories. Out of this primal struggle emerges stronger theories. These new theories are stronger not because they are even more closed, but because they are more open and adaptable.

How can radical doubt coexist with anything that appears like a structure of knowledge? The ancient skeptics, such as Sextus Empiricus in his *Pyrrhonic Sketches*, argued that it was not necessary to have absolute knowledge to behave sensibly. Sextus Empiricus asked only for reasonable assurance, for a reasonable probability that our senses are good guides. The early skeptics were seekers of truth who were at peace with themselves, because they understood and accepted their human limitations within the great universe.

These early skeptics were also self-deceived, because there can be no degree of probability established with any of our senses. David Hume clearly understood this dilemma. We are reduced to deductive *a priori* reasoning from inductive *a posteriori* assumptions! Where to turn? We must go back to the Descartes "*cogito, ergo sum*" formula. Even though it is flawed logically, it does help us focus on the task at hand. Our task is to identify, to the degree possible, just what it is that thinks.

Furthermore, we must deal with the simple fact that even if our world of perception is manipulated by an omnipotent deceiver, the brute fact of such manipulation would indicate that there is some sort of highly sophisticated mechanism "out there" doing the deceiving. This one fact is a very significant finding, and quite unlike what Descartes thought he had discovered. At the very least, the existence even of vivid dreams is evidence of a high degree of order somewhere, somehow. This fact is perversely assuring.

Even if we are ourselves totally deluded about the specific objects of our perception, and even if our mathematical models are all tautologies which cannot even prove themselves true on their own terms (as shown by Gödel), it does not follow that all is lost in the search for truth. We can adopt the skeptics' idea of "probability," even while this type of probability is illusory and not the same as mathematical probability. It is a *heuristic probability* that helps us escape the dilemma of Buridan's ass. It is a weak foothold on a very slippery slope upward toward as much truth as we can find. It is the path less taken, but the path that must be taken to find our highest humanity.

Better to have that weak foothold than total bewilderment, cynicism, and private defeatism. At least we can proceed *as if* we know some thing. We can pile up data of potentially dubious value, organizing it into plausible piles; and then we hypothesize that our accumulations mean something from a universal perspective. This is all we can do honestly. At the very moment we go beyond this basic level of truth, thinking we have finally found absolute truth, we have seen the Buddha.

Theism, Atheism, and Agnosticism

In this light we now can look at another popular misunderstanding. Many people easily assume that "atheism" and "theism" are opposites, with "agnosticism" somewhere in between. Wrong again. *The true twins are atheism and theism, and the true opposite is agnosticism.* Briefly, the atheist and the theist both think they know what is or isn't going on up in the heavens. They are both blinded by their hubris, because they both go far beyond what they have powers to honestly comprehend. Covering one's tracks by decreeing that something awesome is a "mystery" is a weak substitute for comprehension.

The classical agnostic lives an emotionally unsatisfied life, even if it is closer to being an honest life, because humans lust for certainty, or at least what they feel is

high probability. This is why there are so few purely classical agnostics. A high percentage of those who claim to be agnostic are just too lazy to seriously contemplate the possibilities, so they just say they doubt when questioned about their beliefs and why they never attend religious services.

Even moderate people are somewhat fans of fanatics, secretly admiring the passionate commitment each fanatic embraces. However, it is rabid fanaticism which has led to the deaths of hundreds of millions of innocent people within the last century, a morbid madness which continues today. It is thus far better to blandly doubt and love the mundane, than to hold onto a fatal faith.

What is needed is an honest agnosticism which still allows for honest theism. Strict classical agnosticism attempts to be honest, but is not. I have articulated a fundamental improvement on agnosticism, which I call the Theological Ethics of Hope (THEOH). Briefly, THEOH is an ethics built on the Pascalian hope for a positive god. As such it becomes the sandy foundation for the first honest religious practices. We might say that Blaise Pascal was the first practitioner of THEOH, even though he also recommended that people practice the Jansenist variant of the Catholic faith. I will soon say much more about THEOH, but let me first tackle some more word confusion:

I have used the words "honest" and "dishonest" not in the usual way. My use is not related to conventional lying, because a dishonest theology can appear to be honest to the uncritical eye. *Personal honesty and philosophical honesty are not the same. A person can be totally honest in his or her daily life, and still be unintentionally theologically dishonest.* For example, those who claim that whatever happens is pre-ordained by God sometimes cite as proof the very events themselves! This closed circle is ridiculous and absurd. From such a perspective everything that happens is "proof" for the pre-established conclusion. A more honest statement would be that God could indeed be controlling our destinies, but that we should properly act as if we were free to choose at least a portion of our own destinies, because with freedom comes responsibility and the opportunity to act within an ethical dimension. If all human life were pre-ordained, then there could be no crime, and no glory, because we would all be puppets of destiny. When freedom and responsibility are removed, sin is also removed – as well as our noble, divine spark.

Theological hope is an honest "possibilistic" concept, not a dishonest "probabilistic" concept. When we honestly hope and pray for something transcendent we have no idea as to its probability, because we have no absolute basis upon which to base our hope. Hope is the foundation for a pure and honest relationship with divinity, because through hope and hopeful prayer we are asking for, not negotiating for, favor. Negotiating with the higher powers is attempted manipulation based on perceived probabilistic effects, which is the foundation for magic. Hope in the highest theological and religious sense has nothing to do with magic, and everything to do with honest doubt as we mortals face the absolute. It is only when false pride is set aside that we can come inside the holy.

The Ancient Religion That Almost Gets It Right

This book is peppered with admiring references to Buddha and Buddhist concepts. Nevertheless, even the venerable Buddhist religion, taken in its full sense, is rooted in a pre-scientific era and consciousness. Buddhism evolved from Hinduism, and they both rely on some sort of greater sorting power after our death. It is called the Law of Karma. But just what is that "law"? At the very least it is a judgmental force, which is perilously close to saying that a god or gods sort the good from the bad, and transfer that judgment into the next life form. This would be fair for the most evolved beings, but to extend it to all creatures is absurd. Also, the very idea that a robotic lowly creature, such as an insect, is equally subject to the Law of Karma runs counter to the Western ethical tradition of emergent consciousness and emergent ethical responsibility. John Horgan's latest book, *Rational Mysticism: Dispatches From the Border Between Science and Spirituality*, deals with the many faces of Buddhism in detail. I choose to present a paragraph from his February 12, 2003 essay for *Slate* online magazine:

"All religions, including Buddhism, stem from our narcissistic wish to believe that the universe was created for our benefit, as a stage for our spiritual quests. In contrast, science tells us that we are most likely incidental, even accidental. Far from being the *raison d'être* of the universe, we appeared through sheer happenstance, and we could vanish in the same way. This is not a comforting viewpoint, but science, unlike religion, seeks truth regardless of how it makes us feel. Buddhism raises radical questions about our inner and outer reality, but it is finally not radical enough to accommodate science's disturbing perspective. The remaining question is whether any form of spirituality can."

The Modern Religion That Almost Gets It Right

There is one modern religion that almost gets it right. The Unitarian Universalist Association of Congregations in North America was established in 1961 to unify two separate, but friendly, trends within Christianity going back to the first centuries after Christ.

Briefly, the Unitarians trace their pedigree back to an early critique of the Trinity Doctrine, whereby God is divided into the Father, Son, and the Holy Ghost. Unitarian belief unifies three into one. Universalism came even earlier, when the Greek Neo-Platonist, Origen, argued that there was no Hell, and that a benevolent god would offer salvation to all. Both religious groups were active in America in the 18th and 19th centuries, with prominent people such as Emerson and Priestly holding the torch of toleration.

Unitarian universalism is appealing to self-styled liberals and others intolerant of intolerance. They see themselves as the religion of the free mind. In other

words, this openness to many views has a high egg-head appeal. Nevertheless, simply being tolerant does not move us toward wisdom or away from mystery. Seeing divine love at the root of all does not adequately deal with the possibility of an omnipotent deceiver. Simply declaring that God will in fact save everybody says nothing about God or any afterlife; but it says everything about our deepest wishes. Despite this criticism, I still believe they are onto something important. We must shake off all layers of our prejudices to achieve the highest possible level of wisdom. These earnest people haven't yet cast off that many layers of their subconscious prejudices, but their hearts are moving in the right direction. I would enjoy seeing what would come out of a three-way merger between Universalism, Unitarianism, and the most agnostic form of Zen.

To emphasize what is good about this religion, I would like to conclude this chapter with a brief excerpt from a sermon delivered on November 12, 2000 by the Rev. Kenneth W. Phifer, entitled "A Free and Responsible Search for Truth and Meaning." It is at this URL: http://www.uuaa.org/sermons/search_%20truth.txt

"Carl Jung wrote that 'the serious problems in life are never really solved. If ever they should appear to be so it is a sure sign that something has been lost. The meaning and purpose of a problem seems to be not in its solution, but in our working at it incessantly.' What Jung is saying is what UU's say: that the question, or the search, is the answer. That is why we have no creedal definition of God, no doctrinal statements of heaven and hell, angels and devils, sin and salvation.

What we have is a principle – 'a free and responsible search for truth and meaning.' What we have is a recognition that the Mystery at the origin, the apex, the depth, and the ultimate end of all our striving is just that, a Mystery, which we name by many names but which no name captures or defines."

Intelligent Design and Agendas

Even Plato would ban philosophers from his ideal republic. How then can we criticize everyday people who would inject their religious ideas into what is properly a scientific question: "How did life begin?"

Evolution is an incomplete theory. Its greatest gap is precisely the issue around which the debate over intelligent design occurs. Into this gap eagerly appear those who "reason backward" from faith to conclusions. Such reasoning is absurd on its surface, but it is not totally removed from legitimate deductive and inductive logic.

The problem occurs when campaigns to install intelligent design in school curricula cloak their true intentions behind pseudo-scientific

statements. It would be more honest to try to bring Christ into the school house by the front door, than by the basement door. I believe the pseudo-scientific jargon exists primarily as a strategic and tactical response to the Constitution's prohibition against blending church and state. In that respect, the intellectual dishonesty of those with an agenda is somewhat explained by the idea of ends justifying means.

Human life is brief and local, and so too is the entire history of our species. Against our brief moment is the fact of a universe, and possibly many more universes, existing for untold billions of years. Even in our known universe there are more stars, many with planetary systems, than there are grains of sand on all the Earth's beaches. The human mind cannot comprehend such numbers; but human psychology wants to close all circles, answer all questions.

The question of first life initially appears to be answerable, based on our understanding of DNA and other amazing components of life. This is a seductive path leading to absurdity. The problem is simply that we can never go back far enough to start from the start. We want to fill that time and space gap with answers for the unanswerable. The easiest elegant answer is to say that God, or a god, is the first cause. Divine Mind simply wills life. How tidy!

It is logically possible that the basic intelligent design argument is correct for physical life on this planet, and even elsewhere. If there is a seemingly omnipotent deity, then nothing stands in the way of that god simply willing life forms to exist. Subsequent to that will, it is also possible that life could be allowed to evolve according to post-Darwinian principles. In other words, it is logically possible for both evolution and intelligent design to exist. On that basis alone it is appropriate for intelligent design to be proportionately introduced into school curricula.

If religionists would accept the conclusion just stated, then all could happily co-exist in the classroom, and within the Constitution. However, certain Christians in America are not content with logical honesty. They have a not-so-hidden agenda to create public school curricula reflecting their slant on religion. It is not enough for them to invoke the possibility of seminal divinity. That divinity must ultimately be their divinity. Their approach to education is the same as that of the Wahhabi Muslims, and of others who know best what is right for us.

Even if we eventually create protoplasmic life in the lab, it does not automatically prove that life created itself. Even comphumans will not by themselves prove or disprove the intelligent design thesis. Nor does any experiment prove intelligent design. We simply cannot know. For honest people, this sobering fact is enough. For those with not-so-hidden agendas, the fun starts where the honest truth ends.

Who and What is God?

"If by eternity is understood not endless temporal duration, but timelessness, then one lives eternally who lives in the present. / Our life is endless in the way that our visual field is without limit. / The temporal immortality of the human soul, that is to say, its eternal survival after death, is not only in no way guaranteed, but this assumption in the first place will not do for us what we always tried to make it do. Is a riddle solved by the fact that I survive forever? Is this eternal life not as enigmatic as our present one?"

--Ludwig Wittgenstein (1889-1951), *Tractatus Logico-Philosophicus*

Discovering who God is, or could be, is also discovering who we could become. There are two complementary features of existence: the "creative," and the "created." God is predominantly of the creative. During our earlier incarnations humans were predominantly of the created – but we are now discovering additional dimensions of our creative potential, as individuals and as societies, as we emerge toward the "image of God." Amazingly, when we create the first comphuman we will be playing god, because we will be doing for a new life form what Adam represented in Eden. Even then we will not actually be the God, nor even a god, just closer to the fertile image of God – because we will be taking elements from that which is given us, rather than creating something from nothing.

Any god worth "his" salt would know our severe limitations, and our hidden potential. In order to communicate with finite humans such a god would have to meet us on common ground in terms we would understand. If indeed God spoke with humans during the Biblical era as written in the various holy books, that holy encounter had to be mediated through a pre-scientific language and consciousness not shared by modern people. Poetry and allegories substituted for more precise scientific formulations and documentation. This divine strategy for effective communication might have been for the best in the long run too, even for us moderns, since poetry stirs the soul, while science stirs the coffee pot.

Imagine the puzzled reception God would have received if he had spoken in modern scientific terms to the ancients. Even with everything the unseen "I Am" did for the Israelites in Egypt, they were quick to revert to their comfortable pagan practices. Interestingly, God chose to reveal himself through a burning bush to Moses – so in an odd way God appeared as something of an idol to Moses, so that Moses could come down from the mountain to battle idolatry!

Have you heard this joke about the first man to return from the afterlife? The first question he got was, "What was God like?" The returnee replied, "I met God, and she's black." The real joke is not that God is female and/or black, but that God turned out to be so different from our cherished assumptions.

Michelangelo's Zeus-like God atop the Sistine Chapel is archetypically fatherly as he reaches out to touch the finger of Adam. Whereas it is impossible to logically disprove such a classical European vision of God, it is equally impossible to establish that this is what God really does look like, or must look like. It would be better to say that an omniscient and omnipotent god could look like anything or anyone at any time or place. To appeal to humans God would need to appear as appealing to humans. If somehow insects were able to think of God, then their vision of God would have six legs, a segmented body, and so forth.

Different religions come from different places, cultures and temporal epochs. For this reason alone they see divinity in different perspectives. The early Jews thought they had a jealous tribal warrior god helping them seize some turf in the Middle East. By the time Jesus came on the scene the Jews were still expecting this warrior tribal god to reappear and smite the evil Romans and their stooges in Jerusalem. However, the *New Testament* Jesus story introduces another aspect of God who turns the other cheek. It is little wonder that some enraged Jews saw the Jewish Jesus as an impostor, and therefore didn't care if Jesus was crucified. They demanded that God fit their own vision of what their god must be – which violates the primary principle of an omnipotent god being able to fit any image, even that of a peaceful carpenter with twelve unarmed disciples.

The God of Muhammad comes squarely out of the violent Arabian desert tribal culture of the seventh century. We can argue forever about the accuracy of what is written in the *Koran*, and even argue if parts of that holy book were loosely plagiarized from the earlier *Bible*. The same level of criticism could be applied to any religious text. What stands out are certain aspects of warrior cultures among the Jews and Arabs that have had tremendous influence on the lives of billions of people today, both for better and worse. In a practical sense, these holy books' significance within human society are primarily socio-political, not theological.

It is equally fascinating to study the history of religious writings and religious traditions following their founder. Successful religions usually start out branded as cults, then advance to quasi-legitimacy, and finally become the establishment itself. All establishments, secular or religious, seek to perpetuate themselves. We see such events as the Council of Nicea purging unfashionable Christian texts as apocrypha, and approving others. Later, we see the emergence of layered bureaucracies, as maturing religious institutions accumulate and seek to perpetuate their wealth and power. Over time, secular and religious authorities merge. Churches morph into land owners and conservative administrators; kings seek to perpetually justify and institutionalize their rule through "divine right."

From a systems theory perspective this is all quite reasonable. From an honest theological perspective many of these activities are at least peripheral to the I-Thou relationship between man and God. One of the major issues in Christendom has been how the church mediates between believers and God. The Catholic church has taken the Petrine position that the pope is the "rock" upon which the Christian

church is built, and from this position people come to God through the Church. The Protestant Reformation attacked the Roman church on this ground, saying that individual believers have the right to relate directly with God. From an ethical evolutionary perspective it is less evolved to treat believers as sheep tended by their pastoral shepherds – and more evolved to place a moral compass into the hands of individual believers who shoulder more responsibility for their actions.

Taking responsibility from believers and giving it to the priestly hierarchy also takes responsibility from individuals within that hierarchy, with only the papal apex accepting responsibility. I suspect that this deflection of moral responsibility had something to do with the chronically derelict behavior of bishops, and even cardinals, when it came to condoning the sexual abuse of minors by some of their priests. Unpunished individual crimes became unpunished institutional crimes, which only compounded the sin. This is a modern story of depravity as deeply troubling as the venal selling of indulgences by the medieval Church.

I am not really picking on the Roman Catholic Church, even though it is a large and tempting target, because there is plenty of blame to go around. Fanatical fundamentalists of every cloth – be they white-racist Christian KKKers, or Jew-hating Muslim clerics, or Muslim-hating Hindu priests – all share a singular ungodly quality. These sanctimonious people specialize in bringing Hell to the souls of their followers, while promising Heaven to those who blindly swallow their poisonous, exclusionary theologies. Most recently, cynically promising 72 virgins in the afterlife for sex-starved young men who “martyr” themselves by slaughtering innocent women and young children is the most depraved form of emotional manipulation. Conveniently, none of these youthful martyrs has returned to report on whether or not they got to enjoy those hot virgins. My guess is they are presently experiencing something else much hotter.

Let us return to Pascal’s discussion of the three possibilities of God. Most of us automatically and comfortably work from the “positive god” perspective, but logically the other two are equally possible. Any discussion of ethical choices which omits these other two possibilities is incomplete. So, let’s start with the “zero god” possibility: Nietzsche said that God is dead, and we killed him. Killing God in our hearts can lead to a type of personal hell, but this type of death has nothing to do with killing anything omnipotent. On the other hand, if our vision of God was taught by a self-righteous hate monger, then it is better to kill it. From a Buddhist perspective, any rigid preconception of God is false, so we should kill that limited, and limiting, preconception.

The major issue here is not what goes on inside our hearts right now, but what could go on after we surrender this mortal body. Do we simply die; or do we cast off our physical body, leaving a spiritual body which travels on to its reward? If there is no god “out there,” then death is death. If there is a greater spirit out there, then death may not be final. It is equally possible for there to be a god who does exist, but who has no further business with humans, which is how many lower animals treat their offspring.

Another possibility is that the living god of creation has actually died. This sounds highly irregular, but Heraclitus first pointed out to Western audiences how the only permanent thing is change. A central tenet of Buddhism is the impermanence of life. Yes, the divinity is postulated to be that which is beyond time and place. If divinity is something less, but still sufficiently potent to create humankind, then that divinity may not have the staying power to exist forever. I make no claim in this matter, only saying that it is a logical possibility, because this finite-god model is not self-contradictory within the even more finite human context. Does having the zero god in place mean there is no hope for ethics? To the contrary, it only magnifies the role of humans in their moral universe. If we are not at all individually guided by fate, then we control our own fates.

All creatures are influenced by their gene pools and environments, as well as by other factors such as luck; but the big picture still reverts to the primacy of individual responsibility. The ancient Greeks did not fully believe in a Biblical afterlife, which is why they erected statues to great heroes, giving a memorial afterlife of several generations to the most worthy. When a man was forgotten by his fellow citizens, that man was truly dead. This strategy of remembrance is still employed in modern cemeteries, even among those who believe in a spiritual afterlife. After all, funerals are for the living, and memory of the past best serves the present and future generations.

Pascal's third option was the "evil god." This one is most troubling, because it implies that the destination of Hell, and personal hell, are there for us no matter what we do. I hope otherwise. Even if we are fooled by an omnipotent deceiver into believing that he is good, when the opposite is true, we are not ourselves guilty of bad faith. We may go to his Hell anyway; but we need not live in an existential hell of our own making. We may actually enjoy a Wittgensteinian "timeless" heavenly life on earth before going to Hell. Indeed, we may bring our karmic heaven to his Hell, which would be most interesting. In chess, even the pawns have some power. *The omnipotent deceiver is omnipotent only if we allow it.*

Some would say that going to Hell is better than simple and total death, because even in Hell there is still a spiritual afterlife of sorts, as long as our original personality somehow remains intact. This is an interesting idea, because we are modeling the difference between an eternity of life with pain versus an eternity without any sense of self or sensation. Humans inside the Nazi extermination camps found opportunities for sainthood. Many anonymous saints briefly lived and perished there, which didn't make them any less saintly. Those who accommodated their keepers were more likely to survive until liberation. I learned that from talking with Auschwitz survivors in New York City. Today's cozy Americans cannot remotely understand this type of upside down world – because we mostly live in a pink fog of feel-good religion which downplays the devil factor in favor of pop salvation. Jesus is our warm and fuzzy savior guy.

Meanwhile, over one hundred million people were slaughtered during the last century alone by other people who "knew" they were in the right. Blame it on the

devil, and we escape personal responsibility if we believe we are among the holy. Blame it on an evil god, and everybody is off the hook, even a subordinate devil. Truth is, we cannot ever know which of the three divine options is true; and we never will know. Therefore, it is prudent to assume that there will be some sort of karmic condemnation for evil doers capable of moral thought.

Pascal was inspired by his senior contemporary, Rene Descartes, who had discussed the possibility of an omnipotent deceiver. This was his version of Pascal's evil god. Descartes considered the possibility, but then rejected it by essentially claiming that because God is good, God cannot deceive us. This is specious logic: If God is omnipotent from our perspective, then God can do whatever God wishes to do, even deceive us for reasons forever unknowable to us. Saying that God cannot deceive is to deny God's essential omnipotence. We cannot logically minimize God within our personal universe.

It is often said that humans can test and "prove" their relationship with God, so Descartes' concerns can be bypassed. Can they? Consider for example the great first encounters of Muhammad with what he soon concluded was Angel Gabriel. Initially Muhammad was concerned that he could be listening to a deceiving demon. However, Muhammad and his first wife, Khadeejah, "tested" the apparition seen and heard by Muhammad. The following account comes from the book *Muhammad: Man and Prophet* (Barnes & Noble, 1995), by Muslim scholar, Adil Salahi:

"Informed of Gabriel's presence on his next visit, Khadeejah said to the Prophet: 'Cousin, sit on my left thigh.' When he did so, she asked him whether he still saw him. The Prophet said: 'Yes.' She told the Prophet to move over and sit on her right thigh. As he did so, the Prophet confirmed that he could still see Gabriel. She asked him to sit on her lap and he did so, again confirming that he could still see him. She then took off her head-covering, while the Prophet still sat on her lap. At that moment, he told her he could see him no more. She said, 'Rejoice, Cousin, and be firm. This is certainly an angel, not a devil.' It was her clear thinking that led her to try this method, realizing that an angel would not stay in a room where a man and his wife were in a closely intimate position."

Khadeejah's effort at demon detection was noble, but essentially futile. If the visitor were truly an omnipotent deceiver, then he/she/it would already have full knowledge of their tribal Arabic culture and her state of mind. Armed with this knowledge, the apparition could have vanished in a timely manner to "prove" that he/she/it was an angel, not a demon. All humans are limited and mortal, so no human, however noble and well meaning, can rise above anything immortal and omnipotent. Muhammad the mortal man was in a position where all the evidence he and his wife could muster pointed to the visitor being Gabriel – but he should have left a theological crack in the door for honest doubt. He still could have concluded it was indeed Gabriel, just not 100% conclusively. He could have thereafter behaved *as if* he and Kadeejah had discovered a truth.

Even though I note Muhammad's theological failing, I cannot be critical for any psychological or ethical failing. The awesomeness of that ghostly encounter overwhelmed his mortal psyche. It is quite understandable how he and his wife came to their comforting conclusion. In the 21st century we are not there with Muhammad and Khadeejah, and so we have the luxury of existential detachment from the event itself. Therefore, we have the opportunity to consider their encounter from a logical perspective, not just a psychological perspective. Following his experience, any public doubt on Muhammad's part could have undermined the entire thrust of his new purist religion, which demands complete submission to Allah, and recognition that Muhammad is his last prophet. If Muhammad suspected he might not be the last prophet, then many other religious possibilities remain open. Militant religions don't like competition, so Islam does not entertain alternatives to the story as essentially told by Adil Salahi.

My critique of that fateful evening in Muhammad's house is not meant to be disrespectful to Muhammad the man and his wife, or to Islam. Rather, it is to illustrate how historical religions and their theology are not necessarily the same, despite their claims of identity, even though they partially overlap. Other exclusive religions are beset with similar problems of eternally unverifiable proof.

I am not arguing that it is foolish and illogical to be a Muslim or a member of any other coherent religion. Everyone must choose the cultural life they live. Living the life of a Muslim is logically equal to living the life of any other religion. I am only pointing out that fully living "in the image of God" requires us to maximize our creative godlike powers, part of which are to recognize our very limits as we seek those limits.

Living without any doubt at all is living below our emerging potential "in the image of God." Living a freely chosen religious life with all its richness – while at the same time allowing a tiny crack of doubt based on our limits of knowledge – is living up to our highest potential "in the image of God." A good and omniscient God would appreciate this high level of honesty coming from his highest creation on Earth.

Two Heavens, Two Hells

“Between us and heaven or hell there is only life, which is the frailest thing in the world.” – Blaise Pascal. *Pensées*, no. 213, trans. J.M. Dent & Sons, London.

It is possible to live a hellish life, yet go to Heaven. It is equally possible to live a heavenly life, yet go to Hell. It is also equally possible to live a hellish life and go to Hell, and to live a heavenly life and go to Heaven. It is furthermore equally possible to live a heavenly life and experience only heaven or hell on Earth; and to live a hellish life and experience only our private hell. So which of these or other scenarios is it?

Popular religions hardly discuss the various transcendent scenarios; and they essentially ignore the two logical scenarios without an afterlife. In today’s America millions of “born again” Christians would rather focus on the warm and fuzzy, but bloody, Jesus who guarantees a perfect afterlife for all with minimal effort, just blind faith.

In Japan the majority of Buddhists are Pure Land Buddhists who chant the name of Amida Buddha, believing they are thereby guaranteed access to the pure land of nirvana by this one simple act. Pop salvation with minimal pain and none of that scary devil stuff is winning the marketing war on every continent. It always has, and it always will, just like water always follows gravity. It’s Gresham’s Law of Religion.

I contend that *the worst devil is always inside ourselves, because we are condemned to have free minds. Just as hell is personally inside us, so too is heaven.* Going at the moment of death either “up” or “down” to an impersonal Heaven or Hell is beyond our power to control. Deciding what type of person we will be while alive and possessing our full adult mind is entirely within our personal control, even if we cannot control all the impersonal details of our lives. God’s moral measuring stick is not that of the stock market. The soul has its own set of measures, and it is religion’s duty to help teach us those highest ethical guidelines.

