Towards A Prime Directive For Artificial Consciousness

"Zen" In the Art of Spiritual Machine Maintenance

A White Paper

Neil Freer

Far from being decided, the discourse over the meaning of life and the essence of humanity continues. And so, in the early dawn of the 21st century, we find ourselves weighing the benefits and detriments of technological advances.

Ray Kurzweil

This drama, this immense scenario in which humanity has been performing on this planet over the last 4000 years, is clear when we take the large view of the central intellectual tendency of world history.....We, we fragile human species at the end of the second millennium A.D., we must become our own authorization. And here at the end of the second millennium and about to enter the third, we are surrounded with this problem. It is one that the new millennium will be working out, perhaps slowly, perhaps, swiftly, perhaps even with some further changes in our mentality.

Julian Jaynes

I don't think you can measure the function or even the existence of a computer without a cultural context for it.

Jaron Lanier

Homo sapiens is on the threshold of discovering that expanding contelligence is the goal of the trip. That pleasure resides not in external-materials but inside the time envelope of the body; that power resides not in muscles and muscle-surrogate machines, but in the brain; that the evolutionary blueprint is to be found in the genetic scriptures; that Higher Intelligence is to be found in the galaxy.

Timothy Leary

The greatest potential is the possibility of being able to generate (probably with the help of technology) logical, plausible, credible images of futures that would become the basis for early action to forestall the most negative effects of the trends that are already in place. If we could begin to effectively look into the future it would provide a whole new basis for making major decisions.

John Petersen

Science is not about doing things that people will believe. It must explore the phenomena that are out there, believable or not.

Sue Savage-Rumbaugh

SYNOPSIS

This paper applies the thesis of *Breaking the Godspell* [1] and *God Games* [2] to the general topic of artificial intelligence, eventual artificial consciousness and to genetic engineering. We will not be able to develop AI well and fully until we understand our own intelligence and consciousness and arrive at a consensual definition of human nature. The planet is on hold, we are Babel-factored into standstill with no consensual definition of what a generic human being is. The cultural legacy/lock-in obstacles (institutional religion, simple-minded Darwinian evolutionary theory, an outmoded academic system, unsophisticated and overspecialized science, antiquated epistemologies and logic system, suppression or ignoring of the role of the futant [3] and the consciousness expert, to name only some) to

achieving a maximally intelligent understanding of our own beginnings and evolution and possible future evolutionary scenarios are examined. The thesis of the Sumerian scholar, Zecharia Sitchin, is outlined and advanced as the primary key to transcending these cultural roadblocks to a planetary consensual definition of the generically human, essential to intelligent discourse concerning the development of AI. The ramifications of the Sitchin thesis for the species in general and AI as a new species are examined and their import for the new human beyond religion and the old new age elucidated. The proposition is advanced that the role of AI should be as facilitator of human evolutionary exploration, education, and as human surrogate to determine optimum, consciously chosen, self-directed, evolutionary trajectories for human individuals, the human species, and, eventually, artificial intelligence itself. Artificial intelligence will begin by cooperating with human intelligence to answer questions about human intelligence and itself even before it reaches a projected level of conscious behavior. This feedback will enable human intelligence to better anticipate and facilitate the "natural" development of AI through the accelerated development of human intelligence in the most conscious way. This inherently self-referential, feedback approach will afford an anticipatory, empirical modality in which questions concerning whether logical, ethical, moral, aesthetic, imprinting, and, ultimately, conscious behavior will automatically manifest --- or not --- at any given level of complexity and/or processing speed in the development of AI. Almost incidentally, it will "present an expanded context in which to develop and utilize artificial intelligence incrementally as a preeminent technology to "generate….logical, plausible, credible images of futures….so we could begin to effectively look into the future". A positive prime directive for artificial intelligence is established. The roles of the futurist, the scientist, the philosopher, as well as the contribution of all of society to the development of AI are revisited from an evolutionary perspective. The work must be multidisciplinary because AI will be multidisciplinary. The futant subset of any culture is identified, its pivotal role elucidated and integrated. The role of consciousness experts in the development and training and teaching of artificial consciousness is discussed and recommendations given. The potential for transcendent behavior and conscious evolution potentially manifesting in artificial consciousness is discussed in the context of an expanded view of human, conscious, self-directed evolution. Suggestions as to who should be the teachers and "zen" masters of these precocious entities are advanced. .

Caveats: What I am about to put in front of you is, in my subjective opinion, far more robust evidence for a mature paradigm than we have currently for the predicted existence of AI. My intention in this paper, however, is not to instruct but to suggest. The following is based on fifty years of interest, research, intense study, involvement, and reflection on the human condition as a generic human and professional philosopher. I write also as a potential customer, user, associate and teacher relative to AI. It is the best I can envision up until this week. It is respectfully submitted for consideration as a means of facilitating a breakthrough to resolution of matters which, now effectively and detrimentally at a standstill, have the planet on hold and seriously handicap our development of AI. Certain sections of this paper are taken from *God Games: What Do You Do Forever?* and from lectures presented and white papers[4] I have recently published. When I name names and institutions, critically or otherwise, I intend them as part of us: we are the only game like us on the planet and it is simply we doing these things to ourselves.