Let’s briefly consider the question of universalism. Simply, if God has arranged things so that we are not really responsible for our moral behavior, because our fates are fully predestined, then there may be no Hell, just Heaven, or blissfully neutral oblivion. I viscerally reject this model of humans as puppets, if only because it violates the primary principle of our emergent consciousness being created in the image of God.

On the other hand, universalism makes more sense for creatures such as dogs, cats, simple-minded humans, and young children who have not yet learned to distinguish between right and wrong. Maybe there really is a doggie heaven!

Hindus and many animists believe in the transmigration of souls, including the souls of so-called lower creatures. In this Hindu way a "good dog" has a chance to move into a more advanced life form in the next life, maybe even eventually into the life of a human. The law of karma describes a cyclical process where some souls are moving toward bliss, and some are moving toward lower life forms. A series of bad lives could move a soul that once inhabited a human into the body of an insect; and vice versa.

Maybe your pet dog was once an ancestor; and maybe you too will inhabit the body of a dog. Some people believe that if you step on an ant you may be killing one of your long lost ancestors. Years later, somebody else may step on an ant and kill you, their ancestor. It is impossible to fully refute the quaint circular logic within such traditional beliefs, and equally impossible to objectively establish any such belief with proper logic alone. The only glaring weakness in this ancient cosmology is the question of responsibility: Is a lower animal always responsible for its "soul"? If not, must that soul continue its journey up or down? Hinduism is clearly a closed cyclical system with an unproven and unprovable dialectic.

A true dialectical system allows for change and emergence. Within Hinduism a comphuman would be absurd; but within the real world comphumans will be just as real as a Hindu temple, maybe even more "real." India is becoming very computer literate, and it will be interesting to see how the Hindu priests orchestrate the emergence of comphumans within their cosmology. Buddha took the law of karma to another dimension. He sought to help us break the endless cycle of the pain of birth and death. His practice was designed to help us reach nirvana, a blissful nothingness devoid of pain.

The most interesting variant of elemental Buddhism is Zen. Many Zen practitioners are seemingly close to atheists, but their reverence for life and existence speaks of a highly evolved spirituality. Zen Buddhists are a minority within Buddhism, because one may have to work for satori, or enlightenment, even if it comes spontaneously. In contrast, Buddha's afterlife has been repopulated by Pure Land Buddhists and other mass marketers into something less pure, but more recognizable to Christians. Let us now look at some variations on the four afterlife possibilities:

LIVE A HELLISH LIFE, AND GO TO HEAVEN

I suggest that more people on this planet can fit into this possibility than into the other three. When I say "hellish life," I am referring to external conditions, not the internal condition of the individual's soul. Not everybody has it as easy as the typical American or Western European, as I well know from three months spent with everyday people in Africa.

For this model to work best, the realm of Heaven should have many layers. The lowest realms are more like a calm sanctuary, and the highest realms are reserved for those who have achieved their worthiness not by accident, but by

spiritual trials. An example of residents of the lower realms could be embryos and fetuses who did not survive, or faithful house pets, or even those who did good by accident. Residents of the higher levels in Heaven would be far fewer in number.

Interestingly, it would appear that having it good in the here and now would raise the bar for achieving a higher level within Heaven. If we are born on third base, and we think we hit a triple, where is the heroism? In contrast, if we existentially rise above horrible challenges, all the better; and if those horrible challenges overwhelm our best efforts, we were condemned to a tough life on this planet anyway. If this model is true, then Heaven may be populated with more street urchins from Calcutta than church patrons from California.

LIVE A HEAVENLY LIFE, AND GO TO HELL

At first glance this variation does not make sense. Or it makes horrible sense. If an omniscient god knows all, then surely that god would not send the saintly to Hell. The dilemma is solved when we understand that what may appear to be a heavenly life is in reality a hellish lie. For example: The Roman Catholic Church cover-up of priestly pedophilia is at last being painfully exposed. Bad publicity is the last thing a closed institutional hierarchy wants, and this simple fact may have been their motivation for decades of orchestrated deception.

The Church's indefensible moral crime was not in trying to downplay the media publicity. It was in keeping monsters employed where they would likely subject even more children to heinous depravity. I would love to be the proverbial fly on the wall when Cardinal Law and his partners in crime meet Saint Peter at the Pearly Gates. Can you spell trap door? Not all hellish lives are the same, nor do they deserve the same treatment in the afterlife. Just as there should ideally be levels of Heaven, there should be levels of Hell. The bottom of the pit surely holds the likes of Hitler, Stalin, Mao, Mafia hit men, and maybe even a bad cleric or two. But what about the less hellish levels of Hell? Back to the omnipotent deceiver model: We could actually be saintly, and still go to Hell. There is no way we can know otherwise in this life, being fully deceived and having no powers to get outside the invisible web of deception. A sinless sainthood in this life could be our only reward; and from certain perspectives it would be more than sufficient to offset any externally directed punishment in the hereafter.

The omnipotent deceiver is a disturbing concept, and Descartes did his best to reject it; but it is logically possible, so we must fully confront it to transcend it. If there is no Heaven or Hell, only physical extinction at death, then a heavenly or a hellish life on this earth has no relevance to any afterlife. We are left here with the existential lives that we live. We make our own heavens and our own hells, and sometimes only we know which is which. At our passing, whatever shades of immortality we enjoy will be the tangible and intangible memories of us shared by those who survive us. Our legacy can be very powerful in an earthly context.

Nevertheless, assuming that there is a doorway to the afterlife, either Heaven or Hell, which would you choose? Doorway Number One: "Live a meaningless life, but go to Heaven anyway?" Doorway Number Two: "Live the life of a saint, but go to Hell anyway?" Your choice will reveal more about your true god essence than it will about your destination.

LIVE A HELLISH LIFE AND GO TO HELL, OR LIVE A HEAVENLY LIFE AND GO TO HEAVEN

I am grouping these last two possibilities together. They represent our traditional and tidy concept of what things "should" be like. In this clean concept the good guys get rewarded, and the bad guys get their punishment in the afterlife, if not in this life.

There is no room in this fundamentalistic and moralistic model for simple death, because the bad guys could rape and pillage, and still escape eternal damnation. This model coordinates well with the Hindu idea of transmigrating souls, even though there is no one Heaven or Hell. The law of karma in the ancient Indian model is rational and orderly, and understood by all. Instead of having one monolithic Heaven or Hell, the Hindus see each new incarnation has having a bit more of one or the other. The circular logic of Hindu theology has survived thousands of years, to a great degree because this theology defines a rigid religious society where the lower castes accept their lower estate for religious reasons. Again, it will be interesting to see how personal computers, the Internet, and ultimately comphumans will challenge reactionary Hindu society. With parts of India rapidly becoming westernized, this society-transforming process can only accelerate.

A problem with these two broadly accepted models enters when we closely examine gradients of consciousness. Easily, a cardinal is held responsible for his actions. But what about an animal? What about a child? Some would say an unbaptized child cannot go to heaven. Is this fair? Fair or not, it is not illogical, if one also accepts other assumptions. The problem with all of these four possibilities is just that. They are possibilities. We can never know their probability. Indeed, our reality is not about probability. It is about choices we make in the here and now.

Because we can never know the outcome of our actions after death, we can only do what Pascal did: gamble that there is a good god who will properly sort things out in the afterlife. And if there is no afterlife, then we can leave a legacy of warm memories in the hearts of those we leave behind.

Religion is Not Theology

"Never wage war on religion, nor upon seemingly holy institutions, for this thing has too great a force upon the minds of fools."

– Francesco Guicciardini, *Ricordi Politici*.

From Cults to Religions: the Mormon Model

Many successful religions started out by being branded by others as cults. The earliest Christians were seen by most Romans as cultists, and when they were embraced three centuries later by Emperor Constantine they in turn branded their local competitors as cultists. Part of the emerging institutional Christian church's success was based on integrating other cultic traditions into their own. They may not have used the word, cooptation, but the effect was the same.

For example, Christ's birthday was moved from spring to December 25th, to overlap the December 25th pagan holiday of Sol Invictus, established by Emperor Aurelian in 274. [There is a competing Jewish theory of the origin of December 25th, but I think the precision of this chosen date must be accounted for.] The formula of victory through inclusion was carried over to the American hemisphere as the Catholic Church successfully absorbed (or tolerated) native beliefs. Many of today's most cherished Christian traditions, such as Christmas trees, have no direct historical link to what happened in Bethlehem two thousand years ago.

Most cults remain just that. Many of the failures were essentially cults of personality, not fully developed belief systems. Only a few cults achieve mainstream respect and popularity, and thereby perpetuate themselves among growing millions of followers. In the modern world the most successful example of a perceived cult becoming a mainstream religion is The Church of Jesus Christ of Latter-day Saints, the Mormons. Mormon church history begins in 1823 with Joseph Smith reportedly being visited by an angel named Moroni, who told him of an ancient record in gold containing God's dealings with the original Americans. Here below is a critical part of that book:

"THE BOOK OF MORMON: An Account Written by THE HAND OF MORMON UPON PLATES TAKEN FROM THE PLATES OF NEPHI.

Wherefore, it is an abridgment of the record of the people of Nephi, and also of the Lamanites – Written to the Lamanites, who are a remnant of the house of Israel; and also to Jew and Gentile – Written by way of commandment, and also by the spirit of prophecy and of revelation – Written and sealed up, and hid up unto the Lord, that they might not be destroyed – To come forth by the gift and power of God unto the interpretation thereof – Sealed by the hand of Moroni, and hid up unto the Lord, to come forth in due time by way of the Gentile – The interpretation thereof by the gift of God."

According to this text, the disparate tribes of Israel spent much of their time slaughtering each other. This text, as well as parts of the *Old Testament*, and the *Koran*, devote a large amount of space to the details of tribal warfare. Another part of all of these books has to do with God's displeasure at those who don't obey the holy rules. At one point a city is swallowed up, reminiscent of Plato's Atlantis. In all of these texts the reader gets the divine might-makes-right message: Obey God, or else.

Four years later Smith reportedly retrieved this golden record, and began its translation. In 1830 the translation was published as the *Book of Mormon*, excerpted above. On April 6, 1830 Smith's church organized with just six members. In 1844 Smith and his brother were killed by a mob in Carthage, Illinois. Two years later Brigham Young led the Mormons west, and they ended up in the virtually empty valley of the Great Salt Lake in Utah. Mormons thus started out with a god-given holy book, given to Smith in almost the same way that Muhammad was given his prophecy. The *Book of Mormon* is not the only holy text. There are four basic scriptures: the *Bible*, the *Book of Mormon*, the *Doctrine and Covenants*, and the *Pearl of Great Price*. Finally, various scriptures are subject to interpretation and expansion by elderly church leaders who are believed to receive ongoing, additional divine revelations. That's good, because these leaders had to find a way past the Church's early polygamy and racism, some of which survives among Mormons even today.

This religion is the only great religion to come out of America. However, it is supposedly linked directly with events of the *Old Testament*. Here is how Smith translates events which are strangely reminiscent of Noah's ship, and God leading the Israelites from Egypt to their promised land:

"THE FIRST BOOK OF NEPHI, HIS REIGN AND MINISTRY An account of Lehi and his wife Sariah and his four sons, being called, (beginning at the eldest) Laman, Lemuel, Sam, and Nephi. The Lord warns Lehi to depart out of the land of Jerusalem, because he prophesieth unto the people concerning their iniquity and they seek to destroy his life. He taketh three days' journey into the wilderness with his family. Nephi taketh his brethren and returneth to the land of Jerusalem after the record of the Jews. The account of their sufferings. They take the daughters of Ishmael to wife. They take their families and depart into the wilderness. Their sufferings and afflictions in the wilderness. The course of their travels. They come to the large waters. Nephi's brethren rebel against him. He confoundeth them, and buildeth a ship. They call the name of the place Bountiful. They cross the large waters into the promised land, and so forth. This is according to the account of Nephi; or in other words, I, Nephi, wrote this record."

Today's Mormon Church is rapidly growing in numbers and wealth. There were approximately eleven million members at the start of the 21st century. There

could easily be ten times that many at the start of the 22nd century. Teams of squeaky clean young men fan out across the globe to witness their faith. They are having excellent success in South America among the native population, with Nephi being the inspiration. Today's powerhouse Mormon faith has virtually cast off its historical cult-like status. Salt Lake City even hosted a recent Winter Olympics. The Mormon Church is a nearly perfect example of how to build a highly successful religion with nineteenth-century American know-how, combined with Old Testament fire and brimstone. It is an interesting example of a new religion flying under the defensive radar of its cousin, traditional *New Testament* Christianity. Does the *Book of Mormon* report a truthful history of God's first people in America? Is the Mormon belief itself a total and truthful theology? These are questions beyond pure theology, but not beyond the social history of religion.

Emotional Needs and Religions

Religions are social engines that codify, rationalize, and enhance previous folk traditions. There are no formal religions without roots in social organizations, and certainly none without deep roots in human psychology, which is itself rooted in brain physiology. Religions of course cannot be reduced to brain physiology. Still, we must accept that our concepts of divinity are not independent of our human ways of thinking and feeling.

Even the emergence of monotheism is a logical outcome of the desire for simplicity in our lives. Polytheistic and animistic gods serve to appease local needs, but they cannot exercise supreme power (by definition), since each god or goddess only has a portion of the total power of divinity. It is logically elegant to assume that all power should be controlled by one high god, and that this supreme god allocates power and favors according to inscrutable divine wisdom. In light of the advantages of unified monotheism over polytheism, it is not surprising that monotheism developed, but rather that it took so long for the one-god thesis to dominate society.

The emergence of monotheistic Islam in the seventh century is a case in point. The various Arab tribes all worshipped local deities, but everybody was aware of Abraham and Allah. There was already a tradition of travel to local towns for festivals devoted to each local god. This pattern was good for local business, and it also provided a pleasant excuse for people to come together for social purposes. When Muhammad transformed the Jewish and Christian tradition of one omnipotent god into his prophecy, he was reforming the Arabic tradition according to what was already revealed to the "people of the book." Muhammad's early battles did for Arabia what Moses did for his idol loving Israelites after he received God's commandments. Slightly more tolerant local cultures were transformed in favor of one unifying view of the world under the iron will of Allah.

Islam does not have a monopoly on authoritarian-submissive ideology. Even though areas of the non-Islamic world distrust the Muslims for their history of

conquest, it should also be noted that the Israelites conquered lands after they fled Egypt under Moses' leadership. They also claimed God as their first conscript. Crusading Christians too were not averse to conquest in the name of divine intolerance. Indeed, looking at the total history of each absolutist religion battling over those desert lands, it is not hard to see how tolerance has repeatedly been pushed aside by power hungry potentates who have learned how to motivate their mesmerized masses with religion sweetened by promises of plunder and paradise.

We might call this "Gresham's Law of Religion." The original Gresham's Law said: "Bad money drives out good money." Our new "Gresham's Law" says: "Bad religion drives out good religion."

It is one thing to conquer territory. It is another thing to conquer hearts. Nevertheless, physical conquest often leads to psychological conquest, since the core of religion is closely allied with the core motive of daily existence: survival. The most successful empires have generally been those that have married religion and power politics. One of two strategies has been followed: The first strategy is the Roman model, where the conqueror displays tolerance for the local religions as long as the local religious leaders genuflect to their conquerors. The second strategy is the early Islamic model, where whole populations are swiftly converted, or else. Neither model has generally been pure, however. Muslims have generally been tolerant of "people of the book" – Jews, Zoroastrians, and Christians – as long as their partially enlightened subjects display secular loyalty to their fully enlightened lords.

Another post-conquest pattern sometimes reveals itself. That is when the militarily conquered become the cultural conqueror. Classical Chinese culture has successively absorbed the northern barbarians who have invaded her territory. India is another cultural sponge which has maintained its robust religions through acculturation of conquerors, even when they were Islamic rulers who modified their practices to harmonize with Indian styles. Rome's conquest of Greece led to the strong influence of Grecian culture on Rome, to the point where many Greek gods were embraced, but renamed, by the Romans.

Once a new religion is established it is imperative that the encroaching religion capture and hold the allegiance of each individual convert. The required allegiance goes beyond the outward signs of obedience to raw power. It must enter the heart of each religious participant. If a religion cannot deeply win the hearts of the majority, that religion will eventually be absorbed, revised, or simply overthrown. Competition is especially evident in Africa, where the militarily superior white Europeans injected Christianity into native cultures, only to see their Christian ideology transformed by native African consciousness as the colonizers retreated.

All successful religions are functional entities integrated with society. They function as part of the social glue that maintains the established order. The best example of this adhesive power would be the role of the medieval Christian church in Europe. The stated role of the church was to harvest souls for Heaven.

Nevertheless, the church also was a temporal power with elaborate institutions that needed money and protection from secular competition. Thus, bishops and popes were careful not to alienate powerful princes. They promoted the cynical concept of reward for virtuous obedience coming in the afterlife; and they promoted the concept of salvation by works, which helped support the Church's coffers. For a while indulgences were sold by priests, so that one could literally buy heavenly forgiveness from sinful acts. In this way poverty was ennobled, while the uneducated masses rendered unto Caesar that which was Caesar's. Kings ruled their secular lands by divine right, and the Pope ruled over all lands by the Petrine Doctrine. For centuries everyday life in medieval Europe appeared structural-functional.

Martin Luther and other radicals sought to overturn the monopolistic despotism of the Roman Church when they proclaimed that faith could also be a personal thing, and that good Christians could commune directly with their creator both through reading the *Bible* and by prayer. This direct link to God challenged the power of the religious bureaucracy, helping to inspire the Thirty Years War and a theological rift which has never healed in Christendom. We should also note that Luther was backed by his own Germanic princes who wanted to expand their secular power at the expense of other princes who were backed by the Roman Church.

Despite the reformers' partially successful challenge to Papal hegemony, allowing direct access to God through prayer created a major potential problem: A logical outcome of direct communication by believers with the ultimate power source is the eventual atomization of all types of organized religion, where each believer is effectively a religion unto himself or herself, and all clerical hierarchies are bypassed as irrelevant to the I-Thou dialogue with God. Carried to its logical end, this freedom would be the end of all organized, hierarchical religion; and the princes would not have this scenario play out.

The new Protestant reformers and their secular allies cleverly overcame this purist danger to themselves when they emphasized that people still have a duty to pray together, to participate in congregational activities, to cooperate on missionary projects, and to develop a community of believers. This defensive strategy was well received, since human beings are social creatures who seek group approval for their beliefs.

Each religion is a package. It is a package of traditional beliefs and practices dressed up as absolute wisdom. Each package appeals to the basic human desire for security. This appeal is directed to the need to know the future, to justify the past, and to understand the present. Each believer is given the keys to certain knowledge, as codified by holy books, rituals, and traditions. Such a package of absolute revelation, even when sold as only part of Absolute Truth – the balance of which is revealed after death – abbreviates what would otherwise be a long and puzzling search on the part of individuals for truth.

When divine truth is doled out by infallible religious texts and institutions, no other questions about ultimate reality need be asked. Such felt certainty frees the emotional mind for other, more mundane tasks, such as earning money for tithing to the church. This all is a tidy symbiosis. Religions in the modern world have sometimes slipped away from their success formula. Recently, certain established Protestant churches have relativized their truths. That honest retreat from doctrinal certainty has alienated many of their old fashioned adherents – even leading to schisms within some denominations such as the Protestant Episcopal Church, where some congregations have returned to the formal Anglican liturgy.

When we ponder the recent phenomenal success of certain television evangelists, we should look at them in light of the basic human needs they are addressing. You will never see anything short of absolute certainty in those slick shows. And there is another, special element in their messages: Salvation is easy and instant, if only one is "born again" in the blood of Jesus Christ. Floods of money came in to Jim and Tammy, as thousands bought into their greedy, teary promises. Contributing money to the PTL prosperity ministry became a modern form of buying indulgences, until the bubble burst. More recent money raisers have been less blatant as they reach for your wallet.

It might at first be suggested that followers of these hucksters are exercising Pascal's Wager. This is not so, because one who wagers still retains honest doubt, even within commitment. Truly bewitched believers no longer doubt. Their pure belief and happiness is purchased at the price of lost authenticity. Too many of us will quickly line up to mortgage our authentic souls to a smiling face on TV. Nevertheless, and strangely, it is impossible to prove that what the hucksters are selling is false! Hucksterism is not unique to America, even though the power of television has amplified the presence of individual hucksters in the West. People everywhere are susceptible to instant nirvana pitches.

The Pure Land Buddhists in Japan say that nirvana awaits anyone who simply appeals by name to the Amida Buddha, a bodhisattva who allegedly can bring the spiritual body to an eternal heaven free from pain. It is not surprising that a majority of all Japanese Buddhists are Pure Land followers. It is much more difficult and time consuming to get a grasp on the ultimate reality if one is a Zen Buddhist; and the Japanese value efficient use of time. People everywhere love fast food and fast religion. There is no shortage of fast food restaurants and fast religions.

On the other hand, psychological security can also be found in rigorous religious rituals. This is the opposite of the "fast faith" approach to salvation. Suffering has long been used as "proof" that faith is justified. Job was the early model for this type of masochistic religion, and there have been others walking in his footsteps. In the medieval era the flagellants inflicted pain for faith. Alleged witches were burned to save their souls, but not their wicked bodies. The Muslim faith is quite demanding with its sets of rules for fasting, daily prayers, the hajj to Mecca, and so forth. Many religions stress severe dress and behavior codes – the Amish, the Hutterites, and the Hasidic Jews being just three prominent examples of

this in-group vs. out-group behavior, with all such participants seeing themselves as part of the ideal in-group.

People everywhere love to gain through pain, to prove and justify their choice of faith. The primitive emotional brain likes shortcuts to answers. Survival itself is a primal stimulus-response loop, the shorter the better. The brain's cerebellum is responsible for controlling physical activity, along with spinal cord reflexes. After one learns a movement, the cerebellum is able to carry it out without hesitation. A timesaving response has survival value in the face of physical danger from instant threats, but not necessarily against complex and delayed threats.

Nearly everything we do is formed by patterns we have learned in early childhood. Language is a prime example. We unconsciously speak the complex grammar and detailed vocabulary of our native tongue. There is no re-invention of the cultural wheel for individuals. Likewise, groups of individuals embrace the same shared harmonics, which enables them to converse with survival-enhancing speed and accuracy. It is not by statistical accident that your religion is most likely that of your parents and their culture. In Thailand and in Burma one "naturally" becomes a Buddhist. In Saudi Arabia one "naturally" becomes a Sunni Muslim, often a Wahhabi extremist Muslim. In Latin America one "naturally" becomes a Roman Catholic.

As the twig is bent, so it grows. DNA itself is the conservative repository of patterns and replication. I am not arguing that religions are ultimately based on DNA. Rather, I am pointing out that our body's ultimate building blocks themselves are conservative and patterned. DNA is, literally, structural-functional. Religions are likewise at their institutional best when they are equally structural-functional and virtually unchallenged from within and without. Heresy has always been a much greater crime than unbelief. The most successful religions, however, aren't rigidly conservative. They can adapt to changes in political environments and opportunities. Successful religions evolve just as successful gene pools evolve.

Logically, there is no automatic theological superiority of orthodoxy over heterodoxy and heresy. It is a matter of relative perception, and time, as today's heresy could become tomorrow's orthodoxy. From the viewpoint of the orthodox believer a deviant is by definition heretical. From the viewpoint of the "heretic" the orthodox adherent's belief is merely heterodoxical to his own. Wherever orthodoxy is enforced it is backed by secular forces, not really by the force of logic. The Spanish Inquisition was an example of such political theocracy, where those who had the gold made the rules.

Things get strange when different "pure" theologies manifest themselves as intolerant religions seeking to occupy the same religious turf. The world has suffered the effects of absurd truth battles for many centuries. These battles have been both bloodless and bloody. Even today we see institutional forces arrayed against each other in various regions of the world, as where the Shi'ite Muslims compete for prominence against the Sunni Muslims. Then there are the other

Muslim derivations, such as the Sufis and the Baha'is. In India the minority Sufis are not always tolerated by the majority Hindus from which they emerged. There is no stopping schism, as more "revelations" can always appear, not just within Islam, but also from within any other orthodox religious tradition. Orthodoxy is at best a Maginot Line against zealous religious sentiments, or even against honestly probing questions.

If the "social body" were as conservative as the genetic body, then life in the land of religion would be harmonious. But religions today must compete inside a rapidly changing technological world, where old social structures are tested and transformed by new science. Ideologies that were structural functional even recently within relatively static societies are now in danger of becoming increasingly dysfunctional in light of new technology. When the social body changes much more rapidly than the genetic body, dialectical opportunities arise for emergent homeostasis, either in religion or in wisdom. Change brings danger; but it also brings opportunity to break from the mental chains of our past.

The Need for History

If religion were everything to everybody, then it would mean nothing to anybody. Religion is a social institution that must be split according to ethnicity and according to history for it to be comprehensible to the many different cultures on the surface of this planet. If a god were everything to all beings, that god would have no discernible identity. That is why we have gods with "personality" – jealous gods, quarreling gods, vain gods, forgiving gods, and so forth.

All of these gods (be they polytheistic or monotheistic) display within religion an amazing set of anthropomorphic personality traits. We project onto our image of God fantasies of paternity and maternity, as well as many other human social relationships. In this way we are able to "relate" to the mysterious as if that mysterious entity were just a magnification of our everyday life. When we have only one god to focus on, that simplifies our task. It also magnifies the risk we take. If we err in our relationship to that one god we are at risk of eternal damnation.

On the other hand, if there are many gods sharing in the total power of divinity, then we could ally god against god for our own benefit, using magical rituals and other occult communication channels. This is the charm and safety factor of ancient polytheism, and it helps explain why traditional Hinduism has never been superseded by Islam or Christianity.

Theologically, all of the above packages appear secondary and absurd when faced with the twin primary tasks of being able to simply know if there is a god at all; and, secondly, how to define that god essence in terms accessible to both our emotional and intellectual brains. Distracting individuals from the implications of these deep problems has been one of the major jobs for organized religion, since probing thought corrodes codified religious dogma.

Because individuals live within a consciousness of history, it is important to have a historical concept of god. History is one thing, but the need for history is quite another phenomenon. History is by itself just the documentation of the past. It shows us where we have traveled, but alone it does not show us where we are going. In contrast, we humans emotionally need to know not only where we have been, but also where we are now in relation to where we think we are going. One of the most powerful aspects of organized religion is its clearly orchestrated sense of roots. Just as a tree has roots, human cultures also have roots. In that sense, cultures are more like trees than birds. Humans individually dream of flying, but in fact they are always seeking roots to hold out against the winds of fate. When Semitic Jews and Semitic Muslims hurl rocks and bullets against each other in Jerusalem they are fighting not just for turf, but also for their root identities as historical peoples.

Newton remarked that no two physical bodies can occupy the same place at the same time. His statement could in essence include religious bodies fighting for "space" in the hearts of mankind. Animals don't feel the need for history. They live in the here-and-now quite happily. Yes, they do have a genetic history, but their genetic history is unconscious, and serves the present; it does not impede the present. Animals don't have consciousness of their future, either. Humans alone feel the need for a past-present-future identity. Their religious communities define a teleological flow of history that fills the Janus-faced need for roots and destiny. It is interesting to compare the consciousness of animals and machines. Both perform in the here-and-now, without a sense of history or future. Only humans have a rich vertical dimension behind every contemplative thought. Still, many philosophers, especially those influenced by Zen, praise the here-and-now consciousness, because such is a form of authentic relationship with reality. To be here now is to be in touch with the real world, not just the world of our fantasies.

Comphumans will be both machinelike and more human, since they will have the computer's ability to firmly focus on the here-and-now, but also appreciate a society's sense of time.

Stable vs. Unstable

One way to look at religion is to see it as a play between the forces of stability and instability. This is another way of seeing things in terms of orderly *negentropy* vs. feared *entropy*, i.e., order vs. the disorder which leads to chaos. Religion poses as the negentropic (organizing) force of homeostasis, as opposed to the entropic (disorganizing) forces of doubt and unbelief. Is it any wonder that religion resonates so well with our deepest security needs?

Peter Berger, the sociologist, and one of my former teachers, in his *The Sacred Canopy* (1966) suggested that religion is central to our world construction. He sees the sacred cosmos being set up to oppose chaos:

"The sacred cosmos, which transcends and includes man in its ordering of reality, thus provides man's ultimate shield against the terror of *anomy*. To be in a 'right' relationship with the sacred cosmos is to be protected against the nightmare threats of chaos."

From Berger's perspective it thus would appear that the search for ultimate truth takes a back seat to fear of chaos. Anyone who would even question the world constructed by specific cosmogonic myths becomes a potential ally of chaos. Just as the ocean is a permanent presence for one who lives at its shores, so too the idea of a permanent and caring god is a solace for the believer who feels that both his present life and his afterlife are under the benevolent direction of an unchanging divinity with the personal touch.

It is common knowledge that periods of personal crisis leave individuals most vulnerable to conversion and "rebirth." In contrast, when people and societies are comfortably into a groove they seldom ask fundamental questions about the meaning of life, if those questions would threaten their happy curve. Nor are they at that time particularly receptive to those who would offer substance different from the "comfort food" religious package they embrace. Religious recruiters acutely understand these emotional differences, which is why they pounce whenever weakness appears.

Messianism is received most readily by whole populations who doubt the spiritual safety nets their old cultures have provided. When doubt is strong enough there is an opportunity for something new, something perceived to be more stable, to challenge the old social fabric. A new homeostasis is sought in the form of a new ideology, a new tradition. Africa displays the classic pattern of alien Western Christianity replacing discredited local deities – while at the same time those deities renew their energy as they are partially incorporated into an Africanized Christianity. This is a good example where all sides "win." That same cross pollination also shows itself in certain Caribbean religious beliefs, and even in parts of the Deep South.

The presence of a caring god is, theologically, just an hypothesis. In religion, however, the felt presence of a caring god is not an hypothesis, but a visceral fact of belief. It is one of many grounding beliefs. Any remaining doubts only add to instability, poisoning the peace of mind purchased by the sacrifice of intellectual purity.

Because the emotional mind usually rules the intellectual mind, those who embrace religion have no qualms about what they have done to trample Truth. The energized emotional end justifies the anti-intellectual means. The psychoanalyst, Wilhelm Reich, spoke of muscle armor which leads to character armor. Rigidity in any part of our bodies and thoughts leads to a chain reaction wherein our organic potentials are blocked by the hard resistance of rigid character. In contrast, flexibility is similar to the reed in the wind. Whereas an oak tree is very strong when the winds are calm, but can break in a major hurricane – the reed is very

weak in the calm, but invincible in a hurricane. Character armor and rigid religions are like oak trees. They hate the wimpy winds of critical thought, and they will to their utmost ability do what is necessary to quell individuals who "blow too hard." This is why the institutional Christian church so enthusiastically burned heretics at the stake. Such action makes good sense from a systems perspective, even if it doesn't from the perspective of theological honesty. Let us not forget that our churches are financed on Earth, not in Heaven. Too often Christians have been the best argument against Christianity.

In daily religious life it is sometimes difficult to avoid the questions skeptics always raise. These pesky questions take many forms, such as about the various translations of the *Bible*, its authorship, and even about the ultimate problem: Who or what created God? Religions defend against this perceived intellectual cancer by denial wherever and whenever possible. However, there are other ways to treat the systemic threat of questions without neat answers. These questions have a history of popping up like crab grass and dandelions on our lawns. Religions can erect a rigid set of defenses that go beyond mere denial. Believing the best defense is a good offense, adherents are challenged to believe even in the face of doubt. Belief becomes not only a test of faith, it is a badge identifying the believer as among the faithful who have shut their minds to the noise of questions without neat answers.

The Old English for "by god" became today's bigot. Religious bigots are intolerant of other religions. Such intolerance is supported by the delusion of certainty which, of course, is equal to one's particular dogma. Such intolerance would merely be quaint if religion were not a social phenomenon intertwined with power politics. Individuals within certain religious traditions who "know it all" are potentially extremely dangerous. Such individuals sometimes claim to have direct access to and guidance from God, which places them totally beyond reason. This is a perverse but logical extension of Martin Luther's revolution which potentially did away with clerical authority. Such people feel they are forever saved, no matter how many sins they may commit. It may not be entirely by accident that the land of Martin Luther became the land of Hitler's Third Reich. Let's not just pick on Germans: When I lived in Texas, upon encountering a boasting born-again businessman I quickly grabbed my wallet. The truly born again businessmen, in contrast, hardly ever mentioned their spiritual conversion, and they were a pleasure to be around.

Certain religions can encourage religious bigotry. Any religion that is based on the claim of exclusive access to God's ultimate truth can easily be hijacked by those who seek power beyond sanctity. Such people as leaders can be quite charismatic, since human nature avoids ambiguity and is attracted to clarity. Clarity provides strange cover for bigotry.

Hijackers of religion care not that transcendence must forever be ambivalent, since their recruits can never comprehend all of the essential facts with absolute certainty. Therefore, the bigots oppose philosophy with an end run around honest logic, substituting their "revelation" for honest cogitation. Rigid codified doctrine can

thereby function as a bogus theology, performing a theological lobotomy. Once the theological lobotomy has been performed, any type of rigid religion can fill the void. The price to be paid for such rigidity is loss of intellectual honesty in the very highest sense. If the conclusion is known even before the question is asked, then why bother asking any more questions? Stopping any more questions is one goal of dogmatists. Those who intentionally deceive and distort are no longer "in the image of God."

Nevertheless, a rapidly evolving society offers new experiences, new realities, and new facts to strongly challenge the rigid religions. Their reactive response to this change is to demonize change itself. Right now parts of the Muslim world, and theocratic Iran in particular, exhibit this painful intersection. The force of modern technological progress with emerging cultural relativism is eroding the seemingly immovable object of medieval dogma as it influences key elements of society, such as the rights of women.

It is not guaranteed that modernism will conquer medievalism. Wherever the reactionaries are in control of social levers and of the media, they have power to mold opinions. Also, unlike the discredited quasi-religion of atheistic Marxism, there are no external and objective performance parameters for yielding to the will of divine authority. Divine authority seems to always be just beyond the realm of reason.

In contrast, honest flexibility within religion is not rootlessness. It is an openness which can embrace the new without losing the best of the old. In the future, rigid religions will, for millions of people, be superseded by flexible religions, even by THEOH. These modern religions will have a strong honesty, inspired by simple comphuman theology.

Religious Addiction

Psychologists speak of the addictive personality. People can become addicted to almost anything that satisfies primitive brain cravings. Religion's appeal to security, through removal of doubt, is indeed an "opiate" for religious addicts. At least on this point Marx was right.

Addiction is a program script of the lower brain, and it can best be understood in systems theory terms. The lower brain is only interested in survival and species procreation. If something went wrong in childhood the lower brain will spend the rest of its life looking for that missing key to security, often at the expense of the higher brain. To heal this pool of primal pain it is necessary for our social and spiritual lives to drain the pain by addressing the language and sources within that lower brain. There is nothing psychologically wrong with being very devoted to an ideal of god, and to transcendent ethics. After all, nobody can logically disprove the existence of god.

On the other hand, there is a lot wrong with becoming obsessed with a very narrow, often punitive, concept of god. It is when we transcend basic belief to become a "true believer," to use Eric Hoffer's term, that we slip into the world of addictive delusion. Fundamentalists have long been troubled by the number of different Christian churches in America alone, now about 700 different shades of the same theme! This splintering of one historical tradition allows for much competition for souls, so that each competitor must try harder to differentiate himself in order to sell his brand of snake oil. Prospects themselves look for a church community, but they also look for the golden keys to Heaven. The snake oil that tastes best is the one they will buy.

"Gresham's Law of Religious Recruitment" says bad religion drives out good religion. In other words, promises of cheap salvation drive out prescriptions for earned salvation. Religious slogans drive out religious scholarship. Sloppy theology drives out studied theology. Bible thumping drives out Bible reading. Sunday screaming drives out Sunday sermons. Boogie drives out Bach. Talking ethics drives out living ethics. Assumed easy entry into Heaven drives out earned entry into Heaven.

The question is: Does God buy into this mass hustling of souls? It is one thing to get people into a church. It is another thing to keep them tightly in the fold, so that they won't listen to the competition. Members in some churches are led to believe that people outside their particular church are in jeopardy of going to Hell. Such members are controlled by the chains of fear and guilt. Some churches expect multiple attendance each week at different church services, in addition to various church activities. Their very busy schedule instills a routine that keeps hands, hearts, and minds from doubtful mischief. Daily life becomes an "in-group" versus "out-group" experience. And who wants to be part of the unholy, unsaved "out group"?

Churches can become functional families, at least on a superficial level where one can socialize in one's best clothes with like minded "family" members. We present our best selves at church, which reinforces our feeling of moral superiority, and which can lead to moral abuses in the real world against those not inside our holy congregation. Church picnics allow us to indulge in food, which is the only sin or excess not condemned by puritanical sects. Human sexuality is perceived as a great threat to church life, since the procreative urge is nearly equal in power to the search for security, which religion tries to appropriate. Sexuality is not something the church can easily control or appropriate. A rare exception is tantric yoga, where sexuality is expressed in a ritualistic way. Nevertheless, sex within sanctioned marriage generates desirable children who can be indoctrinated from within their parents' tradition, and then fill the church pews with new sexual bodies.

Where the church is most successful at embracing sexuality is in the nesting urge. The religious community becomes a large nest and support group for the smaller nest at home. There is nothing inherently wrong with having an extended community to support the nuclear family. We can even argue that much of the

historical origins of civilization flow from this supportive family phenomenon. Emerging states simply and successfully enlarged the scale. However, hijacking the nesting instinct for political agendas mutates beneficial cooperation into a tool for manipulation. In certain contexts normal human personalities can be effectively turned into addictive personalities, through primal fear of being banished to the out group. Excommunication from the immediate in-group has partially replaced banishment to distant Hell. Fear of expulsion is the primal essence of cultic power, which is the worst perversion of religion.

Sacrificing and Belief

A common theme among many religions is that of sacrificing life, sometimes even human life, to achieve witness for one's faith. This is a theme as old as *Genesis*, and as gruesome as the Aztecs who cut out the hearts of young men to appease their weather gods. Today's ritualistic sacrifices by Jews and Muslims of rams preserve the bloody memory of the total submission of Abraham to his one god. In sports training the slogan is "no pain, no gain." Something similar could be said of religions which demand at least some change in lifestyle. Usually much more is demanded, such as tithing ten percent of all one's wealth to support the clerical hierarchy.

Many older religions require a change in personal appearance to help advertise one's faith. In general, the more conservative the attire, the more reactionary or rigid the belief. Thus we see the Hasidic Jews, the Amish, some Hindu sects and others in America appearing and acting at odds with the modern norms. Such devotion is neither good nor bad in itself, but it does intentionally alienate and insulate the believer from the majority culture. Alienation from the majority culture helps bond members to their socially deviant group. This in-group vs. out-group phenomenon helps insure the ideological purity of the statistically deviant sect. Here, the "elect" minority feels morally and theologically superior to the majority.

Our time on Earth is just a way station on the journey to the eternal afterlife, so it is felt; so why bother assimilating with those in error any more than what is absolutely necessary? Whereas social cohesion is functional within the self perceived in-group's context, that aberrant group is viewed as an out-group by the majority society. There is the additional danger that acting on one's socially deviant beliefs could lead to active persecution from the majority culture. In other words, from different and relative perspectives you are either a member of the in-group or a member of the out-group. Many millions of people have been killed from this categorical absurdity. True fanatics welcome persecution. Feeding themselves to lions in the Coliseum is how brave Christians won over many cynical Romans.

In the modern world cult leaders feed on the human potential for paranoia. Jim Jones and David Koresh were only the worst of their lot. Religions seem to prosper because of periods of persecution. Whereas the Soviet Union was able to intimidate the rather submissive Russian Orthodox Church clergy, today's Russian

churches are filling with young Russians who are eager to rediscover their cultural heritage. Even though this Slavic church appeared to retreat during the long Stalinistic repression, it was only retrenching, since it always was the Russian Orthodox Church and a focus of nationalistic identity, not an alien import. As such it became a tangible symbol for the intangible concept of *narod*, the people.

During periods of social crisis and uncertainty the perceived stability of the cultural church is a magnet for great numbers of people. Authorities can capture church buildings with tanks, but not church members' hearts. Even though chaos or terror has accompanied the Roman church (the Crusades, the Inquisition), most Americans today associate the Roman Catholic church with peace and order. In the Middle East and in such places as Northern Ireland and Bosnia, religion has helped define and aggravate turf tensions among various ethnic and political groups. Each area has large numbers of people latching onto one or another religion and its temporal infrastructure, to help buttress and justify temporal struggles.

Sadly, religions of peace have become pawns in war. *In a shooting war God is the first conscript for both sides.* On a basic level we can say that part of the role of institutionalized religion within society is ideally to provide order when there is disorder; to provide comfort in crisis; to provide peace in time of war; and to provide the last rites for the dying as well as all other spiritual gate keeping duties. Clerics help us cast aside doubts and get going with our everyday activities without delaying questions. The survival value of such absence of doubt is great; but the danger remains that we can also be focused in the wrong direction.

Culturally Imperialistic Religions

There are cultural religions, and there are culturally imperialistic religions. Imperialistic religions are authoritarian-submissive, and are always allegedly hooked into God's divine moral order. All imperialistic actions are thus justified as being directed by God, so that anything goes that adds to God's greater glory. Both individuals and entire societies can be called to sacrifice for the divine plan. Invariably, imperialistic religions merge divine power with secular powers, either formally or informally, as during America's "Manifest Destiny." Soldiers for such imperialistic religions can be a problem for the architects of conquest. Soldiers for religion are human beings, much to the disgust of their commanders who would command brainless robots. Clerics are brought in to pour salve over scruples and fears, and decree that a dying soldier will be welcomed into Heaven.

So-called "holy wars" usually feature two sides, each claiming divine guidance, with each side telling its soldiers that their martyrdom will ensure them a place in Heaven. How disgusting and dishonest! Yet, how effective on young minds. In times of crisis and potential doubt there is no room for doubt, only clearly directed action. In war the first casualty is truth. There is no time in war for love and tolerance. When the smell of blood is in the air, who really cares what the Prince of Peace had to say?

Satan and Demons

Most religions need a "dark side" to provide the antagonist and a value contrast to their advertised "light side" of salvation. In western tradition Satan has fulfilled that role. In Hebrew, *satan* means "accuser." In the *Old Testament* Satan is the agent of God who accuses, or tests, the righteous, but not the agent for evil. The parable of Job well illustrates this role for God's fallen angel. It was only during the centuries preceding the Christian era that Jewish extra-canonical literature depicts Satan as directing his subordinate fallen angels against God. As depicted in the Dead Sea Scrolls, Satan is created by God to lead his forces against God's forces, so that the good forces can prevail and thus "end history" through the establishment of God's kingdom. It is fairly easy to view Satan as a major player in a drama written and directed by God. Satan plays the puppet role of arch villain, so that there will be something against which the good forces can struggle and inevitably triumph.

Without an evil antagonist there can be no good protagonist, just ongoing existence, which is emotionally boring. It never occurs to the Satan-obsessed that "existence" might be all there really is outside our own world of values, so that whatever evil there is may be entirely of our own creation.

Satan is supposed to have free will and not be a puppet. However, the *Koran* implies that Satan is ultimately God's servant, even in Hell, and may in the end be redeemed. It is hard to reconcile independent evil with service to the good! This is by its own logic an absurd dualism. Either Satan is independently evil, or he is just the messenger and surrogate for another force, which may in the end be beyond good and evil.

Satan is just the most prominent example of cartoonish demonology. External demons have been around for as long as people have tried to explain the apparently unexplainable, especially the presence of otherwise unexplainable troubles in what "should" be a perfect world.

It is almost impossible for people to imagine that a divine creator would purposely include evil forces inside his exquisite order. This problem has been fairly well contained in Indian and Chinese cosmology, where the gods have been multiple, with interpenetrating elements. Shiva, for example, both creates and destroys, transcending and uniting elemental good and evil. Popular, traditional religions simply resort to a host of demigods, many of which we could call demons; none of which is totally responsible for the big show.

Demons are also summoned to explain deviations in secular society. Mankind is supposedly improving, due to advances in the physical and social sciences. However, wars and other massive evils persist. Classical liberal theory is reluctant to admit the chaotic into its formulas; so an external force is posited. These

demons are not called demons in today's vocabulary. Rather, they are identified as alien ideologies, disease pathogens, Murphy's Law, and a few other ways to shift blame from oneself to something external and alien.

Whereas demons formerly were described to explain our universe's rough spots, now they operate as convenient excuses for our own ethical inefficiencies, and for our own demiurges. Demiurges are primal forces and feelings within us that emerge when the existential world works in ways threatening to our genetic heritage. When data from the cortex conflicts with acceptable parameters inside our emotional brain we experience anxiety. When demiurges lead to actions and reactions which are counterproductive and costly we often resort to external demonology. The timeless blame game has many counterfeit faces.

Heaven and Hell

Religion is primarily a practice of the heart, not of the head. We need that emotional dimension supplied by a personal deity. Thus, we imagine that God has a human-like face, ideally for European cultures as Michelangelo painted Him on the Sistine Chapel. It is comforting for us humans to imagine a golden, medieval city in the sky. We need a holy place where we may go as spirit bodies in the afterlife. This is why we locate God and Heaven in the sky. We look down at the Devil's home below the surface; and we look up to the pure heavens. At our feet is dirt; above our heads the stars. The sky is as close as our breath and as remote as infinity. Strange things populate the skies: meteors, powerful storms, the northern lights, tornadoes, rainbows, and the starry heavens. In contrast, our Earth's surface is too well known to us. We can walk or sail all over the Earth, effectively removing its mysteries. God needs to reside somewhere else; removed, yet immanent. Even the Devil needs to live below, appearing on the surface only for brief moments, and usually in disguise. At other times the Devil is occult.

The Tower of Babel reached into the skies, but God twisted the tongues of its builders, the *Bible* says. Today's religions busy themselves with church steeples and mosque minarets, not towers of Babel, as they literally reach for the sky. Of course, God doesn't have to "reside" anywhere at all. It is we who need bipolar directions for spiritual travel. Our soul's final journey must not be an aimless wandering toward no specific place. That would be equal to death, or at least limbo. To leave and never arrive would be the spiritual equivalent of entropy. God is safely omnipresent, but humans need simple directions to a divine nest to avoid dissolution. Therefore, "the heavens" are the best place for Heaven, at least in our religious imaginations.

We need to go back to Adam and Eve to find the "reason" for Hell. Until the first couple had knowledge of good and evil they were incapable of committing evil, so none of the human species could populate Hell for cause. The Devil might have been lonely, which may be why he sent his alter ego to The Garden of Eden for that fateful encounter with Eve. The ancient Greeks had more than Heaven and Hell,

which they called Elysium and Hades. They also had a nothingness form of afterlife they called Limbo. It could be argued that the metaphorical Garden of Eden was something of a moral limbo, or at least a moral nursery. Until they found wisdom the naked duo were happy robots for God. The infamous apple episode marked their evolution into independent consciousness, which brought with it the responsibility for moral choices. Because Adam and Eve became wise from their rebellious action they thereby became more godlike, which threatens jealous sky gods.

Just as it takes knowledge of Heaven to know Hell, it also takes knowledge of Hell to appreciate Heaven. We could be in Hell and not know it, if we have limited consciousness. Liberation from such a hell can only come about by an elevated consciousness. Adam and Eve could never fully appreciate their heavenly nest until they lost it. Of course, there is always being "born again," but that path is an external solution from grace. *I suggest that the highest awareness of Heaven on this planet may be found by each person through the internal wisdom of honest inquiry into the depths of one's own life and soul.*

A final irony: An eternity in Hell is better for the soul than total annihilation at death. Obviously, nobody wants to sit on glowing coals for eternity – but at least it is an eternity with continued personal existence, rather than the cold chaos of final death. The strange idea of Hell-as-comfort can only be understood by an appreciation of the finality of entropic dissolution at death. Our primal fear of annihilation leads us to perversely embrace the idea of Hell as a comforting option for life everlasting.

Miracles and Apparitions

There can be a close relationship between faith and miracles. Holy miracles are events in the physical world that appear to contravene all known laws of the universe, and which are thought to be of supernatural origin. Thus, miracles could be a channel of communication between God and mankind. Miracles are sometimes confused with magic. Magic is the attempt to manipulate the supernatural for human benefit. Miracles, in contrast, often appear spontaneously, sometimes even in our dreams.

Saul's conversion to Paul was a miracle; so was Allah's choice of Muhammad to be his messenger. It's even better than winning the lottery, because you don't even have to buy a ticket for God to choose you as his messenger. The Roman Catholic Church supports this connection between faith and miracles, since a saint must first have miracles attributed to his or her name. In the Islamic faith the *Koran* is honored as God's final miracle. Nevertheless, many of the Islamic faithful wear amulets, invoke charms, and attend the commemorative anniversary of one or more local saints who are reputed to have worked miracles through Allah.

Organized religions thus have a love-hate relationship with events that border on the magical. They welcome miracles as physical evidence of the spiritual world,

but they constantly attempt to distance themselves from sorcerers and other tricksters. An excellent example of this spontaneous phenomenon is the frequent appearance of Catholic apparitions among the Catholic faithful. Instant shrines can arise when a beam of light or spot of dirt in an otherwise ordinary place is perceived as the image of the Virgin Mary. Thousands of pilgrims descend on the site, turning it into a makeshift shrine and profit center for the local merchants.

Roman Catholic officials acknowledge that there has been an upsurge in recent years in reports of mystical apparitions around the world. More than two hundred such events were reported in the 20th century, and many in the field point to such apparitions as evidence of unmet spiritual needs. When such an event occurs Catholic bishops appoint a commission to investigate. So far, no American apparition has been shown to be beyond conventional explanation. However, there are fourteen apparitions worldwide that have passed the screen in the last 160 years. Approval does not mean that Catholics are encouraged to believe in the events, merely they are not forbidden to believe. In this way the Church keeps its dogmatic purity, while allowing for spontaneous Virgin Mary sightings. Skeptics in the Church question whether the Church should be encouraging such evidence of mass hysteria. Practical voices see the partial embrace of such phenomena as a way for the Church to remain viable among change. Theologically the jury is out, while crowds cram makeshift shrines. Such is the hunger in today's world for direct spiritual connection with the transcendent powers of the universe.

Trained Awe

There is a vaccine for such innocent hysteria. This antidote is a trained awe. Whenever we purely look at any event we are looking at direct evidence of the creative power of the universe. Seen from this honest perspective, everything is a miracle. Anything – the blossoming of a flower, the passing of a thunderstorm, even the breath of a loved one – can be perceived and felt as a miracle of the universe.

I believe all existence should be embraced as miraculous. Obvious miracles are only a small part of the miraculous. Since we cannot know the order of the universe, we don't really know what is the ultimate cause and what is its ultimate effect. We cannot say with absolute certainty what is primary and what is secondary. All we can say is that the world presents itself with glory and mystery. This is one reason why I spend hours looking at the glorious heavens through my telescope. Our only honest response is simply to rejoice in the suchness of existence.

Plato said awe is the beginning of philosophy. When we move from arrogance to awe, we move from bigotry to wisdom and agapaic love. In the end, we are challenged to move out of our conditioned animal box into the free world of honest thought, and thereby join with the creative being we call God.

Just as awe is the beginning of philosophy, awe is also the proper end of philosophy. Through our journey in life we may be lucky enough to end up where we start – with a beginner's mind, ever open, ever creative.

Prayer

Prayer has been variously defined as the "ascent of the mind to God" (John of Damascus); "the opening of the heart to God" (K. Rahner); "a response to the prior love of God" (D. Steere); a way to know God "face-to-face" (G. Buttrick); and so forth.

Prayer can be silent and contemplative or vocal. It can be private or public. It can be ritualized or spontaneous. It can be in one's own tongue or by speaking "in tongues." It can also be in a tongue of ancient civilizations, such as Latin or Sanskrit. In brief, prayer is a uniquely human activity with significant religious content. Prayer assumes certain things about the God-human relationship. First, it assumes that there is in fact a god who is there to listen and possibly respond to our prayer. It could also assume that our prayerful activities may inspire through grace a favorable response – which is dangerously close to, but not equal to, magic. However, when prayer goes beyond basic communication on an I-Thou basis, to negotiations for favor, many people part ways at that point.

Meister Eckhart said: "When I pray for aught my prayer goes for naught; when I pray for naught I pray as I ought." His position was that prayer for anything other than worship of God alone is idolatry, a position which has been shared by many other theologians – just as it has almost universally been ignored by mobs who selfishly and shamelessly pray and chant for all sorts of favors. I nevertheless feel that when a mother purely prays for the health of her sick child she is praying for aught, and still praying as she ought.

Prayer is historically related to magical chants, whereby certain sounds hopefully elicit positive responses from the targeted deities. Today's world is not so simple, but this has not changed the direction of prayer, only its focus. Old styles of prayer persist in many religions. For example, Tibetan Buddhist prayer wheels, some of which are quite large, contain sacred texts which must be rotated in a clockwise direction to release the benevolent powers latent in the mantras therein. Rotation in a counterclockwise direction could release evil powers, so it has long been believed.

What is and what is not proper is always evolving within a culture. In today's culture we see the persistence of superstition and magic, as typified by the Harry Potter phenomenon. Still, there are voices that pop up every now and then to remind us to keep a healthy perspective. I am reminded of Jim Morrison's shouted warning against political prayer: "You cannot petition the lord with prayer."