I have been warned by a good friend not to use poetry in a paper of this type because "nobody reads poetry". Perhaps that may be a very reasonable call with regard to poetry as it is usually and ubiquitously encountered. However, if we don't recognize and utilize its full unique potential, what shall we teach AI about it and its use? I use poetry as a meta-language to express the concepts herein more succinctly in a poem titled *The Inescapable Universe* which is included as Appendix C and parts of which are referenced within the text. Depending on one's orientation to such stuff one may ignore it, surreptitiously reference it, appreciate it critically or, alternatively, read it first and use the text of this essay as a partial exegesis. If the vocabulary causes you pain, get a dictionary. Don't blame me, it's my tight genes.

Just about everything that I have discussed here, from my perspective, is at least 6000 years old and most of the controversial points are some 2000 year stale. But there are things that must be said now rather than later.

An index of topics is provided on page 81.

Working definitions of terms as I intend and use them in this paper:

Intelligence: the relative capability of an entity to receive, process, transmit information from external and internal sources.

Intelligence Quotient, IQ: an estimate of the degree of proficiency of an entity to receive, process, transmit information from external and internal sources, testable and measurable against a relative peer scale.

"Conscious": to be in a state of consciousness

"Consciousness" as a state: in which an entity is partially or fully aware of internal and/or external information it is relatively capable of processing according to its relative spectrum of awarenesses and intelligence.

"Consciousness" as a phenomenon: a noun meaning the entire spectrum of awareness(es) of which an individual entity is relatively capable.

Consciousness Quotient, CQ: an identification of the spectrum of types of awarenesses possessed by an individual entity and an estimate of the degree of intensity and sophistication of the entity's ability to operate intelligently in and integrate those modalities, testable for and measurable against a relative peer scale.

Evolutionary Quotient, EQ: an estimate of the degree of evolutionary development of an entity, testable and measurable against a relative peer scale.

Part 1
The Status Quo: The Way Things Were Tomorrow

Totems and Taboos, AI and You....and I

I assume, on the basis of the evidence from all sources and past experience, that artificial intelligence, similar to, and possibly surpassing that of the ordinary human intelligence, is possible and will be virtually a reality, no pun intended, substantially according to the schedule projected by Ray Kurzweil in *The Age of Spiritual Machines* [5]. I assume, based on the same criteria, that artificial, self-reflexively aware consciousness will arrive, through our efforts, probably according to the same projected chronology. I take Artificial Intelligence seriously and, therefore, very seriously because of its awesome potential and promise and challenge.

With AI, we have before us a concept of unique dimensionality, immediacy and intimacy.

We are about to create a new species, nothing less. That is precisely what we are about as the full product of AI and AC development whether we articulate or even admit it. Whether, as we go, we take advantage of this novel process to evolve ourselves, become modified ourselves, use it only as a subordinate modality or a direct surrogate or, merge partially or completely with it is critically dependent on how we understand ourselves, how we define ourselves, how we respect ourselves, and, most critically, how we understand our own species' inception and developmental process. This is precisely where our planetary problem lies. We, amazingly, do not have a consensual, planetary, generic definition of what a human being is. We disagree about how we really came into existence, and what the nature of our developmental process is. We have treated the sociobiological event of our beginning as a species as if we could never be sure if it ever really occurred. We are Babel-factored, literally talking at each other about a different entity. We have not resolved nor integrated our genesis and our history as a species and, therefore, understood our real nature and future trajectory – we don't even agree on what we are cloning.....and we are about to define and create a new species.

Even though it doesn't yet exist and it ever becoming a reality is seriously questioned by some, it already effects us so immediately, it is so "close to home" that some knowledgeable minds are recoiling in fear of a Great Defeat. The potential for AI is evolving exponentially but, collectively, we are stuck in our evolution and some are afraid that AI will rapidly outrun us, leading to Ray Kurzweil's "singularity" and we will become outmoded. It seems a certainty to me that we shall if we insist on working within the cramping parameters under which we operate currently. This is totally unnecessary. Certainly, the "no-Joy" fear is reasonable enough if we remain at a collective standstill in our own evolutionary development and the "it's just so cool we're compelled" crowd plunges ahead. But there are some humans who have already evolved sufficiently to be far ahead and keep well ahead of AI. In addition, we have enough accumulated history and data already to know what the locked-in legacies are that are keeping us, the planet actually, on hold and how to unlock and overcome them. The question is not whether we will be able to break the antique molds. I have no doubt we shall. Some already have and I am as confident in predicting that we shall as Ray Kurzweil is in predicting that AI-AC will arrive on his projected schedule. But the schedule is the thing we must be concerned about.