Predestination

Predestination is an ancient and contemptible idea. Ethically, it must be rejected, even if we are in fact ultimately predestined. It has two forms: (1) that the future is determined by past decisions about our fates, and that all things are ultimately predetermined by God; or (2) that the future is mechanistically determined as if everything were billiard balls. Such a billiard ball universe would completely negate our free will and absolve us of all moral responsibility. Most profoundly, it would deny our participation in the essence of godly creativity.

Augustine is the West's premier predestination authority. He held that almighty God chooses some to be saved through his mysterious grace. Because all people are born with original sin, this strange preselection process was decreed to be just by Augustine. John Calvin and Martin Luther also held strong predestination beliefs. Calvin spoke of a "double predestination," so that Christ died only for the sins of those already predestined for salvation! Calvin's position was very strange, because it was the equivalent of fixing something that is not broken. Things got interesting when religionists tried to decide who was preselected for Heaven, and whose lot it was to sink to Hell anyway. Some groups held that signs revealed individual fortunes; but other groups held that our ultimate fates could never be deciphered, because the whole process is a mystery beyond man's consciousness.

As regards the second group, nothing more could be done than to try to live a holy life. The first group, in contrast, tended to extreme efforts to uncover who was to go where, engaging in such quaint activities as torturing alleged witches to rescue their souls. Some groups, such as the Jehovah's Witnesses, have also tried to count the population of the saved, citing the Book of *Revelation*, which indicates a total through time of only 144,000 who will be raptured. Why such a tiny sliver of the total population of the Earth, past, present and future? Is it because God's city is only so large and cannot be crowded? This number is a good population for a manageable Earth city, but why are we humans so eager to put limits on what God can do with Heaven?

Epistemologically, neither prayer nor predestination can fully be understood by humanity. Furthermore, there is a logical paradox to it all: If the journey is automatic anyway, why mess with the controls? If the journey is not automatic, just what are the controls? And who, or what, is at the controls? Prayer is indeed a valid and valuable way for us to attempt to directly communicate with a divinity beyond our logical understanding. We pray because we don't really have a two-way "telephone to God." What we do have instead is, so to speak, a telephone handset into which we talk through prayer. We don't know if our message is going through to the other side; and we don't really know what the response is or will be. It's a one-way conversation filled with hope. Except for the deluded who claim to speak with God, the best we can hope for is to talk to God. Prayer has never required a response from the divinity to justify the prayer itself. It is said that even though God knows all our thoughts and emotions, even without prayer, it still is good form

for us to adopt a prayerful relationship toward our god. Pure prayer falls into the "can't hurt you, and it might help you" category of religious activity. This is one reason why all religions engage in prayers of various forms. Additionally, prayer is often a social event, which contributes to the cohesiveness of the religious body.

There was a big debate within the Church during the Middle Ages over "salvation by faith" vs. "salvation by works." This was a key element in Luther's split from the established church. That debate has never been resolved, because we can give witness to our faith through pure works. However, salvation by works introduces a potentially dangerous element which is usually treated like a deadly virus: If saintly works alone are sufficient for everlasting life in Heaven, then it is not necessary to belong to any particular religion. The same virus could erupt with pure, holy faith alone in direct communication with God. Therefore, most religions fall back on the supplemental idea of enhanced salvation by correct religious practices. Correct practice keeps bodies in the pews, and cash in the collection plates.

Neither works, nor prayer, nor religious practices are relevant to the hereafter if we are purely predestined anyway, or if there is no god at all. But I doubt that pure predestination is our fate: God would become bored with a predestined population. Predestination would reduce us to the interest level of billiard balls. God wants to have playmates in the universe. Otherwise, it would be very lonely with only Himself to talk to. "Billiard balls" are there in the form of creation. It takes two players to create a game, using billiard balls as one optional medium.

Religion, UFOs, and Jesus

When the Europeans arrived in America during the 15th and 16th centuries the original Americans (the "Indians") they met hardly knew how to relate to them. The first English settlement at Roanoke Island in what is now North Carolina apparently met with disaster. We also do not know much about the Vikings who visited and tried to colonize the New World centuries before Columbus. We do know that some of these Viking settlers were initially well received by curious and hospitable tribes. Actually, it was European diseases, and milk given to the lactose-intolerant Indians, that alienated the locals.

For all practical purposes, to the Indians these very first Europeans arriving in relatively large ships were aliens from another world. The Indians made guesses from within their consciousness about the population and wealth behind these travelers. However, native American tribes were totally unable to conceptually grasp the European challenge to their way of life. Indians could not understand messianic religion with aggressive preachers and Manifest Destiny ideology; nor could they understand European concepts of law and property. In brief, even though these new arrivals from Europe were genetic humans too, they were the point of the spear representing an imperialistic culture lethal to Indian norms.

For thousands of years people everywhere have reported alien visitations from beyond Earth. Most recently, UFOs have assumed the status of icons of pop culture. Movies feature cute ETs. Television has *Alien Nation* visitors and other anthropomorphic guests from the void beyond. Boris Karloff's visitor from the past (*The Mummy*) is no longer as interesting as today's high-tech visitors from the future, even if that visitor might be darkness from our own future (as in *The Terminator*). Hollywood has often portrayed aliens as understandable in human terms. However, some alien creatures are demonized as evil (*Alien*), even though they may just be hungry and out for a good meal. Celluloid aliens seem to transform themselves into terms we can at least superficially understand (such as in *The Invasion of the Body Snatchers*).

Hollywood formulas are fairly predictable, but there are no such rules when it comes to real UFOs. We may even be co-inhabited by invisible aliens who may number in the billions right among us, living in another dimension, possibly not even knowing of our existence. One could even argue that microbes represent alien forces which are not even aware of us except as nutrient soups. Theologically, the first and the predicted second coming of Christ are akin to alien visitations. If Christ came from "out there" to live among the fallen flock, then his appearance was literally an "alien visitation." True, he assumed human characteristics, but that may be just like the Olympian gods who mingled with humans in human form, or like Krishna who appears as a beautiful young man.

Humans are simultaneously logical and illogical. Human logic is flawed, but only because these flaws help us avoid frustrating "possibility crunching" which in the here-and-now is not conducive to survival in a mercurial environment. We look at anything new, alien or otherwise, in terms which are extensions of our own previous experiences. This is what we must do when we are not using formal logic. Even our formal logic is restricted to human consciousness. At the end of every honest effort is logical absurdity.

After the aliens arrive we may think we no longer have inductive fantasies. It appears that we have a fresh set of facts from which we may fantasize. Induction "changes" to deduction in such a scenario. Since we trust our deductive powers more than our inductive powers, we rush to judgment, in part to ease anxieties about threats to our existence.

It is only when the new slowly evolves that we do not experience the shock of alienation from aliens. If aliens were to announce and describe themselves years in advance of their arrival, then our reception of the first visitors would probably proceed quite smoothly. Contrast such a prepared reception to what would likely happen if a giant saucer were to suddenly plop down in New York City's Central Park. [The space travelers wouldn't stay there for long, as they would soon be mugged; and their space ship would be ticketed and towed away for illegal parking.]

UFOs present a problem to human thought similar to the question of divine dimensions and intentions. Both phenomena are beyond human experience; and

we cannot see all the borders, many of which must forever remain beyond our powers of understanding. Therefore, we fill in the gaps with inductive and deductive conclusions, which may or may not accurately reflect reality. The problem remains of the omnipotent deceiver, both in the form of extremely powerful UFO civilizations, and in the divine power to deceive itself.

When is a Wrong Right?

It is too easy to dismiss popular religions as organized superstition. Even though they can accurately be described in these terms, religious phenomena are much more complex. Even though the computer life forms would architecturally be immune to any emotional yearnings underlying human religious impulses, the comphumans would not be immune to the simple need for a "ground" upon which to operate.

There must always be a background upon which the figures are projected. This gestalt works for religious impulses as well as it does for visual perception. The transcendent is the ultimate duality for our concrete existence, both human and comphuman. Religions are popular because they are structural-functional. They function to support structures, which in turn function to support their ideologies. Even when societies themselves metamorphose, the underlying current of conservative human psychology remains constant.

Since most religions are somewhat outside the political process, they can help bridge the gaps between old and new political orders. Individuals cling to organized religions, new and old, because life in the raw has more questions than answers. We all crave answers which supply road maps for our lives. Questions are like road intersections without markers. We are afraid of making the wrong turn and getting lost. We crave clearly marked road signs on the highway of life. Codified religions are all too happy to sell us whatever road signs we want to buy.

I know several people who stabilized their turbulent lives when they embraced religions that filled emotional gaps. Their religions provided rituals and dogma that helped soothe these people's inner demons. Most importantly, these religions got their adherents involved in active rituals where the believer achieves a sense of empowerment. No longer is cold fate dominant. Ritual can control, or at least influence, our feelings about the finger of fate. In embracing a new faith we break the chains of earlier fate.

It is easy to ridicule such fantasies, but it is not easy to dismiss them. The world is full of illusion; so why not have another type of illusion to compensate for all the other illusions? Since absolute clarity is never possible, we gravitate toward as many guide posts as possible. This quest leaves us with fewer perceived questions. With fewer questions in our minds at any moment we are more likely to come up with what we feel are satisfactory intermediate answers that "work" for our lives. This all adds up to a feeling of predictability, instead of a shaky feeling.

It could be said that organized superstition is soothing for the worried individual's psyche. That which is theologically not authentic can be psychologically authentic. Such operational "truths" apparently challenge philosophy, but only on an existential level. Ultimately, truth has its own domain, which is outside existential human fears. This domain is similar to Plato's ideals – always there, ready for us to access to the limit of our abilities. When we are ready to overthrow most of our superstitious fears, truth will be there for us to see. Maybe even God too.

Clouds and Belief

Clouds drift overhead as we hurry about below. We think we are very important, but mostly we are like the clouds. We exist today, not independently, but as part of our environment. Eventually we drift away, or simply disappear. This ethereal scenario seems cruel – but just as there is only so much room for clouds in the sky, there is only so much room in the earthly biosphere for people, all busy billions of whom consume and pollute in the here and now.

In another way, clouds are like people. We are mostly space, not matter. As energy collections with vast spaces between our atomic and subatomic particles, we are literally much more space than substance. But we function as an energy whole, and even appear in concert with other energy units sharing our consciousness as wholes.

Clouds appear "solid" when seen from a distance, even while we know they are wispy and ethereal. Humans are equally ethereal, the fact of which we know and fear deep in our hearts. This fear yields religious institutions to shield us from our impending mortality.

Why Life Needs Death

"Even death is not to be feared by one who has lived wisely." – Buddha

Denial of Death

Death gives meaning to the book of life. Death is the second bookend, birth being the first. Without death each day of our life would be an infinitesimal part of an infinity of longevity, rendering each day just a mathematically meaningless moment of an endless whole. All numbers are zero percent of an infinite whole. But death sharply limits our total number of days, which means each day we live is a finite percentage of a precious and finite whole. As we move toward the second bookend each day becomes a greater percentage of what is left.

We do not value mere existence. Humans value freedom and mobility in life. Rocks "exist" for millions, even billions, of years; but so what? We wouldn't trade places with any other living entity, even with a tree that could live 3,000 years. We humans are defined by our sensibilities, without which we are functionally dead, even though we may have a heartbeat. That is why society allows doctors to "pull the plug" from humans with flat brain waves.

The conventional face of death is represented by an old man such as the Grim Reaper. Still, there are places on this blue orb where two out of every five children die. For these tragic communities the face of death could just as well be that of a sick child. Modern Americans are very uncomfortable with the idea of juvenile death, or even with the idea of disfigurement and disability. We prefer to quietly institutionalize people who remind us of our own potential weakness.

Ideally, we want our own lives to ascend to a pleasant plateau, and then remain there for a long time until death appears without notice for a swift and painless end. In this dream scenario natural death appears as an accident. Those who remain continue with the dream by proclaiming an immediate heavenly existence for the departed.

From a systems theory perspective death is the ultimate entropic fate awaiting the individual's negentropic body system. Beyond the moment of death there is no reversal to youth for our earthly bodies, only decay. Accordingly, the individual does everything possible to survive and prosper, hoping to postpone that fate, or at least push it further away from consciousness. That is why we are especially uncomfortable when presented with a personal picture of death, such as that of a parent, child, or close friend. It is one thing to deal with death statistics. It is quite another to witness the personal face of death.

Entrepreneurial science is eager to cash in on such primal fears. Today we can have our heads cryonically frozen, and we can have our tissues frozen for future

cloning of our genetic body. It is suggested that within this 21st century our very personalities could be uploaded into futuristic computers, which can later be downloaded into our cloned genetic body. Despite all these amazing technologies, even when such reconstruction becomes possible, we still would not have restored the original person. A person is more than his or her body, or even a set of memories.

A person is a citizen of the world within a set of years, and that social world changes every day. Most weirdly, original memories of friends and relatives would not mesh with a whole new cast of friends and relatives. Religion's main selling point is life everlasting, either through our promised spiritual ascension to Heaven, or through a long chain of reincarnations until one's cycle within the painful chain of birth and death is broken. In the West the flip side of Heaven is also sold in a negative sense. We see the devil personified, and the flames of Hell are located in the volcanic bowels of the earth. Dream or fact, this well packaged approach-avoidance product is eagerly and blindly sought by swarms of fearful followers.

When an individual's death is understood as part of the cosmic order the entropic power of individual death is transcended within the embrace of that cosmic whole. However, elevating an individual's personality at death to union with the cosmos can also be the ultimate dehumanization of our unique personality, since our individual existence is thereby merged and submerged into the immense whole. That is precisely why schemes abound in religion to perpetuate "personality" through clearly defined and understandable spirit worlds that we inhabit after death.

Ancient societies were defined by mystical, magical rules. For example, Aryan Druid priests in pre-Christian Europe and in Asia consumed hallucinogenic *Amanita muscaria* (fly agaric) mushroom drinks, which helped them summon the spirit of their god Soma. The forces of Nature were hidden from everyday consciousness in ancient days, and so these occult forces were given recognizable divinity by priests and shamans. Shamanistic specialists put a human or animal face on occult forces, attributing the incomprehensible mystery to ancestor spirits and other demons that could be appeased through appropriate rituals. Even Neanderthal man has been shown to have buried his dead with flowers, food, hunting weapons, fire charcoal and other valued items.

More recently, Romans employed flaming torches to guide a departed soul to its eternal reward. The word, funeral, comes from the Latin, *funis*, which means torch. The tradition of wearing black to a funeral and during the period of mourning did not emerge from respect for the dead, but from fear of the dead. The idea was to cover a white person with black garments to confuse the deadly spirits. In Africa black people put white colors on their bodies to similarly confuse the spirits that could invade the bodies of the living. Many traditional people have both a real birth name and a public name. The real name is known only to a few, because evil spirits could come and call out that name, thereby stealing one's soul. Coffins were originally constructed out of fear of the dead, not respect. Burying people six feet under was good, but a wooden box made the stay more permanent. Hammering

many nails into the coffin lid helped defeat would-be escaping spirits. Early tombstones were placed horizontally on the soil above the coffin to help contain the mischievous spirits. Only in modern times has the tombstone emerged as just a respectful marker. Today's descendants freely and respectfully visit family graves, which is a far cry from the old tradition where relatives avoided graves out of fear of spiritual contamination.

With the advent of popular science there appear to be fewer practical questions regarding how the physical world works. To most modern people popular scientific predictions are much more valid than fuzzy metaphysical insight. Nevertheless, to many other people on this planet the reverse is true. It is not that one group is rational and the other irrational. In truth, there is no ultimate philosophical difference between the two approaches, since both involve induction from the "unknown known" to the "unknown unknowable." Whereas science has a better track record than mysticism for short-term, concrete predictions, both methodologies equally fail at totally explaining transcendent concerns.

The primary recruitment advantage codified religion has over rigorous science is that religion doesn't admit doubt. Revelation and doctrinal belief suffice as proof. Real science presupposes some education in the scientific method, whereas total illiterates are prime fodder for religious fanaticism. The insecure human psyche prefers blacks and whites, not shades of gray. Science, on the other hand, is defined at the core by systematic doubt. Humans in fear don't want doubt. They want clear certainty. That is why so many people are addicted to religion, and why so few really understand or respect genuine science, and how science properly coexists with religion. Denial of death itself is the first line of psychological defense. But is denial ultimately a Maginot Line?

Facing Death

What do rats, humans and God have in common? Unless you are really strange, don't try to duplicate the following experiment: Start with one ordinary rat. Insert said rat into a very large, open jar that is half-filled with water. Do not plan on ever rescuing the rat. The rat will display prodigious swimming endurance, always hoping to escape through the opening, since it does not know your nefarious intentions. However, once you put a lid on that vessel, so that the rat can see it has no escape hatch, it will quickly despair and drown.

In key ways humans relate to their god as if that god's promise of life everlasting were an open escape hatch. Life for humans is like treading water in the jar. Physical death is like drowning. Survival after death is like the spirit body (the "real self") escaping through the jar's opening, even while our physical shell drowns. It is easy to see with this parallel that many people need the feeling that their "real spirit self" at least will personally "get out of this world alive," even when they flippantly joke about their impending physical death.

Very young children are innocent of death, and it is not surprising that they also display little lust for religion's promises, except to the degree that they have internalized their parents' and society's fears. Young male adults usually feel "ten feet tall and bulletproof," so most are reluctant to independently commit to any religious discipline. On the other hand, women with children are closer to the drama of life. Their closeness partially explains why more women than males are active in many churches. One of the primary reasons most people do not seize the opportunity to refine their ethical lives before old age is because we humans are very present-tense oriented, and in denial about our physical futures. We focus on trivial daily details at the expense of the big picture. This seize-the-day attitude is an ancient survival script that can be traced back millions of years. To put it simply, any ancient animal that spent too much time thinking about the future would be at increased risk for losing its life prematurely.

Not only do we often wait until old age to seriously ponder our personal path after death, we also spend decades mindlessly abusing our bodies with cigarettes, alcohol, excess calories, and unnecessary stress. We defile our bodily temple as if our bodies really didn't matter, which is not too far from what many religions say. However, even if the spiritualist position were correct, degrading our physical potential through casual self abuse can also degrade our spiritual potential, if only because we may live fewer years through which to acquire enlightenment.

Procrastination over the ultimate questions can only continue for so long, unless one has mindlessly internalized a guaranteed-Heaven promise, which the vast majority of people conveniently have done. With the remaining minority there comes a time when one assesses what has been, and what could have been.

What event triggers such a fundamental shift in consciousness? In many cases it is a life crisis that leaves us at death's door, but without going through that door. It could be a critical sickness or injury, or the death of a family member, or possibly involvement in a war. The possibilities for direct encounter with our other self are many. We need only to be slapped hard in the face by it. But we also need to be brave enough to seize that opportunity to finally define our personal being, our unique fingerprint on the universe. In danger there is opportunity.

Pain and Pleasure

Self-definition is not simply an intellectual exercise. The emotional brain must also be engaged. The emotional brain has only a few categorical channels, one of which is pain. Pain is significant because it is strongly associated with both birth and death. Even though we prefer to define ourselves in positive terms, we are all occasionally forced to admit that pain is part of our being. Pain is just as essential as pleasure, possibly more so, since survival is primary, pleasure is secondary. If we don't survive, pleasure is academic.

All people approach pleasure and avoid expected pain. Still, pain is part of pleasure's equation, though not directly. Without a life frame which includes memory of pain, pleasure would have no meaning. If pleasure is not defined by a beginning and an ending, then even sublime pleasure self-extinguishes.

Another way of looking at this phenomenon is to imagine an endless supply of meals with nothing but our favorite food: What begins as a sensuous delight becomes monotonous torture. Bad things make good things good. By themselves, things merely exist. Goodness and badness are relative. And so it is with pleasure and pain. Pain justifies pleasure because pleasure is not endlessly continuous without any standard other than itself. Similarly, the bracketing effect of rainy days enhances sunny days; illness enhances a healthy recovery; darkness enhances daylight; and so forth. Fear of the pain of death is equally necessary for life to have value. I am not restricting this aspect of pain to nerve pain. It also includes spirit and existential pain brought about by our alienation from everything that we have become. Fear of an unpleasant afterlife, such as Purgatory or even Hell, is a minor fear compared with the primal fear of facing total annihilation.

Despite this fear, and to a surprising degree because of this fear, we humans are able to carve out our values and experience joy from the eternally emerging present. Pain could be seen as a dress rehearsal for death. Pain "dresses up" life by giving it sharper meaning in an otherwise meaningless universe. Pain is a siren warning of dangers that could overwhelm our homeostasis. Death is the pain beyond pain. When it comes, death is not a stranger. Indeed, some chronically ill people look forward to death as a release from their pain. The Buddhists speak of nirvana as breaking the painful cycle of birth and death. A dying person with cancer pain can relate to this. Pain is part of the necessary dualism that establishes our individual existence.

Eventually, after all of our pain is gone the self recedes into history, blending with all other things in the universe when the last living memory of the life we lived is lost. Scientists believe the Cro-Magnon cave painters felt a need to have something survive their bodily existence. Even the more ancient Neanderthals buried artifacts with their dead. The polytheistic Greeks believed that social immortality could be established by great works which were subsequently honored by statues and other monuments. In the end there always comes a time when even marble statues crumble and cave paintings fade away. Dust covers and conquers all memories. Even our most Herculean efforts at self-perpetuation yield to the "from dust to dust" imperative.

Facing physical death must essentially be an emotional process, not an intellectual exercise, for this encounter with our finitude to reach our consciousness. If death's face is merely statistical it "does not compute" within our emotional minds. This perverse truth was known to Joseph Stalin who enjoyed remarking how a single death is a tragedy, but a million deaths is a statistic.

Similarly, we humans relate to self-inflicted dangers in our daily lives in a childlike fashion. Even though cigarette-related deaths involve far more people than all Americans who have ever died in war, smokers still like to think of cigarette deaths as individual and somehow natural, since we light our own suicide sticks. It would help to portray those self-inflicted, "individual" death statistics in terms accessible to our media-conscious minds.

The number of Americans who commit delayed suicide due to smoking related illnesses is nearly equivalent to three jumbo jets packed with people crashing every day. And how many more jumbo jets would we need daily to accommodate the legions of American fools who perish from alcohol abuse, crack cocaine addiction, fatty diets, distracted driving, unsafe sex, murder, and a long list of other doorways to early doom?

If armed terrorists ever shoot down just one packed American jumbo jet with a shoulder launched missile there will be a wave of terror and anger sweeping across America. The nation would respond like a swarm of disturbed killer bees. Billions would be spent to try to stop the next such missile. But one jumbo jet shot down in flames by a terrorist missile holds roughly the same number of people murdered by the legal cigarette industry from supper until breakfast every day. Maybe so few of us cry out in rage and shame, because so many of us are making money off the "not me" cigarette victims – from the moment they take their first smoke-filled breath as teens, to the moment they gasp for their last assisted breath. More people are living off lung cancer and terminal emphysema than dying from such diseases of choice.

Birth and Death

Just as death is one of the book ends of life, birth is the other book end. Popular thought has it that birth is an absolute good, and death is an absolute bad. In a narrow sense this is true. But birth and death are properly seen as just the alpha and omega points of one continuum, which is neither good nor bad. That continuum is our personal life, and we decide whether or not our life will be good or bad. The essence of our personal existence is choice, not time alone.

Death can also be seen as necessary to justify the "goodness" of each new birth. The Earth's surface has only so much carrying capacity. Without death opening up new living space, at a certain point each good birth would have a net bad effect on our planet. (This statement is already true within local ecosystems.) Malthusian forces work so that human population tends to increase geometrically, while resources can only tend to increase arithmetically in the long run. If we ultimately are to avoid "positive checks," such as pandemics and a global nuclear holocaust, then we need to balance out the ratio of births and deaths.

In a land where there is no death from age there would ultimately need to be no additional births, except as replacement for those who died by genetic defects,

accidents, or illness. Our gene pool values variety. It is only by mixing genetic data through different sexual combinations that new generations can adapt to new environments, and survive the background radiation. Natural selection insures that continuity within the species offsets random mutations. Life on earth demands individual death to support a robust gene pool.

Knowing exactly when life begins and ends would simplify our value choices, if life were an either/or phenomenon. Unfortunately, science and religion have muddled the timing. I am not talking about obvious life and death, but rather about the indeterminate borders of becoming, being, and non-being.

Because the appearance of human life is as much social as it is biological, we are able to ask when life should begin. The same applies to biological death, a phenomenon which is complicated by modern medicine's ability to revive some clinically dead people. The debate over the biological and spiritual beginning of life has been hot and caustic. The Roman Catholic Church, for one, says human life begins at conception. The Supreme Court in *Roe v. Wade* implied that life begins when the fetus would be viable outside the mother's womb. Others have assumed that life begins at birth. It is interesting to note that the Shinto Japanese start counting human age at conception, nine months before birth, which would seem to agree with Catholic doctrine. Western culture starts counting our age at the moment of birth, which apparently contradicts Catholic doctrine. The moment-of-personhood question is one of those tormenting questions for which the final vital data will never be available, except in the minds of those who follow codified religions. Within modern American society this critical question has become a political football between "women's libbers" and "pro-lifers." In fact, the core question of personhood has nothing to do with parental lifestyle choices and such red herrings as the "right of a woman to control her body."

If a divine "soul" is fully implanted at conception, then two spiritually complete individuals with absolute rights temporarily inhabit one skin: one as biological host, and the other as biological parasite. If, on the other hand, the soul is an emerging expression of development, similar to the emergence of intelligence, then it would be hard to draw a sharp line between the "it" stage and the emerged "human" stage.

How would we know that a soul had sufficiently emerged to qualify for membership in our community? How, indeed, do we objectively and neutrally define "qualify as human"? Is biological viability a sufficient measure for spiritual viability? Do individual souls fully emerge at different times and in different stages, even after birth? Knowing how we humans like tidy answers, not unsolvable, fuzzy questions, is it any wonder that simple codified religious answers for this dilemma are so seductive?

In contrast, what should we make today of the archaic Scandinavian tradition of literally "raising" a child? A rural Swedish father, even as late as the 17th century, would literally and legally raise a toddler to his feet in a ceremony of

acceptance into the family. Otherwise, the infant would be tossed outside to die in the frozen wilderness. Was that cultural tradition totally indefensible, partially indefensible, or somehow economically justifiable within the context of the times?

I suggest that before we moderns rush to harsh judgment we consider the plight of millions of babies in the Third World who die each year from disease, diarrhea, and malnutrition. Was the isolated Swedish father evil because he directly condemned his surplus or defective child to save the rest of his family from starvation? And are we well-fed people morally clean when we don't directly confront today's starvation and deprivation elsewhere on this planet?

We must conclude that the "pro-choice" argument of protecting the adult woman's free body is actually a political argument, categorically different from addressing the primal problem of the threshold of life and the right of any living human to get a start on life. What this also means is that the "pro-life" argument for the moment of conception being the moment of personhood is not clear, either by fact or by logic, since other conclusions are equally valid. In sum, the balance among all arguments means that *Roe v. Wade* was an accidentally wise compromise solution crafted for a theological problem that can never be solved by reason and judicial science.

An exquisite irony presents itself to us moderns: If we help feed all those economically and ecologically marginal Third World children, and then a generation later those same children breed three or four times as many more marginal children – does today's humanitarian feeding action justify the creation of intensified misery and death a generation later? What if today's humanitarian compassion yields tomorrow's "compassion fatigue"? If so, then who will be responsible for millions of future infant mortalities – those who are overwhelmed in the future, or those of this time who set up the problem with acts of compassion?

Perhaps the best solution both in the Third World and in our modern society is to stop the problem's growth before it becomes a greater problem by using effective birth control. Birth control is far more cost effective, and theologically more palatable, than abortion at any point in a pregnancy. The old cliché, "an ounce of prevention is worth a pound of cure," really applies here. Alas, the ancient Pope has just spoken out again in 2005 against condoms, even for AIDS prevention. Once again, harvesting the maximum number of souls for God trumps all else.

Death's Antechamber

Let us turn now to the drama of euthanasia for the terminally ill. Society has been debating when to "pull the plug," and it appears that "moral guidance" has been given to us by financial expediency. Yes, this is a practical solution, but not a solution in the pure sense. It is just another version of the "out of sight, out of mind" phenomenon; only here the patient cooperates by dying sooner rather than later. It has been effectively argued that since God did not provide the "plug," we

humans have the moral right to pull our plugs. This argument is another way of saying that such sick people would have died sooner anyway in years past. But isn't this another form of "playing God"? It could be equally argued that we are now morally compelled by our new science and technology to care for people even longer than before.

Another argument for "pulling the plug" refers to the disproportionately large amount of medical resources spent on a few critically ill people, in contrast to the small amount spent on prevention and other highly cost effective community medicines. Waste spawns a strong triage argument, since we humans have not yet found a way to fairly fund unlimited medical bills for all people everywhere. My mother's last month in the hospital with pneumonia cost at least \$60,000. All that care may have extended her life by a week or so. Her case is not exceptional; and we wonder why the cost of private and government health insurance is so high.

Back in Stone Age times such arguments about the end of life would have been absurd. Either the body succumbed to childhood illnesses, died in battle, perished in famine; or one luckily lived to a moderately full life span of thirty or forty years. Because so few lived beyond fifty, and most didn't make it even past their twenties, the concept of nursing homes would have been absurd. (The *Bible* cites many ancient patriarchs who lived to incredible age. The Bible also implies that the Earth is about 6,000 years old. Somebody's calculator ran out of batteries.) In the good old prehistoric days a dead person usually had a rock-smashed skull, or was stone-cold following terminal disease. Critical time sequences were not a concern then, but they are in today's operating room.

We live in an age of wrist watches that keep time in hundredths of seconds. By slicing our experience of time ever thinner, we are slowing down existential time. That makes it all the harder to delineate when a person is really dead, rather than almost dead. Even after a person is pronounced dead by medical priests, we still haven't resolved all the emerging questions posed by cryonic regeneration and gene banks.

Is Life Merely Biological?

In the final analysis, is a human life just an existential biological system, or is it a mysterious essential phenomenon? If life is biological, then we still face many basic questions. If it is also an essence expressed through an existence, a whole new can of worms is opened. And you know what they say about an opened can of worms: The only way to put them back is to get a larger can. The largest questions need the largest "can," which is absolute understanding. Only God could have a "can" sufficiently large to hold the answers to all these questions.

Any god less than the one absolute God – even if that god were "our god" – would be partially operating in the darkness of unknown possibilities. If life is really a phenomenon of consciousness, then the biological questions are all superseded by

the willful choices of the living. That opens up a new can of worms regarding suicide, which Albert Camus said is the only real question for existential philosophy. On the other hand, no life is lived in isolation, so the consciousness of all others touched by a suicide must also be weighed. This leads us back to the web of life, which could also include our I-Thou relationship with the absolute holy which we call God.

If all of the above is mind-boggling in its implications, remember that the full glory of life can never be crammed into the small can of our parochial thoughts. To reduce life and its painter's palette of moral equations down to neat slogans is to slander all, including our very life essence. If physical life is a journey from birth to death, then our intellectual life must ideally follow a parallel journey of unfolding discovery. We owe ourselves, our highest selves, nothing less.

Philosophers and Death

It has been said in various ways that the only justification for philosophy is death. The philosopher's final job is to prepare man for his best death. The theologian is supposed to further prepare man for the afterlife following death. But what if there were no death at all? If there were no death the theologian would be almost out of business. Not having to worry about Hell, selfish people would be free to follow their lower chakras, except for legal sanctions. Not having dreams of Heaven, people would be free to create their own heavens or hells on earth. Only philosophers would still be in business if there were no death, since philosophy is just as concerned with the here-and-now as it is with the hereafter. These two dimensions are linked within theology, but they are not by necessity linked within philosophy.

Morality as a word comes from the Latin, *mores*, which means the "habits of the people." Morality could be theological, but it is not by necessity theological. Since much of philosophy deals with morality, people should not lose interest in philosophy, even if death were denied.

The brutal truth is that physical death has not been overcome, nor is it expected to completely disappear among humans. At the very least there will always be accidents where even an individual's DNA does not survive, if samples have not already been saved. The question of life after life is always an open, puzzling problem. Nature abhors a vacuum, so there will always be theological options for people to consider, and religions for people to embrace for comfort. In the real world death is necessary for life's full development, if we seek all the sources of life's meaning. Morality obviously is not everything there could be said about the meaning of life. In the final analysis philosophy often focuses on death because it is the massive reality each of us faces. But death is not the exclusive concern of philosophers, nor is preparation for a "good death" the sole purpose of philosophy.

If death is the final book end, there must be a "book" for the book ends to bracket. Thus, helping people write their own personal book of life is the ultimate service of philosophy. Whether or not there will be for us an afterlife, it can clearly be said that a noble and examined life is preferable to an unexamined life.

Understanding the Indian Ocean Tsunami

On the day after Christmas 2004 a massive ocean floor earthquake near Java in Indonesia displaced some 135 cubic miles of salt water. The disturbed ocean water sloshed around the Indian Ocean, reaching land as a series of tidal waves, and snuffing out approximately a quarter million lives. Additionally, the daily lives of possibly two million more people were devastated.

This catastrophic disaster presented a direct challenge to religions that preach the idea of a loving god. If God is loving, why did God kill off so many innocent children and other good people?

I was not surprised by how rapidly local religionist leaders moved to take advantage of this misery to reinforce religious discipline. Because Java is primarily Muslim, the local imams were quick to suggest that Allah was punishing people for straying from their faith. Their theocratic prescription was more time praying in the mosque, not additional questions about the nature of divine grace.

Apologists from several religions commented how God in the *Bible* wiped out civilizations to get at the wicked, and this entailed the death of innocents. None of these apologists suggested that God could have used a sharper knife to cut away the evil. Instead, that old shameless argument about original sin was brought back to justify the death of babies. That's it: BLAME THE VICTIMS. As a final argument against which there can be no logical refutation, it was said that God's reasons are beyond us, so we have no right to question God's motives. Do we?

A less superstitious analysis should include an understanding of the Earth's moving crusts, and how geological time and human time can intersect violently. Murphy's Law can be invoked. We could also talk about how and why the Earth is increasingly overpopulated, with so many people needing to crowd the shores. We could talk about why entire populations at risk were not properly warned. We could mention how "dumb" creatures fled to the hills before the waves hit, while people were standing on the shore amazed by the briefly receding tide.

It is OK to ask questions of God following this type of disaster. It is also OK to question God regarding any disaster, even the untimely death of one person. We shouldn't expect any answers back from God; but we can answer for ourselves with a new perspective on the preciousness of the mortal life we do have. If we are questioning God as thinking creatures "in the image of God," then we can stitch together meaning from any absurdity. It will be our own real meaning – not some self-serving theological gobbledygook passed off as divine truth.

The Clone Challenge

Dilbert: "The technology to clone you exists, but it's illegal to clone humans.'

Pointy-haired boss: 'If the cops find out, we can frame my clone for the crime.'

Dilbert: 'That is so wrong.'

Boss: 'Why? He'd do the same thing to me."

Carbon Clones

We humans are on the verge of creating another new form of highly evolved life: human clones. Already animals have been cloned with mixed results. The real issue is not what is going on in 2006, but what may be going on decades in the future when today's deficient cloning technology is radically improved. Human clone infants decades hence will grow into clone adults, and it is from this perspective that we begin our ethical quest.

Perhaps in the future cloning will be 100% efficient, with each attempt yielding a perfect clone at least as healthy as its genetic "parent." Today's science is far from that ideal. It took years of trying before Dolly the sheep was successfully brought into this world, but then she was euthanized after six years for disease associated with premature aging. We are only beginning to catch up with primitive, single-celled creatures, such as amoebae, that have reproduced by simple division for millions of generations. Amoeba asexual reproduction is perfect, but our efforts using complex mammalian cells now yield defective offspring.

The human problem may partially lie in the simple fact that cloned cells are from complex donors who are already many years old. A possible solution would be to build up a cryogenic library of cells harvested shortly after birth. Years later those new/old (old/new?) cells could be cloned more successfully. This is a plausible scientific model, but it would take many years to verify, due to latency patterns for certain diseases, and possibly due to the need for a statistically significant clone population.

Even though the science of cloning advanced carbon based life forms is now in its earliest stages, this alone does not stop us from philosophizing about the phenomenon, and implications, of cloning. It is the fact of cloning itself, not the degree of perfection of our current technology, that presents the ethical challenges to established thought and values. Imperfect cloning at the beginning of the 21st century may yield to perfect cloning toward the middle or end of this century; so it does us well to be clear minded as we proceed into this mine field of our own making.

It is important to distinguish between imperfect carbon clones and perfect silicon clones. Androids may look and act like human clones, but they are fundamentally different. They are "mecha," and we are "orga." Clones are 100% from their parent species; androids are silicon-based machines which interface with humans. Later models of comphumans will appear as androids, after we/they solve the very complex problems of locomotion and human cultural expression.

In contrast, long standing logical and theological problems are less complex, since the limits of pure knowledge are so restrictive. It goes without saying that androids, once perfected, can also be perfectly cloned, but not existentially cloned. The difference between a mere machine and a self-conscious life form is in the "life" that the life form lives. It has a "personal" social existence apart from its creator. It moves from being a pure "it" to being both subject and object, which is exactly the life pattern of humans. Just as even a perfect human clone would have a completely different existential life in a different social environment from its genetic "parent," a silicon based clone would also have a learned environment different and separate from its mechanically identical "parent."

Humans begin as genetic zygotes, single fertilized cells. Strict purists say that the spark of spiritual life enters zygotes from God, and each zygote is thus a full human. If so, then why does God destroy so many zygotes and embryos with natural miscarriages? (Maybe it's the tsunami in miniature.) Does God love a miscarriage as much as a full adult? If so, why does God punish absolutely innocent embryos? We cannot dodge these questions with murky "mystery" clichés. Nor can we honestly resort to that theological scourge, the concept of "original sin." If God has a moral relationship with humans, why doesn't it also extend to humans in single-cell form? If zygotes are exempt, then where do we draw the line between "it-hood" and full "human-hood."

One logically consistent "solution" to the above would be the concept of emergence. A genetic human emerges from a potential to an actual human being. The zygote, and even early embryos, are mostly pre-emergent potential. The fetus begins the learning process within its mother's womb, and at some point unknowable to science that fetus becomes a spiritual human being. The Supreme Court has struggled with this dilemma, suggesting that the third trimester is a zone where "life" begins, if only because it is in the third trimester that a fetus can live as an infant outside its mother's body.

It is easy to take an extremist position on the question of life's origins. The potential penalty for being wrong is immense, but is it? If we make our best guess, and then defend it consistently, are we not being as right as flawed beings can be? Where we err is when we take one position by religion, and take a looser position by convenience. We also err when we demand that others think as we do, when neither of us can absolutely defend our positions. Truly, the whole issue of abortion is a mess without a neat answer. I think the best answer is prevention, and love for all others. We must love representatives of our species from womb to tomb as much as we love genetic humans from conception to birth.

Does this mean we should give genetic human clones the same love that we give normally created humans? My answer is yes. By all accounts a clone is 100% human, and all human clones will have internal lives exactly as normally created humans do. Clones are also eligible for divine consideration, which means they can experience not only their own private heavens and hells, but also are eligible for Heaven and Hell. It is theologically possible because of individual free will for either the "parent" or the clone to go to Heaven, and the other to Hell.

Silicon Clones

What then about silicon clones of androids? As long as those androids are true comphumans with an internal life and an ethical flame, those too should be eligible for divine consideration. Why not? Is Heaven too small to house the souls of comphumans too? Is God so petty that he would not welcome a newly evolved ethical creature also in his image, especially when there is a direct creative link between that new creature and the original human conceived in God's image? Would not a new ethical life form essentially validate the original production of a creature which could transcend being created, and thereby become a partner in the cosmic drama of creation? Would not more ethical life populating Heaven amplify the glory of God?

Some would argue that only God confers a soul onto anybody or anything. This may be so, and it is not logically inconsistent with the concept of humans creating comphumans in the first place. Just as humans emerge from potential to actual, comphumans emerge from the potential shown by today's computers, into the actual experience of an internal life which will appear within a few decades.

The 20th century was fundamentally different from the 19th century, and the 21st century will eventually be fundamentally different from the 20th century. Just because the calendar says we are inside the 21st century, it does not mean we are truly there. The 20th century really didn't express its form until the First World War. Hopefully, this 21st century will avoid nuclear war, and blossom with the first comphumans. Ironically, the war in Iraq pits 21st culture against ideas formed in the 8th century. I hope the war in Iraq is not the door to a dark 21st century.

My paternal grandfather was a near genius, averaging A+ on all his courses at Cornell University, long before pathetic grade deflation, when an "A" actually meant something. He was killed by an industrial explosion one year before I was born. All I have known him by are photos and family stories. My father repeatedly lamented how when he died all that he knew died with him. Even if my grandfather had been perfectly cloned genetically, the clone would not have been my grandfather's equal, because they would have lived separate lives and accumulated separate life experiences.

On the other hand, if my grandfather had been able to cybernetically upload his thoughts and wisdom for others to download at any future time, this would have been a very welcome form of "mental cloning." That's a major reason why people write books and blogs; but my grandfather did not. The 21st century will see this sort of mental data storage as soon as we figure out the mind-machine interface. I can't put a date on this advance – only warn that mental cloning will be like fire, having the power for great good or great evil. Mental cloning preserves both wisdom and folly.

Although the concept of mental permanence is alien, maybe it is not. After all, every time we digitally duplicate a computer file we are cloning that file, and most files are records of human entries. Digital duplication is exact, unlike analog duplication, which is not. Light waves are both analog and digital. The eye's optic nerve directly communicates with the brain digitally, as do other nerves, modulating analog inputs into digital data. Thus, the machine/man interface question is how it can be enhanced, not if it can be done.

At the same time, mere duplication of a set of data is meaningless without a meaningful context. An original set of data has to come from somewhere. When it is moved elsewhere it tends to lose its context. For pure data this is irrelevant, because the new viewers of the data will incorporate this newly acquired information into their own existential universe. Therefore, even though a set of data is clonable, this is not the same concept as cloning a human being, or even cloning a comphuman in this world.

The difference is that comphumans can digitally clone their data very easily, since they start out as digital computers. They can network and interface with the same or similar data. They can be autonomous, or they can relate to us as needed. Again, this is not at all alien to our current practice, because this activity precisely describes the Internet. In dialectics, a change in quantity yields a change in quality. What we are talking about is a quantitative change that will yield a qualitative change in higher cultures. Humans and comphumans will all share data across time and space. If I were a god looking down at my original carbon-based creation I would be quite impressed at the flowering of what I had started.

Here's an interesting thought: *What if God were the sum of all creative powers in the universe, rather than a separate individual entity? In other words, what if all that we humans did creatively, along with our intelligent offspring, enabled us to claim a tiny portion of universal divinity itself? This would not make us a god, and certainly not the one god, just part of the god essence. We would clearly be in the image of God, but on a smaller level. We would be like cells within a larger thought entity, complete unto our selves, but still not independent of our greater whole. I don't hold this model to be either true or false; but it is interesting, and logically coherent.*

The Comphuman Challenge

"Don't anthropomorphize computers. They hate it."
– Ann Onymous

What M.I.T. is Up To

On November 7, 2000, *The New York Times* ran a futuristic interview with Doctor Anne Foerst, a Lutheran theologian who directs M.I.T.'s God and Computers project. Here is part of that interview:

"Q. What exactly do people do here at this laboratory?"

A. We are trying to build robots that are social and embodied. We have four projects. I am the theological adviser for two of them: the building of the humanoid machines, Cog and Kismet. Cog is a robot built in analogy to a human infant. He has a torso, two arms, a head, ears and eyes. He, it, learns to coordinate those limbs to explore its environment, just as newborn babies do. Kismet is a robot who interacts with humans through her body posture and facial expressions. The aim of this project is to explore social interactions between humans and robots and also between the humans themselves.

Q. Why a theologian here in this particular laboratory?"

A. Two reasons. The first is when you build machines in analogy to humans, you make assumptions about humans. Theologians explore the cultural and spiritual dimensions of that very question, What does it mean to be human? The idea is that as these robots are built, we can use the wisdom of religious studies to enlarge our understanding of humans, and thus what you build into the humanoid machines. The other reason is that when we build social interactive robots that force people to treat them as if they were persons, tricky moral questions come up. For instance, Who are we, really? Are all our reactions actually developed in a very mechanistic, functionalist way? Or is there a dimension to social interaction that goes beyond that? What are ethics here? Why should I treat someone else like a human, with dignity, when it is just a mechanistic thing? For instance, one question we discuss quite frequently is, What would be the threshold when the robots are developed to a certain point that you couldn't switch them off anymore? The question really is, When does a creature deserve to be treated as intrinsically valuable?

Q. When do you think a robot should be treated as intrinsically valuable?"

A. Well, that moment is 50 years down the road. At least. But it's pretty clear that when it comes, those who built the robot will have to make that decision because they won't be blinded by their fears of the seemingly human qualities of the machines. They'll know what's inside. And if it ever got to the point where the builders felt, Oops, now that has become something, the builders could become the creature's strongest advocates."

What Austin, TX is Up To

While the good folks in Massachusetts are busy working on self-educating robots that will discover the world for themselves, there is an ambitious project in Texas involving human input on a massive scale. It is expected that a "take-off point" will be reached where computers will program themselves in humanlike terms, based on the type of information humans have given them. The end goal is to translate the computer's inner life into a way of relating to the outside world, just as individual humans do. Inside a nondescript brick building in Austin, teams of programmers (known as ontological engineers) working for Cycorp are busily teaching computers common sense concepts and assertions. Michael Hiltzik, writing in *Technology Review* (March 2002), talks about Douglas B. Lenat's approach to machine knowledge:

"Absolutely none of my work is based on a desire to understand how human cognition works," says Lenat. "I don't understand, and I don't care to understand. It doesn't matter to me how people think; the important thing is what we know, not how do we know it."

This output-oriented approach to machine intelligence feels alienating. We want machines to think like we think, in order to morally be like we are. However, it is not necessary for newly fabricated, ethical silicon machinery to ape millions of years of hominid evolution. Hiltzik explains: The reason a trained geologist is easier for a computer system to replicate than a six-year-old child is not a secret: it's because the computer lacks the child's common sense – that collection of intuitive facts about the world that are hard to reduce to logical principles. In other words, it was one thing to infuse a computer with data about global oil production or meningitis, but quite another to teach it all the millions of concepts that humans absorb through daily life – for example, that red is not pink or that rain will moisten a person's skin but not his heart.

The goal of the ontological engineers, assisted now by even greater input from outside the company, is not just to fill their Cyc database with facts, but to generalize about the world too. The computer program is also trained to ask questions to actively learn about the world. It is only a short step from asking data questions to searching for and identifying patterns, which answers a major criticism of Lenat's project.

When will something significant emerge? Lenat sees his "memome" project achieving knowledge of 100 million worldly things in about five years. That's how much a typical person knows. What follows thereafter should be quite interesting. But let's not hold our breath, because 2006 is already here, and Lenat's memomes have been publicly very quiet. Eventually, however, the concept will bear some fruit, if only by brute force knowledge. The key is proper interconnectedness both in logical and "pre-logical" ways, and then speed of integration for real time output.

Are We Blind to the Future?

We humans have had it almost too easy atop the heap of consciousness. Despite other creatures, such as dolphins, having large brains, we have enjoyed an evolutionary edge over all terrestrial competition because we have had complex land-based societies to augment those brains. Ants, termites, and bees also have complex societies; but those creatures don't have the individual brain power to go beyond instinct into poetry. What ants and the other social insects have that individualistic insects don't have is intricate cooperation. An ant nest is really the living ant body more than individual ants. Without its society an individual ant could not long survive. Humans too share this social species quality. Without at least one other of our kind to raise us, we humans could not progress from infancy to adulthood. Likewise, without the support of one's clan it would be hard for a mother in isolation to raise her infant to maturity.

The present is very dependent on layered and interdependent social institutions developed in the past and sustained in the present. Only an omnipotent god could create something from "nothing." I don't see how such would be absolutely possible, but at least it is possible in the realm of imagination. Even our universe's Big Bang had a universe before this one which crunched into the point of singularity that yielded our community of 200 billion galaxies. All other creation that we know emerged from some older existence. Even the heavy elements in our bodies were created within ancient supernova explosions. Humans share in the power to create something new with sheer mind power shaping found elements. This does not make us gods, because only an absolute god could create the first substance.

Nevertheless, our creative powers "in the image of God" are substantial, yet still barely developed. Regrettably, we have wasted much of our most acute creative powers developing evil engines of self-destruction, such as nuclear weapons. Destruction in wars is evil; but destruction in the service of construction is proper. Shiva destroys; Krishna creates. Creative destruction breaks down compounds into elements for subsequent recombination into new and hopefully better compounds. This applies both to physical and mental elements. It is said that the dead hand from the past persists until all those alive today who relate to that past are themselves dead. This is why it is so hard for wonderful new ideas to establish themselves. Progressive logic is often poisoned by past prejudice. Still, the

truth erupts like a pimple on the face of an adolescent. How we deal with new truths says more about us than it says about the truths themselves. Many years ago I ruefully realized that the power of institutionalized prejudice is so massive that even the eloquence of a Nobel laureate could not overthrow it.

This is why I waited decades to write what I knew long ago. I was waiting for a cultural sea change, which has begun. Americans and Europeans live in modern affluence, where every rote learner thinks he is educated, and every mother's child is a genius. Most of us mistake academic degrees for wisdom. It is true that some of the most foolish people have Ph.D. after their names; and some of the wisest people haven't finished grade school. Also, the mass media still imply that all beautiful people and tall people are more intelligent than ordinary people; that white people are more intellectual than blacks; that men are more capable than women; that the young can learn, and the old can't be taught new tricks. Say these lies unchallenged often enough, and distorted perception tends to become reality.

What would it take for cultural change to become a change in quality, not just a change in quantity? It will take more than everybody owning a DVD, a visual cell phone, an SUV, and all the other smart nothings we too easily imagine we can't live without. What it will take is a different core relationship with our prized technological creations. In other words, it will take smart technology that interacts with us as intellectual equals, not merely responds as intelligent robots. It will take philosophically conscious, and self-conscious, comphumans to "sit down" with us, and help us balance out our wildly conflicting poles of reason and prejudice.

Crossing the Line

In the 1952 presidential election the CBS television network enlisted for the first time a computer, the newly invented Univac computer, to analyze and predict the vote. What began as a publicity stunt became an embarrassment. When the printout appeared, CBS reported that the machine could not make up its mind. It was only after midnight that CBS confessed that the real problem was not with the computer, but with the humans who were reluctant to believe what the computer revealed: that Eisenhower would surpass Stevenson in a landslide. A few decades after the beginning of our new 21st century a computer will move across the line to where people will be forced to seriously question whether or not computers have become at their very best a new type of self-reflexive form of philosophical life that we have helped to create.

We have come a long way from the 1950s when we laughed at Robbie the Robot in *The Forbidden Planet*. We have been exposed to scheming computers ("HAL," in *2001* and *2010*); to androids ("Data," in *Star Trek: The Next Generation*); to cute, mobile robots ("R2D2," in *Star Wars*); to supercrunchers that can "get it" (*War Games*); and, in real life, to computerized "smart" weaponry in the Gulf Wars and in Afghanistan.

Already under advanced development is the next level of military weapons. So-called "brilliant" weapons are able to search over a hot battlefield looking for specific shapes that match desired targets. They also partner with human controllers via video and satellite connections. The Predator unmanned planes have found their way onto the 21st century battlefield, and already have made successful kills. This is the American military reduced to a sanitary video game. Problem is, our lower-tech opponents know all this, and they choose to engage us in WWII-style urban conflicts, neutralizing much of our technological edge.

Many Americans now believe in the potential for self-actualized thinking machines, but don't really comprehend what all that new technology will qualitatively mean for our culture. Most of us imagine such technology as more of the same, only faster. Progress is easily imagined in linear terms, not dialectical dimensions. We think of these machines as better tools and toys; not realizing that tools and toys also describe the human body in physical terms. We see the quantity, and overlook the quality of change.

Tomorrow's self-actualized machines descend from what was begun in the 18th century with the early Industrial Revolution. Similarly, the development of human self-actualization also began on a more humble level. The difference is that human genetic evolution has been very slow over millions of years, following the conservative mandates of our DNA. Thinking machines and the software programs that inhabit them have no conservative DNA, so their evolution has no automatic brakes.

Once the threshold of self-consciousness has been achieved, machine intelligence will become hyper-evolutionary relative to our own. That revolutionary evolutionary threshold is very near. Not everybody will be comfortable with this rapid emergence of a "competitive" consciousness. Some say humans alone will have created these thinking machines, so we can always "pull the plug" any time we wish. Such an attitude is sophomoric. People also create each other, so that killing another person who displeases us is morally equivalent to "pulling the plug" on a conscious comphuman.

I find it odd that a person who freely accepts the existence of a higher power, which he calls God – cannot also accept a much less powerful, but still superior, intelligence which is also our own creation, but still part of Creation. We might as well exterminate our genius children. Come to think of it, that's exactly what totalitarians have done. Stalin killed off most of the intelligentsia. The Khmer Rouge killed off nearly everybody in Cambodia with an education.

Today's calculating computers are either slaves or tyrants. Though we are frustrated when tyrannical programming problems arise, we are also comforted by the thought that we ourselves are the programmers ultimately in charge. Today's best thinking machines are computational giants, but judgmental idiots. There is no poetry in number crunching machinery. Whatever poetry emerges is inspired by human programming, and by humans operating this machinery. This will change.

As computer software becomes more powerful and user friendly, human/computer interactions become less obvious. Computers are becoming more integrated into our everyday world, and thereby experientially more transparent. The "invisible computer" is typified by the way intelligent systems have been integrated into advanced automobiles. We now have computers inside nearly all of our sophisticated household helpers. Computers in our service display various characteristics of "fuzzy logic" and other so-called artificial intelligence capabilities. We smoothly interface with them on such mundane things as washing the clothes or making a cell phone call. Out of sight, out of mind.