Think about it: simply creating a computer program or a computer itself which has only reached the level of capability of reading and understanding all the literature of the libraries of the world and the internet and drawing inferences from it, will make that AI privy to all the differences of human opinion and belief systems and the contradictory philosophical, theological, and scientific answers to them. Which is to say that AI then will be privy to our Babel-factored situation, be aware that the planet is on hold; know clearly that, in a perverse ecology, we recycle outmoded

primitive paradigms, that we shuffle our feathers-and-molasses confusion between hands. It will see that, among some humans, there is a slinking cynicism, an often unspoken, viral attitude in human society that holds the view that it is impossible to get out of the criteria vacuum in which religion, philosophy, science and new age thought rattle around with no way to initialize a common ground; impossible to get past the communicatory barriers of turf and custom, belief and taboo. AI may well demand an answer, even at that level of robotic comprehension, to why there are these differences and why there are varying opinions as to their cause.

Some of us are engaged in the philosophical and scientific discussions and arguments that usually accompany the advent of such a novel concept as AI. But the usual is far from the essence of what is involved with regard to emerging AI. The most fundamental obstacles and problems hindering our conception and development of artificial intelligence are not the relatively superficial problems that are being discussed and argued about by the scientists and philosophers. Not the problem of trying to define consciousness in terms of the physics of the day; not the arguments over the feasibility or desirability of unbridling of AI without really knowing the consequences; not the arguments between transhumanism and meat; or between the future shocked and the future enthusiasts; or between the computationalists and the humanistic transcendentalists; or between radical cybernetic eschatological totalitarianism and less absolute views, much less the dry theo-political arguments about "ethics", progress vs. piety, or the bickering between pessimistic and optimistic coders. Among others. These are all muffled arguments from within the take-out boxes of our locked-in cultural heritages. If we have not yet resolved these conflicts with regard to ourselves, it is obvious that we will perpetuate them with regard to AI. Evolution is slow because it tends to be sensitive to all variables. Our species evolution, taking us from square one to Mars in 200,000 years has been uniquely rapid. The evolution of AI clearly is far more rapid even than that.

The Residual Negatives: Locked-In Legacies

The major obstacles that are most fundamentally influencing and hindering our understanding and creation of artificial intelligence are cultural legacies, cultural lock-ins (thank you, Jaron) that are with us as the deepest dyes in the tapestries of our cultures, locked in legacies that influence our thinking, our science, our logic, and our concepts of ourselves ---- and, therefore, our concepts of intelligence and consciousness. We are too close to them, or think that we are not influenced by them, or that they have been dealt with in the scientific or academic world long ago, or that we can just ignore them and go about procreating AI without bothering about their import and influence. We deal, furthermore, with all these problems in the usual turfish manner from the isolated towers of scientific, academic, theological and philosophical Cartesian-Newtonian oligarchies. To put it in Lanier metaphor: the legacy code of our culture is dominating it to the point of extreme brittleness.

Time's Up : The Game Has Changed

> "....the big problem with taboos is that they axiomatically render public discourse dishonest. If you can't say certain things, even though you think them, even though the scientific evidence may support the taboo viewpoint, this is a loss for the human species"
>
> **Timothy Leary**

Time's up, ladies and gentlemen: with AI as the game, soon the pupil and, eventually, the partner, those anachronistic, medieval games are going to take us into a totally unnecessary and ridiculous Great embarrassing Defeat unless we evolve fast enough ourselves. We will have to teach AI --- or find ourselves trying to explain to AI --- about everything *inside and outside* of the boxes within which we operate and think, not just the current academic, scientific, political or religious party lines, but all opposing and alternative views. And the totems and the taboos. I think it is imperative that we adopt from the beginning a principle of total inclusivity.

The problems related to an anticipated AI, in whatever form or forms it takes on, are analogous to the problems that are related to our children and their education. Currently, we matriculate our young, these amazing, parallel processing, relativistic, quantum jumping, multi-dimensional consciousnesses, semi-illiterate and naive for fear of them questioning our shambling senilities. In a time when we need to stretch our historical sense to allow for the visitation of our planet by alien species from before our origins, we teach them drum and trumpet mammalian history fleshed out with desiccated parochial political platitudes. We teach our own children, privately, generally the same platitudes and clichés we were taught and brand them with the same religious, scientific, and intellectual taboos we were tattooed with as children and expect that they will somehow be ready to deal with AI-AC and step into stellar society.