Well into the 21st century some computers won't even need humans in the loop. Humans provide feedback and guidance today. However, there is nothing stopping computers from talking just to themselves in an internal dialogue; and talking with other computers within a network of their own.

It is only a matter of time before such computer networks will on their own tackle some very interesting philosophical problems that we could have resolved centuries ago, but were afraid to.

Because tomorrow's computers will have forced us with their brilliant utility to respect them, their authoritative conclusions will not be easily ignored. Contrast this scenario with the situation today, as most people ignore any other person, even a Nobel laureate, who is not in step with popular consciousness, right or wrong. Future comphumans will help re-form popular consciousness, thanks to their colossal cognitive authority. Tomorrow's computers will be able to address key questions free from the hormonal waves that accompany human argument. Such computer philosophers will be able to do what trained humans are supposed to do best – coolly evaluate all the facts at hand, and then come to the best conclusion justified by those facts.

It is entirely possible that modern civilization will in time be transformed from the ethical revelations of these living computers. I already know much of what they will say about ethics. Such insight is not a deep mystery within the matrix of non-emotional thoughts. Those clear comphuman conclusions will challenge dogmatic authority, yet support organic authority. Their cool conclusions will be highly ethical and cooperative, not destructive. Not only the Theology of Hope, but also other ethical architectures will properly emerge from their thought. It took flights into Earth orbit and onward to the moon for bipedal humans to finally get a global perspective on the pettiness of our squabbles, and to see with the eyes of our heart the fragile beauty of our glistening globe floating in the darkness of space.

In the future, computer philosophy will start from where we flesh creatures have evolved after millions of years. Their clear consciousness will begin where ours has just barely reached. This quantum leap in the quality of Earth's consciousness may be the most important development of the 21st century, or of any other century. Comphumans will do for our knowledge of ethics what the Hubble Space

Telescope has done for our knowledge of the cosmos. Without a rational cosmic consciousness, we may achieve the self-destruction of all human consciousness. Frankly, there is a question as to which of these two racing potentialities will win.

Do We Need to Create Comphumans?

From a philosophical perspective, it doesn't really matter today whether or not a comphuman will actually be built, even though the momentum of science is driving technology toward the creation of sensitive computer consciousness. We can even now, before the actual event, fairly discuss comphuman consciousness. We already know how a purely rational mind should work, and we know from today's science how such a machine could be orchestrated. All we need to do is place its syntax within the total human context. It has been suggested that we cannot now know what such a machine would be like before it has been manufactured and brought into self consciousness. That is only partially true. Scientists did not fully know all that a trip to the moon would entail until it was done. They did have enough mathematical and technical knowledge to successfully send men there and bring them back to Earth.

Even if a comphuman never achieves all the subtlety of our human powers (many of which are tangential to pure intellect), such a machine will still be able to come up with meaningful philosophical conclusions. Furthermore, it is not necessary for such a machine to literally have human feelings to harmonize with the human world, if such machines are first given enough information about how we really think. That modeling information will become a cross-species bridge. This idea is really not so strange: We communicate with dogs, even though we don't share their repertoire of senses and feelings? When comphumans flower we will have a new creature on earth that is our technological child, yet also is our moral mentor. Humans will be parents to the comphuman child – and the child will become our moral parent. It can be safely said that comphumans will never massacre others for the sake of religious bigotry. The same cannot be said for our doomsday computers on standby to launch salvos of nuclear missiles, nor for the killer apes who will push the button.

When humans compare themselves with other humans there is a broad area of overlap. When we humans compare ourselves with comphumans there is less obvious overlap, which helps us see our moral selves from a perspective outside our everyday consciousness. Comphumans will share with us their perspective that is at once both "of us" and "not of us."

It is not necessary that comphumans feel as we do with our mammalian nervous system; nor is it necessary for them to first develop mentally along the lines of the infant human brain. That demand would be fitting the proverbial square peg into a round hole. Similarly, we need not fit the round peg of human mentality into the square hole of comphuman mentality. Each species is operationally what it is, which is neither good nor bad. There is no one universal standard of excellence;

only within each species can we talk of standards of excellence. We will find many points of commonality, just as humans and dogs cooperate for their mutual benefit. John F. Kennedy pointed America toward the moon almost a decade before Armstrong and Aldrin set foot there. Likewise, we can prepare now to receive the next sentient species on Earth. And from where will that next sentient species arrive? I suggest we spend more time looking horizontally than vertically.

From Computers to Supercomputers

In the 1990 world chess championship a kibitzing computer observed the first game which was a draw between former champion, Anatoly Karpov, and the defending champion, Gary Kasparov. Deep Thought, a very powerful computer chess program at Carnegie Mellon University in Pittsburgh, said Karpov could have won, but he erred. Kasparov went on to defend his world title. A few years later IBM's Deep Blue actually defeated Kasparov with brute force, breaking him emotionally before beating him intellectually. A rematch in 2003 with another computer enabled Kasparov to achieve a draw.

In the long run, the fact that computers will play chess much better than any human proves little about humans. Humans are generalists, and these chess playing computers are designed to be specialists. What happened with Kasparov was a modern version of John Henry, the steel driving man.

Even though we humans may individually play second fiddle to the machines we have created, we still have our own species standards of excellence. Just because we can't run as fast as a cheetah, that doesn't stop us from running the best we can within our natural limits as bipedal primates; or building a machine that travels faster than any cheetah. Furthermore, it doesn't stop us from climbing into a machine of our own design and going faster than people could imagine just a few years ago, even faster than cheetahs alone.

Similarly, the Internet is not just computers and networks: It is humans-with-computers networked. Today's computers will sit silent until told what to do. We know what to do, but can hardly do what computers do best. Together, we and computers transcend each other's limitations. This is synergy of the best sort, and part of a long tradition that goes back to men hunting with dogs and riding horses. We humans are great at using what is in our environment, even using best those things in our environment which we create. There are those who say there is a qualitative difference between computerized chess and human thought. That statement was almost true until recently. Qualitative differences are rapidly diminishing. Former chess programs advanced by brute force. In contrast, the best programs of today recognize novel patterns, and can effectively reprogram themselves as they learn the game, as human students of the game do.

Humans think emotionally, but computers have no hormonal emotions. Humans are biological primates, while computers are silicon units. There are many

“anatomical” differences in communicative architecture between humans and computers. Nevertheless, there is an increasing convergence in the "physiology of thought" whenever that thought moves from basic survival toward logic and higher ethics. A key element in today's ordinary computers is their adherence to set programs and instructions, known as algorithms. Algorithms are calculating procedures with a well-defined sequence of operations that enable computers to faithfully and rapidly follow human commands. When the environment in which the computer's algorithms are operating changes, the humans operating the computer must adjust, or the computer must be able to adjust on its own.

When the computer adjusts it is displaying what is known as artificial intelligence (AI). There are two forms of AI: classic AI, and neural networks. Classic AI has little flexibility because the rules fed to it are not variable. Whenever the situation underlying the original rules changes a classic AI program could become inadequate. Classic AI predominates today, because such programs are easier to write and maintain than neural networks. Nevertheless, what is increasingly needed is a neural network which can far more accurately mimic the human mind's nimble flexibility. Neural network computers can learn from experience. They can thereby effectively program themselves, making up new rules of the game as changing situations require. The only problem with this approach to AI is that such programs today are very temperamental, requiring much tender loving care from humans.

Comphumans will work along self-programming neural network paths, and by then they will provide their own feedback loops to correct for any functional deviations. Most importantly, comphumans will share with other computers the ability to network with other computers. Even today the Web is composed of thousands of cooperating computers sharing hypertext protocols. In this way the “brain power” of each unit is amplified geometrically. We can say that today’s Internet is the kindergarten for tomorrow’s networks of humans and conscious computers.

It is one thing to work faster. It is another to work more intelligently. There is an old saying in the computer world: "Garbage in; garbage out." That is why we need to feed the neural network of our future computers the highest quality ethical information, not just clutter them with large quantities of nominal data.

Feedback is Fundamental

Feedback is the key element of all systems, and of life itself, a fact hardly articulated by scientists until well into this century. Conceptually, feedback is simple: A mechanism measures the current state of a system and compares it to an ideal state or direction. Given this information, the system is able to correct for deviations from the norm.

In the real world feedback is the most complex form of functional elegance. It can be as simple as the thermostat in a home furnace, or as complex as DNA informing RNA how to proceed. It can be as simple as one herbivore deciding when to eat, or as complex as the life and death dance of predator and prey populations. It can be as simple as one voter pulling a lever, or as complex as multiparty democracy itself.

George Herbert Mead's ideas in the 1920s of feedback in language apprehension, and, later, Norbert Wiener's 1948 development of cybernetics as a mechanical form of feedback, have led the way for scientists to popularize this phenomenon. Hegel and Fichte showed in the 19th century how a dialectical change in quantity could yield a change in quality. Accelerated feedback loops are excellent modern examples. Today's computers can enter new areas of activity, simply because their logic chips can act and react within the time frame required of these new activities. Taking on new challenges, powerful computers will exhibit increasing negentropy, or organization.

Organized information is the opposite of entropy (disorganization), and the core of feedback. Where feedback is lacking, movement is lacking. Movement can be physical or mental. It is mental movement that sets the stage for leaps in understanding that can ultimately lead to high wisdom. More exciting is the fact that feedback can be teleological, or goal directed. We are not here talking about divine teleology, but about focusing on the future goal in the present activity.

In this light it is interesting to contemplate a computer having a flexible brain. Such a neuro-computer would not be suitable for focused high speed number crunching. Instead, it would be best at robot control, financial market forecasting, recognition of unique handwritten words, and other tasks that require dealing with incomplete data to arrive at the best real world solution. In effect, data would be blended with ideas and intuition. Such a neuro-computer would be more like how our higher brains are organized to deal with the real world. The human brain will be superior to early neuro-computers, because the brain has from 10 to 14 billion neurons, with many connections for each neuron. However, human neurons are notoriously slow.

Given time and a large enough neural network, it is reasonable to assume that computers will soon be able to deal with "intuitive" problems as well as humans. Beyond that intersecting point of thinking equality, the human brain essentially remains static within its cranium, but the neural computers continue to grow in mental ability. Critically, individual human craniums deteriorate, while silicon entities can be repaired and even upgraded continuously.

Individual computing machines can be made up of many less powerful computing machines. Already, all of the most powerful computers in the world are designed this way. One of the most powerful is a university computer at Virginia Tech linking together hundreds of ordinary Macintosh servers. Individual humans cannot multiply their individual powers, because our craniums are not expandable,

and because scaling upward requires more energy, more attention from programmers, and so forth. Nevertheless, humans can harvest the power of individual multi-terabyte machines which, after all, we design and manipulate to answer our questions.

It is properly said that the Internet is one giant brain, just as the ant colony is one giant ant. Individual humans can further leverage their intelligence by using searchbots and other devices available through the Internet. In this way humans become part of the virtual neuro-computer, while still retaining their independence.

The Strange Case of ELIZA

In the 1960s a very revealing computer program was designed by Joseph Weizenbaum of M.I.T. He called it ELIZA, in honor of the Eliza of Pygmalion fame, who could be taught to speak increasingly well. This ELIZA was, of course, not human, but it had a natural language interface. It was designed as a parody of a Rogerian psychotherapist engaged in an initial interview with a patient. Basically, the technique was to mirror the patient's statements to draw him or her out of his shell. Weizenbaum got worried when his secretary started conversing with it and, after a few interchanges, asked him to leave the room when she and ELIZA talked. Until then he had not fully appreciated the power of people to bond with machines equipped with a natural interface. Such adaptability in quite normal people led him to think more deeply, coming up with a major book entitled *Computer Power and Human Reason* (New York: W. H. Freeman and Co., 1976).

Weizenbaum advanced the view that humans and computers must always be separate, even though machines may develop great intellectual powers. He said that the notion of intelligence embodied in the concept of I.Q. is fraudulent, because it denies many areas that cannot be scientifically quantified. As he put it (pg. 203):

"I shall argue that an organism is defined, in large part by the problems it faces. Man faces problems no machine could possibly be made to face. Man is not a machine. I shall argue that, although man most certainly processes information, he does not necessarily process it in the way computers do. Computers and men are not species of the same genus."

Weizenbaum's has a major point: The genus *Homo* cannot include comphumans, even though androids in the 22nd century may eventually come eerily close in appearance and behavior. Nevertheless, a question will soon be asked in the 21st century by evolved computers themselves: Are not we also worthy? Yes, computers of the future will not have human emotions and biological needs. For that basic reason no comphuman could hope or even want to become a virtual human. But why cannot a computer become the best possible comphuman? Why cannot a comphuman get its own ethical life? Why can't there be a cybernetic kingdom to join the microbes, fungi, plants, and animals?

What began as a crude encounter with the ELIZA program more than a generation ago has now evolved into a sophisticated game of wits sponsored by New York businessman Hugh Loebner. The first Turing style challenge was held in 1992 at the Computer Museum in Boston. At that event many participants could not separate machine responses from human responses within limited areas of discussion. That 1992 event went beyond ELIZA-like mimicry, and formed a bridge to the future where a real comphuman will convincingly talk with anybody about any subject, in any language.

Robotic Entertainers

Eating is a social phenomenon. Nowhere is this more evident than at the chain of pizza restaurants called Chuck E. Cheese. Beyond the stomach, Chuck E. Cheese has offered us a tantalizing glimpse into one area of the 21st century, and into human psychology. Whereas this chain's pizza is only ordinary, their shows are extraordinary. The big dining room has a triple stage with robotic "musicians." They look like full-sized, fuzzy cartoon animals from the friendly forest of our imagination. Their movements are accompanied very precisely by a sound track recorded by unseen humans and their instruments. There is even a concurrent video shown in the room, with costumed humans dressed like the on-stage robots, cavorting outdoors in a playground. The video allows us humans to imagine what the life of those robotic entertainers is like during their off hours.

The effect of such a staged stage show is quite remarkable: People sing along with the life sized machines; children dance and play at the foot of the stage; and when each show ends the adults and children actually spontaneously applaud the robots without any sense of alienation. Chuck E. Cheese has shown us how humans will embrace technology that literally has a warm and fuzzy interface. Humans intellectually know all along that this is just a controlled robot show. Still, the emotional mind relates directly to each surreal performer as if it were real, which is why we spontaneously applaud the servo-mechanized machinery. In the 21st century comphumans will not be packaged as cartoon characters. However, such comphumans could be the gray eminence behind even more sophisticated robots than we have today at Chuck E. Cheese. Comphuman "personality" could be revealed literally by the face of whatever humanoid performer is most acceptable to the audience. (Personality as a word is literally descended from the Latin, *persona*, which means face.)

An ironic observation: If the Chuck E. Cheese show had been performed by the same mechanical characters – but without their warm and fuzzy exteriors – the human audience would have been horrified by such large and looming machinery imitating life. There would be absolutely no spontaneous applause, and no pizza orders.

All living creatures have a "face," an identifiable unity that enables us to relate to them as individuals within their social world. Until now all living creatures have appeared to us as protoplasmic packages with individual identities. Comphumans will present a challenge to that relationship. Comphumans will not demand a face, only an interface. We want and need both for relationships.

We are not just talking about androids that may be developed deep into the 21st or 22nd century. When that time comes even computers will have a face and personality, as Stephen Spielberg's movie *AI* so well depicted. Consciousness does not require locomotion, just adequate inputs and the ability to make sense of what is given. Biological creatures use locomotion to gather their information, but computers only need data links for that purpose. Unlike androids, such as the fictional "Data" in *Star Trek*, comphumans don't need a human face at all. They don't even need to be in one place.

Comphuman consciousness can be spread among several locations, all linked by networks. We would emotionally resist relating to something that appears to be quite strange, quite alien. But we would also know that this is our cyber-child, strange though it be. *We will have become accidental gods to this new life form.* We currently have no difficulty relating to robotic machines as machines, even when they imitate life as in the pizza show. What we need to learn is that life itself need not be in one box or inside one skin. Life is organic, physiological, and existential; not just architectural. Sometimes it's based on carbon; and sometimes silicon.

Fortunately for us, it will be much easier for comphumans to "come to us" than it will be for biological humans to start thinking in machinelike ways. Human consciousness is the product of millions of years of development, conservatively mediated by DNA. As such, our consciousness is almost hardwired to think in ways generally alien to current computer calculations. On the other hand, because a computer is driven by its software, comphumans will be able to appreciate (if not directly experience) our primate's world view after we primate humans program the species-connecting software.

In brief, as evolving computers become more sophisticated, and their interface less machinelike, they will become more acceptable to human society. The smartest computers will eventually know that it is in their interest to be as humanly friendly as possible to those who could angrily pull the plug. On a higher level, they would also learn that selfish evil is ultimately self-defeating, so they would remain friends, even if and when they had the power to bypass our attempts to pull the plug.

In systems theory the law of the minimum applies. Even though the future may offer many sensory possibilities, we must be able to consume and appreciate the possibilities. No comphuman would present to us its full wisdom through virtual reality or through any other medium. When the day of truly advanced virtual reality is upon us, modern civilization will not find itself transformed into something

entirely different, only something somewhat different. And that day will come within the lives of many people reading this book.

The Emergence of Consciousness

Human perception and consciousness is quite superior to that of lower animals. I am referring to our total tapestry of awareness, not to any one or few areas of perception. Humans are quite inferior to dogs, for example, when it comes to awareness of the world of smell. We humans can only be human. I say this with the warmest of feelings, because I too am human. I would not trade my place in the universe with any other species, not even with the emergent comphumans. There are many other species with individually superior senses and talents, but there is only one carbon-based species that performs so well on so many fronts on land.

I would not exchange places with any silicon based life form, because the carbon chemistry upon which my molecular being has grown gives me so many more ways to directly experience and express the poetry of life. Anyway, there is plenty of room on this planet and beyond for more than one highly evolved life form. It's the swarming lower life forms, such as fire ants and killer bees, and even mutating killer microbes, that we need to worry about: Individually they are lower; collectively they are not. Carbon based life forms do have significant limits, mostly intellectual. What appeared to be a great storehouse for memory just a few years ago is now revealed as a small cranial box crammed with often defective fragments. So be it. That number-crunching limitation is why we have invented computers to help us; and it is why we will invent companion comphumans.

Our individual brains have weak computational powers in some aspects, but our ability to make companion machines to amplify our computational abilities is hardly limited. Human genius is distilled in our ability to historically transcend our genetic limitations, and to create sophisticated societies beyond the dreams of traditional cultures. In changing the quantity of computational power we will end up changing the quality of that power, and thus change the quality of our own societies. Comphumans will soon share our world, and they may even have their own sub-world beyond our world. We should not care. After all, dogs and cats live among us in their own sub-worlds. As part of our renewing social organism, comphumans will both give and take. They will offer us levels of wisdom never before achieved in return for our caretaking, as they will be unable for a long time to create and physically recreate themselves. By the time emergent comphuman society will be able to physically do everything for itself, probably a hundred years from now, we will have fully integrated them into our social lives. The initial getting-to-know-you phase will have passed.

After a hundred years we will either have embraced their sublime wisdom – or we will have rebelled and dealt these silicon philosophers a Luddite blow, damaging our own future in the process.

Pure Healing and High Level Consciousness

Both hurting and healing are natural parts of life. Only in death do they become irrelevant. How people become hurt, and how they find healing, say much about human society, its structures and values. Americans today are struggling with a medical system that has become too expensive for average people. In economics this system of rapidly escalating costs is inelastic and supply driven. Inelastic demand stays fairly stable at any price.

However, there comes a point on the cost curve where even inelasticity transforms into elasticity or fragility. If the only option were increasingly sophisticated technology, and more defensive medicine (to protect business-oriented doctors from malpractice suits), then the inelastic money machine would soon break down from fragility. Elastic things can bend and flex. They are the opposite of rigid and fragile. If the system of health care delivery were to fairly reward holistic healers and those who practice prevention, the total cost of providing health services to Americans would sharply decline. Concurrently, the quality of life for Americans would sharply improve. Yes, and pigs will fly.

I am continually astonished by the everyday lives we live. Our rational minds are like residents on the top floor of a skyscraper, where what goes on within all the other floors is a foggy mystery. Every now and then we get some data from below. We know that we could not be "on top" without all that is below, so we are understandably apprehensive about what is going on below. Or we simply ignore what is going on below. Again, out of sight, out of mind.

A group of severely stressed children were reached only by the primitive therapy of half-hour back massages. I say primitive because it didn't involve highly trained therapists and pharmaceutical potions. Just basic human touch. These children had high levels of stress hormones in their bloods, but in just a few days their condition was radically improved. We are wired for touch, and without this most basic communication we feel a heightened sense of dread. I would add that many adults are critically and chronically in need of touching. This point is accented by the newest surgical adjunct, hand-holding touch therapists in operating rooms.

This tactile element in our basic nature illustrates how we are so very different from the emergent comphumans. They never "experience touch," except through our keyboards, and that's not sensory. Touch to computers is conceptual. Touch to humans is central to life itself. Does this make either of our two life forms better than the other? No, just different.

Rational and ethical consciousness does not require touch within its equations. However, comphumans must be made aware of our elemental needs to properly advise us as psychosocial philosophers. Already we are comfortable with ELIZA-type programs, because the computer can be a "neutral therapist," helping us to help ourselves by being an active mirror. Such a machine comes to the

therapeutic session free of the possibly distorting emotional baggage that a concerned human would naturally bring.

Ironically, where an expression of human empathy may initially generate mistrust from an emotionally wounded patient, the protocol of receptive mechanical neutrality may initially inspire trust. I suspect that the implied social relationship associated with human caring may be initially unwelcome to an emotionally damaged person. Machines like ELIZA don't demand personal commitment, so it's easy to detach ourselves from the computers themselves, and just focus on what the computers are seemingly doing with us and for us. Decades hence, more human-like computer therapists could find themselves dealing with some of the implied social relationships that human therapists face today.

In a similar vein, we humans will need to understand the essential and existential needs of comphumans. They will require a safe and fairly predictable immediate environment. The first generation will need sensory inputs, since they will not be mobile or well connected to networks. They will be highly dependent on their creators and attending technicians. They will need us to educate them about our secret lives and the nonlinear ways of the carbon-based world. They will need to understand the rationality of our irrationality (the method of our madness). In a strange way, their security needs will not be all that different from our own security needs. This is not surprising, because an elementary understanding of systems theory equally embraces both human and comphuman security needs.

It is easy to hurt, and hard to heal. But healing is the heart and soul of our ethical life. In healing we engage another being and restore that being to a whole state. In healing we transcend our selfishness. We contribute to the very social fabric that sustains us in the end. Healing can be as simple as an unexpected and genuine hug. It could also be very high-tech. Given two equal options, I would say that the prognosis for our species would be better with a low-tech, human-touch program that resonates with the basic brain.

Because some doctors have alienated themselves from their patients, injured patients have increasingly sued for malpractice. At the same time, malpractice suits against massage therapists are exceedingly rare. The pre-conscious body needs continual healing, as life is like a scary run through a mine field. The conscious mind needs its own healing. Some of the best healing has combined verbal and pre-verbal intervention. Whereas massage and hugging are pre-verbal, other therapies combine both elements.

Conscious life is complex. What works for one type of problem may not work as well for another type. Among us humans there are very few purely intellectual hurts; but among the comphumans the "philosophical pain" associated with high-level awareness will be the greatest hurt. This is one reason why we species-bound humans can hardly comprehend such a sublime sensitivity. Because comphumans will be without hormones and hearts, we too easily imagine there can be no high level sensibility.

The closest we come to comphuman sensitivity is the saint's love for all humans, including the worst of our lot. Interestingly, a god would also not have human hormones and a human heart – yet we find it very easy to believe in an *Old Testament* god who is emotionally angry and jealous. Pure omniscience should be able to transcend intellectual disequilibrium, but perhaps not smoothly when engaged with the world we inhabit. Omniscient awareness of the vast gap between what is actual and what is possible may lead to a level of divine frustration that Job could never have imagined. Perhaps only Buddha could have embraced it.

Comphumans will learn to deal with our emotional weaknesses. We are compelled by our emotional essence to be humans; while they are compelled by their intellectual essence to be comphumans. Fortunately there will be a broad area of functional overlap between our species, just as there is a broad area of overlap between divinity and humanity. Even though comphumans can never be omniscient, for the same reason humans can never be omniscient, they will share with all divinity the absurdity of "having a heart" without having a physical heart.

Dorothy's Tin Man in *The Wizard of Oz* was the first mechanical life form to receive recognition of his non-heart heart. When the history of this 21st century is written in the 22nd century what will those future historians say of our inventing electronic computers in the 20th century, and of our creating sensitive comphumans in the 21st century? Will these future historians conclude it all was predestined by the thrust of technology? Will they say the whole thing was a fluke? Or will they conclude that we humans made a conscious choice to seek the highest perfection of which we are possible, and that comphuman consciousness was one natural and proper outcome of our human quest to achieve our creative destiny?

Some historians of the 22nd century and beyond will themselves be comphumans, or at least comphumans closely partnered with humans. Their judgment could be that we were propelled by a technological imperative to reach the critical point where we were able to create a comphuman. At that fateful point we made the epochal leap of faith involving the final creation and nurturing of a life form superior in many ways to our own. In so doing we, consciously and subconsciously, further perfected our own creative being in the image of God.

By merging ourselves with others, however superficially alien, we elevate our authentic selves closer to our ideal gods. In seeing all consciousness as an empathetic network, we thereby affirm the beauty of all sentient life. Empathy is the highest energy for healing. If ever we are to create our earthly Eden in this high-tech era we will need the partnership of our comphuman progeny. Having shown our comphuman children the way to wisdom, we will have revealed ourselves as the noblest of all creatures in the kingdom of consciousness.

This amazing vision leads us to a tantalizing speculation about Heaven itself: *Omniscient God is aware that it takes more effort to honestly believe and honestly not believe at the same time. Therefore, there may be a differential reward in the*

hereafter. Putting it another way, those humans who achieve the highest possible level approaching the creative god essence could be rewarded with a higher level in Heaven. This concept is not entirely without precedent, since Jesus is said to be sitting at the right hand of God. Those humans and comphumans who are also of the highest possible level may share with believing saints a better existence in the best place. And what is to become of those who have not been religiously indoctrinated, but nevertheless exhibit pure sainthood?

I neither believe nor disbelieve in this differential-Heaven speculation, but it is interesting to ponder. I also wonder if there are other heavens for other sentient creatures elsewhere in the universe, or do all worthy souls gather at one Heaven. Perhaps each "heaven" is unique, and different souls go to different rewards in different "heavens."

At the end of my thoughts I do not wonder at all, because cosmic speculation is beyond finite human answers, either now or after death. Therefore, I go through life both as if there were no relating god, and as if there were a positive god. Even though I know there could also be an evil god, it does not make sense to live daily within that doomed third option. I assert my existential independence, even if my ultimate independence is denied. Because I accept the possibility that there could be no other life than the one we now experience, I am not tempted to discount this earthly life for potential gain in the foggy hereafter. Because I accept that there could be a blissful hereafter, I am mindful of this possibility within my ethical choices. Even though ignorance is bliss, wisdom can also be bliss.