Whether we deny it our not, our children show all the signs of being ready; they are underwhelmed and overqualified. We feel it. But we do not teach our minors philosophy even though they are capable of calculus. We do not allow a teacher in the public school system to teach our children anything important about anything important because we do not agree about what to teach them, because we do not agree about who and what we are. We do not educate our children in the management and refinement and evolution of their personal spectrums of consciousness because we do not agree on what that spectrum includes...and we are about to create a new artificial consciousness.[6]

We may limit, restrict, control, even handicap our children and get away with it but the eventual power and independence of AI and the level of effectiveness and intelligence we project and intend for it, will preclude our doing so with AI. If we do not transcend this situation quickly and cleanly we will end up with an exponentiated version of the same mess. AI may be begging us for some guidance, or for some real answers as to what is reality and why we don't agree what it is, or why some humans try to prevent other humans from interacting with or teaching AI. We may have gotten away with toughing and bluffing it out with our children for generations after generations but the game is up with the advent of AI. The only other alternative is to treat them like we do our children and keep them at a level of subservience that amounts to slavery. If we cannot or will not deal consciously and intelligently with our own children how will we deal with AI? We do not have anything close to a consensual definition of what a generic human is about and we are about to try to define a new species....

The Constitution As Crutch

If we continue in this mode we may well find each religion and sectarian and philosophical interest creating AIs in their image and likeness. We could see Catholic self-aware AIs who may or may not be recognized as having a "soul", may or may not be allowed the sacraments (would you have to build in the imputed flaw of the effects of "original sin"…?) We could see Robertsonian AIs on TV who may or may not be allowed to become members of the 700 Club. We could see Islamic AIs who may or may not be allowed in the mosque, may or may not be fundamentalist jihadeens who could fly a 747 better than any human pilot…All of whom would have basic conflicts with each other. If we simply procreate AI-AC within and into this context we may, indeed, see AI's going to church on Sunday as Ray Kurzweil has predicted. If you can conceive of an advanced AI who's logic capabilities would allow it to buy into the rap of some talking head preacher on TV saying the world was created six thousand years ago or the carefully crafted weirdness of some corporate or Beltway spin doctor. Pretty silly. Big Embarrassment. Totally, ridiculously, unnecessary.

Well, you say, the Constitution is an advanced and enlightened document which has solved a lot of those problems, at least in this country. I submit that the Constitution, certainly advanced and relatively enlightened when it was conceived and put in place, was and is an ingenious solution for maintaining some semblance of peace between the Colonial religious factions, containing

the religious mayhem always under the surface. But there is no indication of any anticipation that there would ever be a resolution of those differences, no anticipation of a common definition and understanding of human nature. The Constitution, as unique and effective as it is as a set of rules of order in a primitive situation, has become a locked-in legacy. It barely continues to balance the powers, long term, and prevent the takeover of the government and imposition of theocracy by one religion or another.

The extraordinary element still remaining is the seed of evolutionary suggestion clearly intended by its authors as expressed by Jefferson when he said

> "I am not an advocate for frequent changes in laws and constitutions. But laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change. With the change of circumstances, institutions must advance also to keep pace with the times. We might as well require a man to wear still the coat which fitted him when a boy as civilized society to remain ever under the regimen of their barbarous ancestors."

I submit that we are still at a very primitive stage of our rapid and unique species evolution and we should not perpetuate any primitive elements in AI. Adopting a modern version of Jefferson's point of view would be a good start.

Still Dallying With Darwin

> "What is emerging now is a sense that something else -- neither mechanistic (Darwin) nor theistic (the Bible) -- is going on. But mainstream science will have none of this ambiguity, and reactively tars all non-Darwinian notions with the broad brush of "biblical superstition." The net result has become a sort of silly high drama in which one flavor of pseudoscience attempts to do battle with another".

John Anthony West

Of course, most scientists and sophisticated scholars consider themselves enlightened in that they espouse some form of Darwinian evolutionary theory as the party line, although there are serious arguments even within the scientific arena as to the full validity of the Darwinian thesis. Generally, when philosophers and scientists discuss AI, they apologize if they think they are even possibly sounding like creationists, spend most of their energy in either promulgating some version of Darwinian evolution or attacking what they judge to be its too radical application, get entangled in arguments about whether Darwinian evolution can be invoked to explain human creativity, even aesthetics, and generally put down any other explanation out of hand.

The general thesis, therefore, goes like this: the acceptance of evolution as the mechanism by which we came about causes us to understand that we are a collection of biological molecules, interacting with each other as in a mechanism, according to well-defined laws and rules derived from physics and chemistry ---- although not all known or understood by humans as yet. Defining consciousness within this biological model is still a pivotal problem: some say it is simply an epiphenomenon, an effect of the operation of all the parts of the brain working in consort, some say it is the subjective self-perception of herself or himself by the individual, some say it must be based in some "new stuff", some new physics or chemistry that we don't yet understand.