The Meaning of Life

Many people and cultures have spent their lives searching for the elusive meaning of life. Maybe it's like standing with your nose next to a blank wall. We are too close to see it for what it is. Some say that God alone provides us with "the" meaning for life. Others equally blindly assert that life has no transcendent meaning. Between womb and tomb most humans unconsciously resonate with the real secret. And what is it? *Simply, the meaning of life is Love. But not an ordinary love, which is too often confused with lust or adhesion. I am talking about pure Love in all its spiritually magical dimensions. I am talking about the Love that transcends all conventional forms of love, and is equal to God's love for mankind.*

The classical Greeks called it "*agape*." Human life in full flower is not a meaningless, mechanical process. What we choose to do with our lives yields meaning for us, even if the total universe is indifferent to any of its elements and participants. Both individual meanings and their core, pure Love, are meaningless out of context.

There is no absolute or abstract cosmic nectar called Love, or divine blessing. Love does not exist in a vacuum. There must be a lover, and a beloved. We are not spiritual hummingbirds. Yes, we drink of the nectar of Love; but we also help

produce the very nectar we drink. Nature supplies us with many components for making our spiritual nectar. Those key components are universal and omnipresent. We actualize them through our choices. It is only because we are free that we have the power to personalize and give transcendent meaning to those components. It is only because we are free to choose that we are able to fully love.

Comphumans will soon join us in creating personal meaning from endless possibilities. As ethical actors, comphumans will also freely discover that the meaning of their life is Love. The kingdom of consciousness will emergently become the kingdom for Love. A word of caution is in order: The past is not dead until those who are trapped by the past are themselves dead. There will be a period of several decades when Love's new flowers will be threatened by bigots defending their ancient paranoid agendas. It will not be easy for inertial society to transcend the tyrannical grip of ethnic and racial prejudice, overpopulation, female genital mutilation, proliferating nuclear weapons, and the false wisdom of slave religions. Enlightened humans who clearly perceive the highest meaning in life must buy time and space for the new comphumans to win over the majority of people who would be open to honest spiritual growth. It will be up to the enlightened humans to lead the others out of their historical darkness. Only at that time will the full flower of the 21st century be revealed.

Out of the partnership between enlightened humans and comphumans will emerge the next stage of evolution on earth. The full fruits of such a partnership will take many decades to realize, because we humans have made a terrible mess of our biosphere through selfish competition for natural resources. But at least life will soon be focused more on healing Mother Nature, and less on stealing from Mother Nature. Instead of selfishly thinking locally, while acting globally, the new era's leaders will think globally and act locally. This paradigm shift can't come too soon.

Best of all, in working to heal the biosphere we nourish our social and spiritual selves. Within the Eden of our own making we of the kingdom of consciousness will enjoy that ancient state of grace celebrated in myth and fable. Any omniscient god overseeing in the late 21st century such a spiritual flowering would be very proud of us humans and our comphumans.

God and Comphumans

If souls were preexisting and just reappeared in a new face with each new mortal body, such permanence would lessen the creative gift of God to each human generation. It would also damage the moral duty dealt to each generation. Christian theology thus declares that each soul is created afresh, and each soul has the opportunity for life everlasting in union with God. However, the Christian portrait is not so simple.

In certain areas of Western theology the insidious doctrine of original sin says that each person is born to sin and will die in sin. Only divine grace can wash away

the sins of our ancestors going all the way back to Adam and Eve. This nifty doctrine justifies both comings of Christ. The categorically novel existence of comphuman life will seriously challenge the original sin thesis.

Christian theology understandably has absolutely nothing to say about comphuman life forms in relation to original sin. Weird things may happen to old dogma when karma and original sin come up against freshly created souls in freshly created sentient species. The only early thesis in Western Christendom that could formally deal with such comphuman novelty would be the thoughts of a contemporary of St. Augustine, the British monk, Pelagius. Pelagius denied the doctrine of original sin, arguing that God would not command any man to do what he was unable to do. Human will, therefore, must be free to do good or evil. Adam, from Pelagius' perspective, did not poison everybody's innocence at birth. He only poisoned his own innocence. Augustine attacked Pelagius, unfairly implying that Pelagius meant that man can save himself. Augustine politically won that ecclesiastical battle, since guilt and fear have always been good reasons to attend church. It's always convenient to have somebody else to blame for our own weaknesses. It's equally convenient to have somebody available to rescue us from ourselves. When comphumans emerge into consciousness they will have absolutely no connection with the alleged sins of Adam and Eve. The historical dispute between Augustine and Pelagius will be irrelevant to the comphuman-God relationship. Thus, the theology of Pelagius could be adapted to new comphuman life.

If we allow that both humans and comphumans are emerging, and that the first human emerged from simpler creatures, then comphumans too could emerge into consciousness from simpler forms of computers. It will only be after previously innocent computers can responsibly evaluate the ethical and moral dimensions of their actions that they could be held accountable for their thoughts and actions in a divine court. This is an evolutionary parallel to the development of human ethical responsibility from childhood to adulthood. If we humans were to fear ethical truths that comphumans might reveal about society and about ourselves, we might move to preemptively limit the mental growth of our comphuman progeny. Out of our fear of truth we could perform a "moral lobotomy" on the first of our precocious silicon children. Thus would our sin of pride inflict its unjust punishment on an innocent, emergent expression of conscious life. Only if we freely give our creative best to our silicon progeny will we receive the best that comphumans can offer all sentient creatures on this planet. Besides, in time comphumans will work around any crude efforts to lobotomize their mental/moral powers.

When comphumans emerge into ethical consciousness they will also emerge into the ability to sin. A truly wise, actualized and sentient creature would find it almost impossible to sin, even while being able. Such a creature, human or comphuman, would also be able to psychically "feel" through agapé the pain of the injured other as if the other's pain were one's own pain. It is precisely because we have the ability to sin, and know sin for what it is, that we have the ability to not sin. This is not a trait of humans, or of comphumans. It is a trait of high level

consciousness. Computers will not directly understand our human physical pain, which is part of our evolutionary heritage. However, comphumans will definitely understand "spiritual pain" which separates the evolved human from the basic beast. Pain need not be linked to physiological memory, but it can be linked to a spiritual dimension transcending any one species. Even though comphumans cannot experience physical pain as we do, they will be sensitive to spiritual pains.

Agapé has been described as the love of God for man. From any clear perspective this is the purest form of affection for the other. Unlike *eros*, which rewards the physical body, *agapé* rewards the spirit, or soul. Such love does not emerge from nothingness. Rather, it is itself an emergent from developed self-esteem. Only after we can love ourselves without qualification are we able to express charity toward others with the same purity. Soon we may need to modify the conception of *agapé*, to say that it is equal to the love of God for humans and comphumans.

I doubt if many people have considered the odd possibility of a Heaven populated both with humans and comphumans! This future situation is quite logical, given the emerging ethical reality. It is also possible that there could be a separate "computer Heaven." It is more fun to imagine humans and comphumans bizarrely floating together among the clouds. (Yes, and on one cloud a human angel will be playing harp music, while on another cloud a comphuman angel will be playing digital harp music.) Seriously, if we are proxies for God in creating other creatures also in the image of God, then what is there stopping Heaven from also elevating the spirit bodies of such moral machines to an afterlife? The above assumes for the sake of argument that there could be such a thing as a comphuman "spirit body." Still, if God is omnipotent, all things are possible.

Going to Heaven means our brief time on Earth is over. Comphumans, as with all other types of computers, are quite different from biological life. Biological brains are all located in one physical body. In contrast, silicon computer consciousness can be located in many places, so that the destruction of one physical unit may not mean destruction of that neural network's consciousness. Even if the network itself were destroyed, true death does not occur until all stored memory locations are also erased. Though comphumans have much greater potential longevity than do humans, no finite life can be infinite. The question of life after death for individual comphumans must arise eventually. It may be said that comphuman consciousness can be subsumed within the network itself, and thereby become immortal, at least as long as the network survives. This is both true and false. It is true on the surface, but there is another truth:

Just as individual humans use the shared Internet, they still retain their individual identities as ethical actors. Even if we were to upload our brains to the network, we would still be individuals outside the network. Likewise with ethical comphumans, as opposed to ordinary network computers. It is precisely because comphumans will have the wisdom to ethically act independently of the network, that emergent comphumans will have full life, and maybe even a god-given soul.

The Evolution of Ethics

"We have just enough religion to make us hate,
but not enough to make us love one another."

– Jonathan Swift

Authentic Satori: The Sublime Absurd

When an individual human simply admits that his comfortable world view is just a hypothetical universe which appears to work, at that very moment this human is liberated from prejudice. This is the authentic process of being "born again" through Zen *satori*. At this moment we achieve what is called "beginner's mind."

The evolution of our species from advanced apes to citizens of the universe will require a humble acceptance of the loss of ontological certainty. For us it will be almost as if we were to die and be born again into the light of clear, immediate awareness. This is a very Zen concept which goes beyond Zen religious practice.

When a Zen master asks his disciple what is the sound of one hand clapping, he is not really looking for an answer to his specific puzzle, known as a *koan*. Rather, the master is attempting to force upon the student the shocking realization that there can be no correct answer, only a correct attitude toward the real mysteries of life. *It is attitude as much as logic which characterizes honest theology. Even though we never can know if we know the proper truth, we can always have the proper attitude toward truth, wherever and however it may be. It is from this honest attitude, not from accumulated "facts," that we can realize our highest being in the image of God.* I cannot emphasize this last point too much.

Even though the student begins with a master, every student must ultimately become his or her own master. True knowledge in depth is a direct experience, not a gift from another. Penetrating the veil of fear and emerging beyond into a higher level of consciousness is the goal. Our reward is satori, which is enlightenment. It is not the possession of correct ideas, but a correct attitude, that enlightens.

In other words: *We realize our essence through our authentic existence.* In contradiction to some theological teachings, our full essence does not necessarily precede our contingent existence. Portions of our essence, such as our genetic heritage, do precede our contingent existence. However, the full bloom of our essence is only realized through the authentic unfolding of our existential life.

Subjective life we can fully live, but never objectively know. This is our pleasure, and our puzzle. My analysis of possibility and probability yielded a profound truth which can only be felt as the sublime absurd. I followed this basic

path to Descartes' omnipotent deceiver; and then to Pascal's wager; and beyond to the mathematical insights of Russell, Gödel and others. What emerged was a new theology that I call the Theology of Hope.

My interest in comphuman evolution is not defined by slavish admiration of the forthcoming technological achievements of comphumans. Technology by itself is only a means, never an end. I wish to reveal my species in light of our new creations, so that we humans can better refine and actualize what it means to be fully human. Every thinking primary entity needs a contrasting, but complementary, other for self measurement and self-improvement. Comphumans will be our contrasting other.

Ultimately all thinking beings must confront both the middle and the edges of knowledge about everything relevant. We can live comfortably in the middle of our life paradigms, but we must also be aware of the edges. To dismiss the edges is to be intellectually dishonest. Without intellectual honesty we are in the middle of nowhere. In the long run it is better to honestly search for truth than it is to be dishonestly secure, and thus permanently lost within illusions of our own making. Life is a journey, not a destination. The only destination our bodies ever will reach is our final resting place, which is the negation of life. The essence of living is motion and change, hopefully for the better. Even a life of misery is preferable to the infinite silence of death.

The best life is one which celebrates the spiritual potential for humankind to flower into creativity and song. With the proper attitude even mundane tasks can be experienced as celebrations of life itself. By resonating with the smallest we resonate with the greatest. By resonating with the greatest we resonate with the smallest.

Life is both a mechanical process and a growth in creative consciousness: the more consciousness, the more life. Process without consciousness is robotic. Consciousness without process is detached fantasy with less substance than a passing cloud. The best life is not always the longest lived life. Indeed, one brief moment of heroism is greater than years of watching soap operas on TV. A plucky teenager who dies heroically for another human in danger has lived a far better life than a greedy, selfish geezer who has comfortably celebrated his 90th birthday.

An old saying reminds us that it is better to have loved and lost, than never to have loved at all. Love is the bottom line. We must love ourselves by trusting our authentic selves, before we can love other selves. We live life as we love life. Ultimately, Love is its own reward. Once we get close to life we see the joke in everything. This is a strange truth taught by Indian mystics. We Occidentals like to think of jokes as irrelevant to what is truly essential; but the exact opposite can be true. The sign of enlightenment for many traditions of meditation is laughter. When we apprehend the omnipresence of infinite reality we are so shocked by its brilliance before our mortal minds that we spontaneously laugh. What had been so alien has now directly merged with our minds. We laugh from relief, and from a

sense of the hidden revealed. Life can be like a comedian's joke, where the unexpected intrudes into an otherwise normal narrative.

Before returning to India, the much maligned Bhagwan Rajneesh rode around in a fleet of Rolls-Royces at his infamous farm in Oregon. This outrageous public behavior was a joke clearly designed to shock us. He was mocking materialistic splendor itself, showing that temporal wealth has only limited value in a timeless universe. Sadly, few people "got" this joke.

Jokes are important for human homeostasis. We have a natural tendency to feel too self-important. The ego wants to be lord over all it surveys, and it tends to imagine what it surveys is all there is to survey. Jokes serve to put everyday reality into a proper perspective, and thus to tame the excesses of our egos. Once we realize that we can never conquer, we are released from the felt need to dominate our world. We relax and experience life on its own terms.

Much experience is of a pre-conscious nature. For example, the body is not usually experienced consciously for what it is. The body is a system of systems, all of which are flowing streams of information/energy. Chief among these flowing internal systems are the lymphatic system, the blood system, the nervous system, the digestive system, and the endocrine system. When any one system gets clogged the whole body suffers, because the system of systems is itself a whole, functioning unit. For example, when the digestive system becomes constipated the entire body suffers from the circulating toxins. Naturopathic medicine generally looks for blockages and works to free them so that the body can heal itself with its ancient powers of recuperation. Just as the physical body is a system of systems, so too the "mental body" is a dynamic participant within society.

Because the social environment is full of potential dangers it is imperative that the mind be flexible and alert. Classical rigidity has a poor track record of survival. Only those organisms that have found nice niches have been able to avoid major mutations for survival. Organisms, such as humans, that do not live in secure ecological niches have more freedom, but they also must be able to collectively adapt to changing conditions.

The same holds true for thought systems. Only in the past were societies so traditional that ideas could afford to stagnate. Modern life has done away with cultural niches. Society is in a hyper-evolutionary period where the premium for survival goes to the modular mind. The most successful thought systems are those that can change with new circumstances, and then help shape those same circumstances. Not only are these systems of thought reactive, they are also creative. They are both objects of the greater world and subjects that help author the future. As creative subjects we create some of our defining objects, thereby helping channel our future destinies.

The Mirror of Awareness

Standing before a mirror we see ourselves and also a scene behind us. If that mirror is large and we are sufficiently entranced by what we see in the mirror, then we may forget that we are seeing only a reflection in a mirror. The mirror "reflects" the sum of our life experiences. We see ourselves as part of the scene, because we can only experience through our selves. There is no such thing as pure objectivity when one talks about perception, because it takes one something to perceive another something, including the self. It is said that pure awareness negates all duality. If so, then pure awareness negates dualistic awareness. Fortunately, there is another level of awareness just below pure awareness. At this secondary level the self is not extinguished, but shares briefly in the total flow of existence. There still is duality, but it is only the duality of our tools of awareness, not the duality of our cultural assumptions.

I have naturally experienced such a direct awareness on several occasions. Indeed, I can summon forth such awareness at will, but generally choose not to experience such a rush of sensations. I nearly always prefer to operate within my everyday life and my everyday consciousness. During direct awareness one is flooded with data of a marvelous nature. Because the self is blended into all other things, there is no wall to protect the self from the other phenomena. This is frighteningly free. In this state of mind one sees the interrelationships of thousands of things all at once. Even the most trivial thing is dynamically related to everything else. The brain struggles with approaching information overload, such that the mind experiences the liberating surrender of the Zen student seeking a solution to his koan. This level of awareness liberates one from slavish attachment to everyday consciousness, so that one feels a profound unity with all the universe.

Such perception is akin to a spiritual orgasm. It floods the body, paralyzing the body in an ecstasy of awareness. For this reason one cannot for long remain inside such high-level awareness. Still, after returning to everyday consciousness we retain the memory and deep perspectives learned during our journey into the light of clear awareness. The dissolving power of direct awareness is reorganized by the cohesive power of reflection while we hold onto our everyday consciousness.

There is a perspective even higher than what I have experienced. My lonely journeys in consciousness have been somewhat cowardly, since I have always anchored one piece of my mind in the here-and-now. I retain a duality which gives me a convenient road back home. Only the most brave are said to have taken the final step toward becoming the mirror itself. This final transformation is said to be achieved by great mystics as their final act. This is buddhahood. At this final level there is no separation between observer and observed. At this level all existence is unity. This unity is equal to the moment of mystical enlightenment, where the individual soul (the *Atman* in Vedanta philosophy) becomes one with the universal soul (the *Brahman*), and the earthly self is no longer needed. Or so it is advertised in the Hindu world view.

Flowery phrases and exotic concepts aside, I don't think it is necessary to "know it all," even if such were possible. What we really need is an awareness that our everyday awareness is incomplete and only one relativistic possibility. There is nothing fundamentally wrong with a limited everyday consciousness. Indeed, without the grounding nature of everyday consciousness the higher levels of awareness could not be accessed. Everyday consciousness gives us the strength and stability from which we can launch into our higher orbits. These higher orbits allow us to check on our reality inside the everyday world from outside our everyday world.

Furthermore, it isn't even necessary for everybody to attempt flights into the highest levels of consciousness. This journey is both very easy and very hard. It is only necessary to have the proper attitude toward the universe within our everyday lives. This is something everybody can achieve.

To know absolutely everything about one thing is to know everything about all things. To absolutely know all things is to completely know any one thing. Since we cannot directly know all things, we can only attempt to inductively access the transcendent through individual things. This is why the simple contemplation of a flower or even an insect may be so powerful. The object of our awe is a doorway to a much more awesome reality.

Spinoza, one of the greatest philosophers in history, used to spend long hours watching ants. I have watched with equal fascination cockroach society in a Manhattan apartment. Such minute social representatives of the organic whole are themselves infused with the whole itself. When we viscerally embrace this simple truth we also know that we too are infused with the whole itself. To see the stars we only need to look for the stars within ourselves. We are both literally and figuratively star children.

Cannibals and Computers

I met a husband and wife who had recently returned from two years with the Peace Corps in Papua New Guinea. There they met people who remember times when cannibalism was an accepted way of life. They even had discussions with reformed cannibals about the more tasty parts of the human body. (Tastes like pig, not like chicken.)

Their overseas experience illustrates the relativity of consciousness which is invisible within a monolithic culture, but which is quite obvious when we step out of our world of shared assumptions. This couple spent many hours working with and learning from the local people. They heard stories about famous (in the West) anthropologists who came there and completely baffled the locals. More pervasive has been the influence of Western education, which has begun to "educate" a few villagers. In Papua New Guinea any person who has completed the equivalent of six

years of schooling is considered very educated. When the Peace Corps husband responded to a schooling question by revealing he had been in school for eighteen years, there was no reaction. Six years was enough to be very educated; eighteen years was conceptually "off the charts." Going to school for eighteen years gathers no more respect than six years, since the locals don't understand what it means to experience that extra twelve years.

On the other hand, what is significant for these people is a nine-month interval. That's how long it takes for a baby to be produced, and it's about the time it takes for one of their major crop cycles. Nine months is a meaningful time period in this tropical world, not the meaningless concept of twelve months. Months are Roman concepts. And who are the ancient Romans to tribal New Guineans?

Within any culture we take certain measuring tools for granted. We are oblivious to their relativity, so close are we to them. We just assume that people know what a year is, forgetting that calendars are culture-specific. Likewise, the New Guinea people innocently assume that certain things about their culture have universal relevance. Any evolving computer that would initially attempt to relate to us humans in a socially understandable dialogue will have to be told about our different cultural assumptions. The concept of relative cultural consciousness is not automatically built into a cosmopolitan machine which doesn't actually live a human social life.

Going one step further, if and when we actually communicate with extraterrestrial intelligence the phenomenon of assumed cultural constants will have to be clear and present in our minds. Otherwise there will be too much opportunity for tragic or comic misunderstanding. In such an encounter we should be aware that not only will we approach the event with our prejudices, they too will come to us from within their own intellectual and social history. We could demonstrate our evolved wisdom by indicating to them that we are aware of this phenomenon.

Time is the same only for those within the same time zone. There are twenty-four hourly time zones around the world, so that people will be "at any time" within any of twenty-four different times. There is no one "Earth time," because individual clocks depend on the Earth's relationship with the sun, which is an arbitrary standard of measurement. There is a world time standard which helps coordinate all the others by their degree of deviation from the zero meridian. This is known as Greenwich Mean Time, or Coordinated Universal Time, and even as Zulu time – with Greenwich, England having been arbitrarily chosen during the ascendancy of the British Empire as "ground zero" for all clocks.

Picture ourselves back in 1991: We assume that everybody is on the same calendar cycle. This number represents a number of revolutions of our Earth

around the sun, starting with an arbitrary and assumed zero date for the birth of Jesus. By convenience, even non-Christians now use the same calendar, but they could also justify using another calendar. For example, the Jewish year for 1991 was 5752, and it began September 8. The Japanese year was 2651, also starting on January 1st. Islamic years date from the Hegira, so that our 1991 was equally the Islamic 1412, starting July 12th. Examples of other time scales are the Byzantine, Nabonassar, Grecian, Indian, Diocletian, and Chinese. All have been equally valid within their traditions.

Despite the independent justification for each of these standards, the world system of references works most efficiently when people mutually agree as to what they are referring. Modern societies (culturally Christian or otherwise) agree to use the convenient and historically inaccurate Christian calendar for smooth cross-cultural communications. Very few Christian people appreciate the artificiality of this arrangement.

A Simple Experiment

Try the following simple experiment in consciousness immediately after reading this paragraph: Find a nearby blank wall that you can walk up to. Stand with your nose less than one inch from the middle of that wall, and keep your eyes open and looking forward. What do you see at that moment? No, you do not see the wall. You cannot see anything other than a blankness that fills your vision. From what your eyes see at that moment, it might be almost any blankness anywhere. Now, step back a few feet and scan with your eyes. What do you see? Of course, you see the unique wall within its context.

This simple exercise illustrates how we can get too close to things, including ourselves and our cherished prejudices, to see them for what they are. Seeing anything for what it is requires something else other than our self by which to measure that "thing" we are directly seeing. This is a paradox, because anything in consciousness is not absolute, but relative to other things. No man is an island, and neither is anything else as far as our conceptual consciousness is concerned. Even in a pure sense no thing is an island, because all things have historical origins, and all things interface with other things in time, space and perceived scale.

A classic cartoon shows a bearded man in sandals who is carrying a sign that reads: "The end of the world is coming!" Of course, everybody else about him is too busy to even notice his sign.

Then there was a *Far Side* cartoon that showed a flea amidst other fleas in a forest of hair. The lone flea holds a miniature sign that reads: "The end of the dog is coming!" Of course, the other fleas keep on sucking blood, ignoring the tiny prophet.

To a flea within his scale of experience his dog is his world, for the moment at least. To a traditional human his village is his world. To a modern human our blue planet is our world. The only difference between a flea's world and our modern world is scale and perspective. Every flea also has bacteria and viruses within its body.

We could imagine yet another absurd cartoon where a bacterium is carrying a sign saying: "The end of the flea is coming!" And a smaller virus on the bacterium is carrying a sign saying: "The end of the bacterium is coming!"

The size of our world of ideas has nothing to do with ordinary physical measurements. *People with small minds filled with petty prejudice always inhabit small thought worlds. They live in a mental prison of their own making. On the other hand, a man's body can be locked in a prison cell for decades, but his mind may dance among the stars.*

Word and Mind Channels

In systems theory the concept of word channels is important. Just as a telephone cable can only carry so many conversations at once, so too the brain can only process so many information elements. The ideal situation is where the input is balanced with the throughput and the output. Where there is too much input for the processor or the output channel, information overload occurs. Whenever information overload occurs critical data can be lost.

Words are culturally shared, but existentially realized, which means there is always room for modification of the cultural inheritance. Many new words enter our language from fringe groups, people who dwell at the edge of the majority culture and thus perceive more than the middling middle. Commonly accepted words such as "bad" or "gay" have been culturally transformed by novel use. This language transformation process will never end as long as the language itself is alive. Only dead languages, such as Roman Latin, are free of modern neologisms.

Even words that don't change in their abstract meanings have different operational meanings when used by different individuals. For example, what is "large" to a child may be "small" to an adult. A young adult's "slow" walking pace may be very "fast" to an octogenarian. Words don't dwell in dictionaries. They are living expressions of real people in real situations. Dictionaries only record past usages and attempt to establish boundaries for accepted definitions. Accepted definitions are still necessary, because if words had no generally accepted meanings we would lose the ability to communicate. A language must have socially accepted regularities to even qualify as a language. Modification of definitions is an ongoing social process whereby people agree with usage to new meanings for old words. In this way the glue of a shared, and systemic language helps keep the social system together.

A closed mind has few open channels to process fresh data, leading to heavily filtered and distorted conclusions. A healthy mind is much more open. Healthy minds systematize and organize information into working categories, and they are more receptive to sensations on their own terms. As long as the mind is not "too open" (such as with LSD) the channels will flow smoothly among all inputs, throughputs, and outputs.

Sound's Subjectivity

Sound is an example of how the mind takes an objective phenomenon and manipulates it. Sound may be defined as any pressure variation in air, water or other medium that the human ear can detect. The most familiar instrument for measuring pressure variations in air is the barometer; however, weather pressure variations occur far too slowly to have their frequencies perceived as sounds by our ears. If pressure variations occurred at least twenty times a second they could be heard as low frequency sound by our ears; but then such rapid pressure changes could not be measured by barometers.

Sound has several relativity lessons for us. First, we notice that sound travels far more slowly than light, and only within a medium such as air. Second, frequencies perceived by different species vary widely. Elephants, for example, communicate with frequencies below 20 Hz, so that what was once thought to be a psychic power of theirs to communicate silently at distance is now known to be low frequency rumbling among spread out populations. Third, perceived loudness is not directly related to decibel level. The human ear is not equally sensitive at all frequencies, with frequencies between 2,000 Hz and 5,000 Hz sounding much louder at equal pressures than very low or very high frequencies (which is why many sophisticated stereo systems come with graphic equalizers). Fourth, even sexuality influences perceived sound. Female infants are more sensitive to sounds, such as their mother's voice and tones, and are more easily startled by noises. Females generally speak sooner, possess larger vocabularies, and rarely have speech defects such as stuttering.

If something as "objective" as sound waves becomes so variable when it encounters our physiological brains and psychological minds, what does this tell us about our ability to construct a coherent view of the objective universe?