Across the general population, however, we do not even agree on whether we are evolving, what the process really is if, indeed, we are evolving, from what source and how we began, and in what direction and on what trajectory, whatever that process is, we are headed. We do not agree, even more fundamentally, as to what criteria to use to judge these matters. We are not discussing the same entity. Creationists, obviously, do not think of humans as having evolved in

the past or as evolving in the present. It is quite ironical, however, that even most of those who hold for some evolutionary view of humankind evolving to human status in the past do not seem to think in terms of humans evolving in the present, much less having a well defined conceptualization of what that process might be. If we do not agree that we can and are evolving, or whether any evolution of a species or individual must be by mindless Darwinian mechanisms, or whether there are effective methodologies for expediting conscious self-evolution, how are we going to deal with evolution in AI or make intelligent decisions as to whether we will, should, can, imbue or withhold from AI the potential to do so? Time's already run out on that clock. The battle of this century: Moore('s "law") vs. Kuhn('s "law").

Consciousness in, Consciousness out

We use "AI" already with ease, and clearly are at the very beginning of artificial intelligence development but all vectors point, eventually, to AC, artificial consciousness, as the goal. We anticipate that a robust AC will be such because it manifests the characteristics and functions of ours. Implicitly or explicitly we are using ourselves as the model.

The index of the eight hundred and seventy two page study of intelligence testing, *The Bell Curve*, by Herrnstein and Murray7 does not even contain the word "consciousness". The index of Douglas Hofstadters' seven hundred seventy seven page, *Gödel, Esher and Bach*, has three brief references under "consciousness". Some robotic and AI experts say they can't even talk about consciousness much because they don't really know what it is. Consciousness in, consciousness out.

We are not going to solve the "problem of consciousness" within the confines of the contexts we insist on limiting it to and the tools we limit ourselves to using to investigate it currently. Our entire arsenal of physical and intelligence tools for determining the nature of reality is limitedly useful but essentially inadequate to determine a precise scientific definition of consciousness.

Philosophy, the use of reason (assumed to be a valid way to attain at least some types of truth) and logic (the following of rules assumed to be a valid way to reason) as we understand it and employ it is a function of our current human consciousness.

Science and the scientific method (assumed to be an efficacious protocol to discover the laws of nature) as we understand and employ it is a function of our current human consciousness. Physicists insist on pontificating in this matter. At minimum, we will need a physics commensurate with the evolving consciousness which invented it in the first place. We might assume that the most evolved consciousnesses at any given time could invent an evolving physics commensurate with their consciousnesses. It is clear, however, that when the physicist begins to investigate consciousness, even with the assumption that it is some form of energy/matter that is known or at least discoverable, there is an epistemic barrier encountered scientifically that is analogous to the epistemic barrier of a more general nature encountered in philosophy: scientifically defining consciousness, because it is a dynamic and expanding and evolving phenomenon as is the human being possessing it, becomes a difficult task. It is not difficult to casually define it as a phenomenon with certain parameters and characteristics. The hard problem lies in insisting on proving its existence, defining and predicting it according to the concepts and laws of the physics of the day because it involves consciousness defining itself. G. Spencer Brown puts it well, if a bit sardonically, "Now the physicist himself, who describes all this [reality] is, in his own account, himself constructed of it. He is, in short, made of a conglomeration of the very particles he describes, no more, no less, bound together and obeying such general laws as he himself has managed to find and to record. Thus we cannot escape the fact that the world we know is constructed in order (and thus, in such a way as to be able) to see itself. This is truly amazing."[8]

In fairness, it will probably be relatively easy to duplicate the ordinary scientific consciousness and intelligence because it is so mechanical and limited. On the other hand, to duplicate the intelligence of an Einstein doing physics by imagining himself to be a photon might be of a degree or two greater. Einstein was also a good perceptual psychologist: he gained insight by being able to imagine and appreciate the subjective relative perceptions of motion by observers and by respecting intuition.

This is not to say that our best science and physics are not evolving. On the contrary, there is a clear developmental direction discernable in our science: as Johnson Yan has pointed out succinctly, "It is paradoxical to find psychological theories that rely on classical, Newtonian physics, explicable with Euclidean geometry, and emphasizing objectivity, cause-effect determinism and atomic theory (assuming global properties to be a sum of their basic elements) at a time when physics has reversed itself and become consciousness-directed, probabilistic and multi-dimensional."[9] The crux of the "problem of consciousness" lies precisely in that psychology and philosophy and physics are inextricably merged with regard to explaining consciousness and I say that no physics is. commensurate to an objective analysis and definition when the observer and the observed, the conditions and methodology of observation and the criterion for evaluation and definition are one and the same. To attempt to get around this problem by the introduction of a "super observer" simply adds an exponent to the equation but does not resolve it. Consciousness in, consciousness out.