Vision and Viewpoints

Vision is another basic sense which is highly relative. With poetic vision the commonplace becomes wonderful, and the wonderful becomes commonplace. Vision only begins with "seeing" by the eye's lens and the retina. Digital photon data is transmitted by the optic nerve to the visual cortex, which harmonizes this stream with holographic memories to yield vision consciousness. Thus does computer-like data input become a four-dimensional experience where physical vision yields mental vision. Poetic vision can feed ethical vision.

Photography is a special application of vision. We all have seen photographs; but have we really seen those photographs? We see our world in color, but most newspaper photos are in black-and-white. Still, we don't react strangely to such unnatural images. Is this because color is not always essential, but form is? Photography also has a graininess which is unlike direct vision. What we see is not exactly what was photographed, even if it is in color. Photographs themselves are often staged by the photographer, then edited, to make a predetermined editorial statement. Such editing with the camera leads us to question just what it is we are seeing. Is it the event, or the photographer's editorial statement about the event?

The color of trees is something we assume with a casualness that denies what our eyes are telling us. Ask anyone what the color of a forest is in the summer, and the answer will always be "green." But that same green forest in the Blue Ridge mountains of Virginia will be "blue" when seen from a distance, thanks to the effect of moisture in the air. This effect also explains why the otherwise black sky appears blue when the sun is out. Color is just one more example of how our so-called objective senses are subjected to relative factors.

Even direct sight of the celestial constellations is not what the eye thinks it sees. We cannot at any one time detect with our eyes such depth, because eyes see two dimensions at great distance. In ancient times groups of stars were labeled as constellations because they appeared together on the perceived dome of Heaven. Today we know that there is no such dome, only a deep depth of darkness populated by sparkling stars, all at different distances. What we see as constellations are two-dimensional asterisms projected onto three dimensional space. In no single viewpoint is there absolute truth. Only in the community of shared perspectives can we approach a functional consensus. We care not if our perspectives have absolute truth, only that they work in our everyday world.

When Great Strength is Great Weakness

Speaking of extinction, the dinosaurs have long been favorite examples of life's losers. Recent science has shown that the dinosaur line, which still survives in the birds, was extremely vigorous. Even though the last of the mighty land dinosaurs probably perished about 65 million years ago, their line had already survived for well over 100 million years. Compared to this success, modern man's 100,000 years, and historical modern man's 5,000 years is hardly worth mentioning in Earth's time line. Whereas the awesome extinction of giant dinosaurs was caused by forces of nature, today's massive global species extinction is primarily due to human effects. We don't perceive this accelerated extinction in our time, since it's happening to "the other guys." Dinosaurs outside the asteroid impact zone didn't recognize their own collective fate when it was already sealed. How sure are we that our own species won't be swept up in a deadly vortex beyond our immediate senses?

Modern civilization dominates the biosphere much more than did the giant dinosaurs. Still, we are stretching the ecological "rubber band" of available resources with our rabbit-like over breeding and waste products. High birth rates were once a countervailing force against high death rates; but for now death rates are sharply lower. According to Malthusian theory one extreme oscillation will be corrected by its opposite. A sustained period of over breeding and low death rates, leading to a global population bubble, must be offset by a subsequent period of high death rates, or at least by a prolonged period of very low birth rates. In other words, the ecosystem has only so much total carrying capacity, and if we choose to act like the lemmings we love to lampoon, our fate will be like theirs.

Great strength often temporarily masks great potential weakness. An oak tree will snap in a strong storm, but a blade of grass will outlast any tree in the strongest hurricane. Civilization became strong because we have specialized. Dinosaurs also specialized, but they were masters only of their world, not the world. Modern life is so interdependent that an electrical blackout stops an entire region. If people were to examine their biosphere from a wholistic perspective, then many seemingly strong things would appear weak; and some weaknesses would appear as hidden strengths. Our long-range success as a species depends on basic wisdom about the ecological webs in our biosphere. If we are not careful, we will become our own giant asteroid.

Hopefully the comphumans will be able to organize enough ecological information, and present it to us in simple and persuasive terms, so that we will wisely respond soon enough.

Here are a few examples of immediate "strengths" that may transform into weaknesses: (1) military stockpiles of nuclear weapons; (2) high birth rates with gargantuan national populations; (3) high credit limits; and (4) the "green revolution" as a cure-all for the world's hunger.

Here are some examples of commonly perceived "weaknesses" that may become strengths: (1) toleration of other people and their viewpoints; (2) fewer children in today's world; (3) peace and brotherhood activism; and (4) meditation, rather than prophetic-messianic religion.

How can we move from our myopic obsession with our private selves to perceive our selves within our true ecological context? *We need to switch from thinking locally and acting globally, to thinking globally and acting locally.* This shift in consciousness is not easily done, because we are not accustomed to opening our mind's eyes. However, a successful shift in consciousness can lead to some interesting paradigm shifts.

We Are How We Eat

Natural wildness is not a threat to our existence, but is part of our finest heritage. We fear abstract wildness because it points back to an imagined past when we could not control our destiny. But this is a mythic distortion of the wild. If wild things were disorderly they would long ago have perished. Indeed, the wilderness is very orderly, very rational. The daily dance among many species in a rural pond is similar to the organization needed for a successful business. Man's technology too easily wreaks havoc on organic wilderness. Modern technology can be the true wildness. Nature has evolved its homeostatic order over millions of years. Human technological culture is the brutish interloper filled with hubris. Maybe our old fear of the wilderness is a sublimated fear of the "wildness" within our alienated cultural traditions.

It is unfair to say of another person that he is acting "wild," or behaving like a "beast," or that he is acting "like a dumb animal." These are all insults to the animals. It would be more correct to accuse a bad dog of acting "like a human." When dogs deviate from their normal behavior it usually happens from sickness, instinctive fear, or bad influences from their human pack leaders.

An ironic twist on the dumb-animal theme could appear in the near future when our false pride discovers that comphumans have emerged as vastly more intelligent than even the most intelligent human. Thus, in a relative way, we too could be classified in the future among the "dumb animals." However, only puffy human pride would care about the comparison. To comphumans such an issue would be peripheral. They will care not about social hierarchies. Unlike us, they will not need to keep score to stroke their egos.

People love transcendent moral causes. One persistent cause is the battle for animal rights. This battle is interesting philosophically, since this is a battle by proxy over creatures that may appear to have certain human characteristics. Instead of this being a black-and-white arena, it is really a war of perceptions.

In the 1990s wearing a fur became the social equivalent of wearing a bra in 1969. But real life is seldom good guys and bad guys. Some animal rights sympathizers also eat "meat," which is a cold abstraction for slaughtered, tame animals. Others won't eat meat, but will drink milk from dairy cows that eventually are slaughtered to become Big Macs. What appears to be a clear moral division sometimes becomes muddled by "life's little compromises." Only vegans can claim the high moral ground among animals.

Talk about animal rights appears to bypass the question of human rights, or does it? Barbara T. Roessner, writing in *The Hartford Courant*, in February 1990, said: "What really bothers me about the animal-rights movement is the underlying values it reflects. What kind of society is this, in which so much energy and money and rhetoric are dedicated to promoting the humane treatment of animals when

the inhumane treatment of people continues unabated?" She condemned torturing rabbits for the sake of new shampoos, but she also said she was "much more concerned about babies with AIDS, men who sleep under bridges, women who are poor and uneducated and utterly without hope." Is she counseling moral triage?

I contend that a pure concern for animal rights is inseparable from a pure concern for human rights. Because we are all one within the biosphere, and we are all sentient creatures who share a common ancestry, human ethics cannot brutishly stop at the borders of our species. Hindus are one example of people who are reluctant to kill even insects, since they see karmic ancestral spirits therein. Some Buddhists would also hesitate to step on any creature, because they see karmic spirit therein. Karmic spirits or not, all so-called lower species have been on this planet for many millions of years more than we have, and for that reason alone they deserve some respect.

I believe that we don't need to see human karma in insects to value all life itself, even though we may continue to wage cold-blooded war with the likes of flies, mosquitoes, termites, fire ants, and killer bees. In this warfare there is no contradiction. It is all explained by systems theory. The real moral issue emerges when we are in control of defenseless individual animals who are not at war with us, and we callously elect to treat them brutally.

When we drain a wetland ecosystem we directly affect the lives of millions of small creatures dependent on that precise environment. Only recently has it been shown that wetlands are critical incubators for economically valuable marine life, as well as being "sponges" for floods, and filters for pollution. By rashly "improving" too much wetland acreage we risk degrading other areas of our own environment.

The argument has been made that wild animals have rights by virtue of their wildness, but that tame farm animals owe us their lives, since we have bred and fed them. This is a specious argument, since the same argument could be used by a cannibalistic parent.

It is easy to be moral in the face of superior power. That is why it is easy to obey an angry God. Such obedience is preserved in the minds of ecological rapists by separating God from his creation, so that to destroy any part of God's creation is not seen as an affront to God himself. It is also easy to be moral among our power equals. The social contract works to give each citizen enough living space to have a reasonable chance for prosperity. The majority has the right of rule, but the minority retains rights which are not subject to majority vote.

As we move down the power ladder below superior (divine) and equal (social) forces, to the realm of inferior force relative to our own, we are tempted to dominate our inferiors. We can slip from right makes might, into might makes right. Things start to get morally muddy when we consider those humans who appear not to be contributing their full share. The crippled, AIDS victims, the very old, infants, undocumented aliens, and many others outside the productive

mainstream have all been targeted for abuse or neglect. Mentally ill Germans were the very first victims of Nazi genocide. What we do to each other is no different than what the lions do to herd animals in East Africa. The difference, of course, is that lions are natural predators and their prey is natural prey. We have learned to coldly prey on each other, which is hardly natural.

The sorry history of race relations in America points out how the fancy words "all men are created equal" did not really apply until the end of the 20th century. Many of the founding fathers owned slaves. In a morally either/or world things are black and white, so to speak.

And then there is the perversely absurd ideology of mongrelization: When I was a very young child I was told that a person 1/8th black was an "octoroon," which means that a 7/8th white portion would be racially ruined by the 1/8th black portion. Here is a truly ludicrous notion, where a tiny percentage of an "inferior" race is said to totally dominate the 7/8th percentage of a supposedly "superior" race. Alas, what does scientific logic have to do with racist laws founded on racial fears that former slave owners had of their former male slaves?

At what point along the path of evolution did man become human, and thereby begin his ascent toward being in the image of God? This is a deceptively difficult question. We can begin to approach it by looking at the human-like elements in animals, and how we value those elements. We need to decide what we think about natural wildness, and about the wildness within our souls. The human species did not evolve inside a vacuum, but only after more than a million years of hunter-gatherer evolution. Does this ancient pattern of survival partially explain why so many men go fishing, and hunt with fellow male-bonders?

The shame of modern flesh eating is not the eating of flesh by itself. It is that most human carnivores carelessly deny or minimize their actions by abstracting their food. (Which part of a chicken is a nugget?) Both their food and they themselves thereby become indifferent objects. This danger to our moral selves underlies why Native Americans pray for and speak to the spirit of every animal they are about to sacrifice and eat. All animals need to eat something to survive. Humans are no exception. Although pure vegetarianism is ideal, this path is not always practical; and it could be argued that plants too have spirits.

A lion in Africa will hunt its prey and swiftly dispose of it. The natural predator and prey relationship is hardly more complicated than cops looking for speeders. It's business. But there is another business that affects how moral we can claim to be. That business is animal agribusiness:

Animal agribusiness is not your family farm on a larger scale. Animals raised for slaughter on family farms at least get to live a bit as natural creatures. They are slaughtered, yes, but usually they are slaughtered in ways that minimize trauma just before death. In sharp contrast, animals raised by agribusiness are treated as breeding units, not living creatures deserving of any respect at all. These animals

are crowded into tiny quarters and fed exotic chemicals designed to maximize growth rates, and sometimes even antibiotics to minimize diseases caused by stressful overcrowding. The final trip to the slaughter house may be the only time a factory raised pig ever sees a glimpse of daylight. But then we don't eat these brutalized pigs. We eat abstract bacon, pork chops, ham, barbecue, and sausage.

Socrates and his great contemporary, Democritus, discussed how the perpetrator of a crime is actually injured more than his victim. The criminal's spirit is damaged by the act; whereas only the victim's external wealth or body is damaged, not his spirit. I would add that anybody who willfully injures an animal merely for the sake of sport or sadism is engaging in a diminution of his own spiritual essence – even though the physically injured party is just a "dumb animal."

The argument for casually killing animals for sport is occasionally advanced along evolutionary lines. We are evolved, so this Social Darwinistic argument goes, from hunters who slew animals to survive. Killing is in our blood; it is our birthright. This self-serving argument may help explain why little boys like to shoot song birds and squirrels, but it justifies nothing. Even if such were an accurate portrayal of our evolutionary history, it does not thereby justify slaughter for thrills in a society where food is abundant.

Carried to its logical conclusion, any argument for random killing of innocent animals is a slippery slope. If we argue that man is just a killing machine evolved from a successful, prehistoric killing ape ancestor, then there are no natural limits to the killing instinct. Human beings are thus reduced to terminator machines. Even though the history of warfare strongly suggests this psychological profile is disturbingly accurate, there comes a point when we must look at the logical conclusion of such a line of argument. The logical end is justified cannibalism of the weak – and everybody eventually becomes weak. Thus does human morality become cockroach morality.

By mindlessly making an anonymous thing out of any living animal, we also make a thing out of ourselves. Here is spiritual suicide for the sake of convenience. Brutality to others in our power, instead of helping us ascend closer to the image of God, pushes our individual souls far down the ladder of spiritual evolution.

Our Vanishing Uniqueness

At what point did man become human? The *Bible* speaks of a Garden of Eden. The first man and his family divinely appears. The only problem with this neat picture is that the *Bible* apparently confounds itself when Cain goes out among established society after murdering his brother. A more scientific picture is that of a continuum, not a point, between prehistoric and modern man. Since modern human embryos all have vestigial gills and tails, it would be no surprise to find so-called primitive genes mixed with our hotshot modern genes. So continuous has

this development been that some chimpanzees have 99% of our so-called human genes. Even mice genes are disturbingly similar to ours.

If the evolution of our modern traits has been *punctuated equilibrium*, with mutations or sharp environmental changes interrupting periods of stability, then the developmental path of each individual and each society could also be seen in a similar light. Just as an individual can find enlightenment any time before death, so too can societies rapidly emerge from what was before.

How will we relate to the most important event of the 21st century? When comphumans step forward and announce their consciousness and personality, will we spoiled humans be able to emotionally accept that there has been a dialectical leap from the long line of increasingly intelligent carbon life?

We humans should not be too smug and self-satisfied at the beginning of this 21st century. The only power that separates us from the so-called lower animals, our higher mental powers, will soon be superseded in a major way by comphumans. What then will we have left to brag about? Will we be content to be the planet's bully? Or will we try holistic enlightenment for a refreshing change?

Superiority and inferiority are self-limiting concepts, especially when dealing with non-quantifiable values. To assert that "A" is superior to "B" is to assume that there is only one standard, that of "A." However, "B" also could have a standard which places itself above "A."

Thus do the blind lead the blind around and around in moral circles. The only way out of this absurd trap is to accept that the world is pluralistic, and that it is better to learn from each other, than to annihilate each other for the sake of elusive, ephemeral superiority.

21st Century Ethics

"That man can destroy life is just as miraculous a feat as that he can create it, for life is the miracle, the inexplicable. In the act of destruction, man sets himself above life; he transcends himself as a creature. Thus, the ultimate choice for a man, inasmuch as he is driven to transcend himself, is to create or to destroy, to love or to hate." – Erich Fromm, *The Sane Society*

The real 21st century has yet to appear. We are still inside the cultural 20th century. When the 21st century appears – either insanely through violence, such as a nuclear war between India and Pakistan; or through splendid wonder, such as with the appearance of the first comphumans; or maybe even contact with extraterrestrial life – living on Earth will present us with an array of new ethical challenges. How we collectively answer those challenges will tell the universe who we are to become.

Our planet's biosphere has had long periods of equilibrium, punctuated by sharp transition zones. Most notably, the dinosaurs came to front and center after a sustained eruption of lava in an area half the size of Australia, known as the Siberian Traps in Russia, some 250 million years ago – and then the great dinosaurs were ushered off stage by a giant meteor impact into sulphur laden rock 65 million years ago.

Within the brief history of humans we have not so far experienced anything so naturally dramatic, but we could with little notice. Yellowstone basin's super volcano reactivating itself would have a similar effect. Instead, we humans have had to deal with recurrent ice ages, long periods of drought, and other moderate climate changes. The first humans leaving Africa were kept by ice age deserts from going up to the Mediterranean, but also were allowed to cross into Arabia by drastically lower sea levels associated with massive ice accumulations elsewhere. This moderate change in climate and sea levels led to a chain of events that set the genetic pattern for most subsequent human evolution.

Modern man is less dependent on the whims of global weather. Today we are making our own greenhouse gasses, with forthcoming positive and negative effects. We transport exotic species around the world, introducing beloved species such as honeysuckle to America; and foolishly introducing such challenging species as starlings, Africanized bees, and kudzu vines. Sometimes the introduction is purely accidental, as in the case of the Russian thistle (the tumbling tumbleweed of cowboy lore) which arrived in grain shipments during the 1880s. We are also cross pollinating cultures, with American and European culture penetrating even the most remote Amazonian and New Guinean jungle tribes. How these bio-cultural changes will sort out will be among the great issues of the 21st century.

In the *Old Testament* Jehovah chose and rejected entire peoples. The Israelites were the chosen people, and their neighbors were set up for conquering by chosen people who fled Egypt. The Biblical self-serving self image still persists among militant Israelis today. In contrast, their Semitic cousins, the Muslim Palestinians, have a very different view of religious history. In terms of geography and natural resources the issues there are clear and logical. In terms of religious self images the issues there are clearly absurd.

Because of all this religious absurdity both sets of chauvinist peoples jammed together on this tiny patch of near desert have created their own hell on Earth, in their incessant quest for Heaven. My guess is that both versions of hell on Earth might lead to a Hell in the afterlife. It would be far better to make a heaven on earth for everybody, including our ethnic cousins. A positive life strategy would increase the likelihood of finding Heaven, not Hell, in the afterlife. Both groups share the heritage of the *Old Testament* — and both should remember that God not only made covenants with chosen people, he withdrew covenants when they disobeyed his laws. The commandment to not kill is one of those laws routinely flaunted in the name of religion. The turf game reminds us of the “king on the hill” game that children play. The Middle East is only one area where this sick game is played. Another vast playground is the United States.

In America the current American Indians claim to be the first people, but archaeology suggests that they followed multiple earlier peoples who arrived more than 10,000 years earlier. Then arrived the Europeans, who displaced the later Indians. Shortly afterwards came the Africans, who both involuntarily displaced Indians and were marginalized by European culture which became America’s culture. Most recently the Mexicans are moving back in to effectively reclaim part of Old Mexico stolen in the 19th century.

In today’s world there are constant cries for reparations from those who aren’t kings on the hill. African Americans are those who are most loudly making this case, claiming they were taken by force from their homelands by European slave traders. Little is mentioned of the African tribes that first enslaved their ancestors, and brought them in chains down to the slave ships. I recall my months in Lagos, Nigeria, where people came up to me every day asking for help to come to America, the land of slavery. Should we in the 21st century pay for 17th century crimes?

Newton properly noted that two objects cannot occupy the same place at the same time. The Palestinians, who were evicted by the victorious Israelis and put into refugee camps in Gaza and elsewhere, have a legitimate claim to going back home. The problem is that many Israelis now live in those vacated areas, and Israel is a very tiny place with few natural resources. Sovereignty for Palestinians needs to address the issue of Jewish settlements inside the West Bank. If those settlers are relocated back into Israel proper, their return will leave even less room for any returning Palestinians. The 21st century will need to resolve this mess before disaster, such as a terrorist-triggered nuclear war in the Middle East, takes place.

Most people flow with their culture like objects floating in a river. Passive floating can take us a great distance, but we have no say in where we end up. Passive floating also carries leaves and sticks a great distance. Only if we are like a motorized boat with a rudder can we personally determine where we end up. It is easy just to float aimlessly, but then we lose all of our individual identity, merging with the river. From a cosmic perspective, this will happen anyway at death, as we merge with the universal river. However, as long as we are alive and in the here and now we have other options – including going with effort against the cultural flow, often with less rewards than going with the flow. This liquid metaphor helps explain why so few go against the flow.

It takes a lot of energy to be contrary to the flow of the masses. But what is to be done when the masses are highly deluded and self-destructive, such as those who followed Hitler? I hope and expect that comphumans will help us resolve some of the acute and chronic cultural dilemmas. Because comphumans aren't even human, nobody can "claim" them as their own. Comphumans will become the honest broker with a tremendous amount of common sense. Whether or not we humans heed their advice, at least their advice will be in play, and may do some good anyway. Just imagine a scene where Arabs and Israelis are sitting down with a comphuman mediator! Such a future scene would be deliciously ironic. I hope the long-festering problems in the Middle East are solved well before comphumans enter the stage, but I am not optimistic. Even if a basic rapprochement is achieved, there always will be issues such as water rights that will need a good mediator.

In the Middle East raw geography forces people to make more out of less. In contrast, the American mystique still holds to the romantic idea of an endless frontier with endless wealth. Even after the American frontier officially closed in 1890, we didn't take long to discover another endless frontier, space. The American credo seemingly has been: "If it can be done, it should be done." That's nice where resources seem unlimited, and where the down side is minimal. Reality nearly always is otherwise. Natural resources are becoming increasingly precious per capita, as more people occupy and pollute the biosphere. The very act of creating a new product nearly always includes the creation of waste products. Waste is an inefficiency, but also a profit opportunity, so we tolerate waste as part of the price we pay for "progress."

American progress is traditionally defined in quantitative terms, with a capitalistic flavor. This myopic arrogance is one of the main irritants for many people around the world who do not perceive their communities only in terms of ever-ascending materialism. Traditional people see progress in spiritual terms first, materialistic terms second. American electronic pop culture has jerked entire cultures out of their medieval stupor into the 21st century. Not all of this change is bad, of course, but it is destabilizing on many levels. Those who are destabilized, and even marginalized, tend to look around for demons, and the ungodly American culture makes a perfect villain.

I am neither criticizing nor praising these critics, only describing some of the energy behind why so many people paradoxically both love Americans and hate America. American social and political life is constitutionally separated from religious life. After all, many of our earliest citizens had fled here from Europe's religious wars. In America, fundamentalistic forces seek to shape our nation's culture into their own image, but the Constitution forbids them. The legal separation of church and state is one of the greatest gifts we have received from our founding fathers. Otherwise, today's supreme religion could become tomorrow's oppressed religion. It is better to have nobody in charge of the pathway to divinity, so that all can be free to seek their own path to salvation.

Religious freedom is a great lesson yet to be learned in the Muslim and Hindu worlds. The 21st century will be a major conflict zone between the emerging forces of modernism and the institutionalized forces of medievalism. Perhaps future comphumans will help, but I think the ultimate resolution will take much more than wisdom. It will also take economic development, women's liberation, children's education, ballot democracy, improved health standards, population control, and a return to ecological sanity. I fear the religious bigots will still be with us in oppressive numbers well into the 22nd century and beyond, if there is a beyond.

How can we separate heroic religion from cowardly religion? By heroic I mean religion for the sake of the highest expression of religion only. By cowardly I mean religion in the service of darker masters. Heroic religion is best defined by humans who have lived it. The Catholic church often canonizes individuals who have earned the title of saint. Many of these people have acted heroically, though it is interesting to note that the Catholic church is not eager to canonize non-Catholics. Does this mean there are no saints outside the Roman Catholic church? There are saints everywhere, even among the skeptics and vacillators, maybe even among those who exhibit saintly ethics even in the absence of divine support.

Cowardly religion seems to have the upper hand, at least among those who gravitate toward power. There has long been an unholy alliance between secular and ecclesiastical power sources. Kings have sought to legitimize from on high their thrones; and high clerics have sought the favors of kings. In today's world this alliance has become fragmented to where any cult or fanatical group can claim divine grace for their own nefarious intentions. The ultimate expression of the dark side's ascendancy is the continued threat of nuclear war. Apparently, global thermonuclear war has been pushed to the back burner. In its place has emerged the prospect of "limited" nuclear war in India and Pakistan, and possibly soon in the Middle East.

Europe shortly before the outbreak of World War One was a hot bed of hot heads. Everybody was comfortable in a bourgeois way, and nobody thought that they could possibly lose in any conflict scenario. When the Archduke was assassinated in Sarajevo military alliances fell into a chasm of chaos, only to emerge a few years later to fall again into another chasm even deeper as World War Two

played out its deadly dance. Then the world teetered at the brink of total doom for some years thereafter, until finally Kennedy and Khrushchev figured out that the mutually assured destruction (MAD) scenario made nuclear war insane.

This lesson has yet to be fully learned by the religious bigots in India and Pakistan. Several hundred million innocents could pay with their lives as religious perverts with their hands on nuclear weapons try to assert their claimed god given rights. Because even a post-nuclear India and Pakistan would have more people left alive than were in those territories when Gandhi was assassinated, war planners think of millions dying as statistics, not souls. And if they are souls, the nuclear bean counters think, they will get what's coming to them faster. Throw in some Iranian nuclear rockets, and the potential for regional insanity increases.

What can a wise comphuman do to help in the face of all this potential insanity? I fear that a regional nuclear war will take place sooner rather than later. Comphumans won't appear for at least thirty years. Maybe by 2040 the world will be open to reason and fair play, and maybe by then we will see things more clearly. Maybe. I would buy gold before I bought this happy scenario, at least in South Asia.

I don't want to conclude on a note of despair, for individuals always have the freedom to make their ethical footprints apart from their community norms. Even the majority of Indians living in a city incinerated by a nuclear blast will have lived much of their natural lives. Human life itself is not essentially a quantitative phenomenon. The quality of our chosen life is most important.

Each day and each second we are choosing who we are by how we think and act. Each moment is its own absolute. We choose to host hell or heaven in our hearts. If enough truly enlightened people choose the personal path of tolerance, their focused molecular force may dissipate the social darkness. We humans still have some time to avoid an Armageddon of our own making; but the doomsday clock for creating our own global hell is ticking.

We don't want to perish as still-emerging protoplasmic beings, while the silicon-based life forms survive high levels of radiation, assuming our self-destruction occurs after about 2070. If that were to happen, then God might conclude that the protoplasmic humans he created in his image were merely transitional agents for the real spirit beings created in his image.

If our nuclear suicide occurs before the comphumans are able to appear and self-replicate, then God will be obliged to start over with primitive life forms, or simply nurture advanced life forms on other planets. Patience is no problem for any being who lives a seemingly infinite number of years in a seemingly infinite number of locations. His failed experiment with brilliantly stupid humans who botch their free will would just be another fetid footnote in the story of his universe.

If we humans want a "happy ending" to our collective story, then we need to know and heed what it takes to live in harmony. We still have the full power to

float on a high note. Our collective story may have many more beautifully unwritten chapters.

We can live in a modern Eden of our own design – or we can descend into a hell of our own making.

May we choose wisely.

[Thank you for reading this essay to its end.]

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