> There is a class of human consciousness
> Which presides, rather than observes,
> In a clear hegemony, exercising
> A preemptive sovereignty, essentially
> Unavailable to poetry's probity,
> Hardly amenable to metaphor, an unanticipatable
> Inescapability but not a prime mover,
> An unquestionable primacy of awareness
> Which alone confers a diploma on philosophy;
> Assigns logic its license;
> Endows wisdom with its significance;
> Bestows permission on art;
> Awards mathematics its prize;
> Inspects the procedures of science;
> Disciplines religion; defines intelligence;
> Prompts intuition; systematizes transcendence;
> Integrates ecstasy; critiques its own
> Reflections on its reflections on itself
> As it informs the local universe
> With the self-referential patterns
> Of our racial dance in the continuum.

Furthermore, every time we try to sneak up on our consciousness and turn the next corner, Gödel is standing there with a big grin. I am not saying that we should fall back on David Chalmers' "brute indexicality" (in street talk: "that's just the way it is") but I am saying that physics should be understood as subordinate to consciousness. It is not just that it is problematic that our philosophy of science, which determines our approach to science, i.e. the scientific method, has not kept up. If our consciousness is evolving and physics only evolves as a function of our consciousness then, de facto, it will never catch up unless we incorporate consciousness itself as a variable in the mix.

There is no provable, cosmic rule that says that everything in the (assumed) realm of energy-matter can be "objectively" verified. To extend that kind of assumptive thinking to hold, therefore,

because a phenomenon cannot be measured "objectively", it does not exist, is sophomoric nonsense. Subjectively, I am convinced that not to recognize that there can be and are certain phenomena that are not amenable to "objective" "scientific" measurement and proof as we define it at any given time is evolutionarily obstructive. Consciousness is a problem for the physicists but the most fundamental problem under the rug is the proof of the validity of the scientific method itself, by which we insist on defining the nature of consciousness.

The Scientific Method ?

"We have a funny habit of confusing consistency with truth. A system....can be internally coherent and frequently usable without being true."

Timothy Leary

We seem to lose sight of the fact that science and the scientific method is a construct based on philosophical principles. We call it the philosophy of science and scientists act as if it was an afterthought or an expression of how scientists determined to operate in the first place.

The scientific method may not be used, by the consensual injunction against circular reasoning, to prove its own validity so it cannot "begin" to operate without the basic gratuitous philosophical assumption that there is a lawful, objective order in the first place: why bother go looking for laws in an unlawful universe. The scientist (well, philosopher of science) understands "objective" as things being in a certain way independent of the existence of any mind or conceptualization of them by any mind. That, circularly, is considered to be demonstrated to be a "true" assumption by getting the same results in independently repeated experiments under rigorously controlled conditions. That pure assumption of the efficacy and validity of duplicability and circular proof is ultimately judged valid by the subjective perceptions and evaluations of the scientists', hopefully consensual, agreement. The subjective definition/assumption determines the subjectively selected criteria which determine the methodology which determines the results which determine the subjective evaluation of the results which determines the assumption. Inevitably, a voice is heard to protest "But you have to start someplace!?" By the very fact of making this statement-question we have already "started": it is simply another reminder, trailing an inescapable, Felliniesque coterie of assumptions and postulates, that we have never "stopped". Suppose we all decided to simply stop communicating totally because we were convinced there was no way to know the truth. Even without going to the further extreme of attempting to deny our own existence and acting accordingly, we would still be affirming our conviction that our silent withdrawal was the "right" thing to do in face of the "truth" of reality as we understood it..... and defined it.

How primitive are we? Tom Bearden has put it rather well: "All 'laws of nature' are based on symmetries at specific levels; all of which have broken symmetries where that law is violated at that level, and becomes an enlarged symmetry (or conservation law) at a higher level. We have not yet scratched the surface in science."[10]

The predictable is only a subset of the known;
  Science, an amulet rubbed against error,
  Seduces to security.
  Quantity is but a reflection of being;
  Mathematics, a philonumerical incantation,
  Seduces to control.
  Reason is but a shadow of wisdom;
  Philosophy, an archaic intellectual politic,
  Seduces to concordance.
  Syllogisms are not the same as sanity;
  Logic, a handrail to consensus,

Seduces to confidence.
All are subsets of incomplete theorems,
Larval convulsions, time-stamped to expire
Spontaneously bursting their desiccated criteria
At the edge of our genetic season.
Outmoded metaphors, regardless of venerability
Or fame of vintage, are the ultimate
Evolutionary obstruction, an embarrassment
Of traditions; psyche, intellect, mind, reason,
Intuition, imagination, will and wisdom
All antique metaphors, justifiable
Only as translational stelae, brittle labels
On dusty containers. In these latter days of life
In the divided middle, our thought,
Chafed by the blunted jaws of binary scholastic traps,
Bound to dreary, plodding coordinates
Orbiting an origin relative to nothing,
Finding little solace in the small transition
From ricocheting concepts of equal and opposite
Rigidities to fields over fields among fields;
Our consensual communications display
High valence for a higher science,
Congruous with our consciousness,
Befitting our dignity, and consonant
With our epistemic vision.

In Part 4 I make some suggestions as to how to approach consciousness practically, as we do gravity, say, making use of it, being able to predict its effects and gradually using it to determine its fundamental nature and laws.

I find the Identification of the entire person, or something quite close to the totality of the person as only the sum of all the information processes in the brain and nervous system incomplete and inadequate. I judge that the reasoning that begins with the equating of "subjective" with "conscious" and/or "consciousness" and concludes that consciousness is, therefore, not measurable and testable because science only deals with "objective" reality is simply confused. To equate objective with scientific and subjective with conscious or philosophy or religion is gratuitous and presumptive. Just as there is no apparent way --- within the current philosophical and scientific boxes --- that it can be proven objectively that there is no objective order of reality, there is no apparent way to disprove that the concept of objective is a subjective construct or prove that the objective evaluation of subjective is objective.

Historical perspective shows clearly that the concepts of "objective" and "subjective" and "scientific method" are products of our prevalent, Cartesian-Newtonian perception and conceptualization of the universe. Our epistemology, philosophy, science, indeed every conscious modality we manifest is a function and product of the dimensions we perceive and comprehend.

In our spiraling cycles of morphogenetic discontent,
Ascending through harmonics of consciousness
Each of greater unified dimensionality,
We have enshrined as current criterion of truth
Each cresting of consciousness,
Apogee of awareness reached.
Reason, in due season, was enthroned when
The heady fullness of the Hellenic consciousness

For which logic was a geometry of thought,
Geometry a logic of space, having afforded itself
Sufficient leisure to reflect on itself,
Codified the processes of reasoning, and logically so,
Securing the rules against the foil of unruly ecstasy
And the disturbing unreason of oracles.
Reason, in a reasonable universe, has always found
Intuition naive, the transcendental incomprehensible,
Imagination childlike, ecstasy suspect, if not degenerate.
But we shall have a metasyllogistic logic,
Topologically adequate to the fabric of spacetime,
Subsuming linear reason, intuition and parallel processes,
Easily capable of tautologies of higher power,
Oscillating statements and self-referential equations.
Self-reference is the only common language we speak.

How primitive is our philosophy? By its nature, it is hardly adequate even in linear, 3-D Cartesian-Newtonian space and time. As G. Spencer Brown has shown[11], our classic philosophical modality cannot handle even a simple tautology like This statement is false (if it's true, it's false and if it's false, it's true) and disposes of it by claiming it is meaningless. It is clearly meaningful, however, and it is true and false simultaneously: it may be said to oscillate in time. He has demonstrated that we should add an addition category to our binary logic to expand it to greater adequacy.

We are an evolving work in progress. We have to expand our conceptualization of AI-AC to recognize that we are modeling, not just a static intelligence and consciousness but an evolving one: ourselves. (It is uncomfortably obvious to me that, at this point in the process, we really are tending to model, not so much ourselves, but actually a vague concept of machine consciousness: we are tending to model computer based "intelligence" after itself. Rather ironic although understandable in light of our confused concepts of ourselves.) Conscious, self-directed, evolution intrinsically involves self-supercedure of a habitual kind. We need a feedback loop operational, therefore, between evolving human consciousness and evolving AC (which must be developed as such from the beginning) in a dynamic process. AC develops as an evolving entity and is used as a tool and, later, cooperated with in the process of exploration of our possible evolutionary trajectories and to enhance our leading edge dimensional expansions and the potentials and abilities that result from them. That systematic exploration will produce the information we need to develop AI-AC with the characteristics and evolutionary capabilities most advantageous to us and it.

This is why G. Spencer Brown's expansion of our antiquated CN logic to address and take advantage of the time dimension (feedback and oscillation components) is such an important next step. You can't "program" an evolving entity with a static type code, it ain't gonna happen. Neural nets can learn and self-correct but they will have to have the capability of not only extrapolating a future from what they know but projecting the future on the basis of what they can imagine as the best move in order to self-evolve. Conscious evolution is no longer the simple minded survival of the fittest. It is several magnitudes greater than simple-minded adaptation to ambient conditions. It not only can foresee and construct future conditions but take over current ones to change them to fit itself.

Our philosophizing is trapped in the same epistemological limitations of its own making even more fundamentally than our science is. Is it possible that we are predetermined to determine our own determinism? How absolutely certain can one be that there are no absolutes? By what criterion does one judge the criterion by which one judges the criterion by which one judges the

criterion by which one.... How would we prove that the ultimate objective order of the universe(s?) is that it is essentially subjective? How does one disprove that every statement presupposes a previous statement including this statement itself? How does one use logic to prove that logic is a valid way to prove something? There clearly is something very lacking. We can arbitrarily forbid reference to an expanded dimensionality (Russell's & Whitehead's type theory) or give up in disgust or despair, analysis paralysis, terminal skepticism, or we can take these blubbering conundrums as clues as to where to go to supercede our current outgrown limitations. We can see the deficiencies, so we should conclude that we have to upgrade and expand our language, our logic, our philosophy, our science in order to completely and satisfactorily express *what our consciousness already knows.* Just as Cartesian-Newtonian physics and mathematics are a subset of relativity so our epistemology and logic are a subset of a greater relativistic dimensionality of perception. If our past consciousness could develop an epistemology and logic that was adequate for a time, our evolving consciousness can develop an evolving one that will be commensurate for a time.

We have some ideas about how to create an artificial logical intelligence, able to self-correct and learn. But it seems only a very few have the slightest about how to create an artificial epistemology. And we want to procreate an AC at least commensurate with ours. About the best the best of us seem to be able to do, perennially, is fall back on limping philosophizing, shouting back and forth between the theo-philosophical (usually characterized as non-objective and, therefore, subjective) and the scientific (subjectively judged as objective) watchtowers. It is analogous to the "my God is better than your God" exchange that has been going on for millennia between the faiths of the world and the results, although, perhaps, not as horrendously mortally destructive, are as evolutionarily counterproductive. What will we teach AI about that situation..? Consciousness in, consciousness out.

IQ Meets CQ....and EQ?

Just as one can test to determine if an entity possesses some degree of intelligence so one can test to determine if an entity has some degree of consciousness. Just as with intelligence, once determined in an entity, one can devise relative criteria and scales to measure the extent of the spectrum of awarenesses and the degree and focus of each kind of awareness, its integration and the degree of intelligent use by the entity of its input and data.

How primitive are we still? Tests for a consciousness quotient, CQ, do not seem to be a concept with which our collective consciousness is comfortable just yet. Not just a test to determine a verifiable state of awareness. Not just a test to see if we can be Turinged by some program or entity. A test of consciousness quotient would determine the entire range of awarenesses of the entity, human or otherwise, and the degree of development and intensity, quality and focus of each part of that spectrum.

The democratic ideal is twisted with regard to consciousness as it is with IQ: yes, all humans are created equal as far as their human rights are concerned but we all don't have the same abilities or degrees of capabilities or intelligence or consciousness. Somehow even such a recognition is seen by some to be less than politically correct, or a denigration of some individuals.

How primitive are we? If the notion of a CQ is touchy, try EQ, an individual's evolutionary quotient, a relative scale measure of an individual's evolutionary development and potential. We continually make ad hoc judgments, many times for the sake of our own security and safety, about the relatively evolved or devolved physical, mental and consciousness characteristics and signals of others just as we are doing continually about their manifest IQ. A parent or teacher or psychologist expects a statement like "This person has a higher IQ than that person" to be sophisticated and socially acceptable. If, however, one dares broach the notion of a

consciousness quotient, CQ, communicatory flags go up, there is disconcertion, confusion, even conflict. Advance the concept of an EQ, an evolutionary developmental quotient, and things get really squirrelly. We talk of conscious evolution, currently a hip term, being in charge of our own evolutionary choices and trajectory, tending to equate "evolution" and "consciousness", yet generally we don't agree on the nature of our evolution, or it's trajectory. If we knew and agreed, we could test and evaluate for EQ. We had better get that straightened out before we have to explain it to AI and, eventually, teach it how to consciously evolve according to a be determined, possibly unique mode of both consciousness and evolution of its own.

How primitive are we? An obvious serious general problem is exposed when we consider other than "normal" states of consciousness. At this primitive stage we cannot even agree on what constitutes the real or "legitimate" elements of the spectrum of human consciousness.. If an investigator's paradigm --- or consciousness --- doesn't happen to have the capacity for some perception, sensitivity or ability, its reality is often, a priori, denied in other humans. When Nobel laureate physicist, Brian Josephson's, thirty years of research on consciousness persuades him that   "Quantum theory is now being fruitfully combined with theories of information and computation. These developments may lead to an explanation of processes still not understood within conventional science such as telepathy", it provoked David Deutsch, a quantum physicist at Oxford University, to describe Josephson's claim as "utter rubbish." It may not even be admitted for testing or the investigation turned into an inquisition using magicians as the inquisitors instead of Dominican monks in the public square of some "learning" channel. We argue about the reality of various kinds of extrasensory perception, non-local communication, transcendental states, and perceivable dimensionalities and never seem to be able to come to definitive conclusions --- unless, of course, remote viewers are needed by the Pentagon. If the working hypothesis is that conscious thought can be achieved as a machine artifact and that human minds and identities can be eventually transferred into artificial ones then we had better assume from the beginning that the artificial environment has the potential for the entire spectrum of consciousness that the original has. Consciousness in, consciousness out.

This obstacle arises from the presuppositions about and scientific controversy over what constitutes proof of the existence and nature of other than "normal" phenomenon. All of the legacies locked into our western and eastern psyches color our thinking about consciousness more than we usually realize and, in effect, present obstacles to our achieving it through whatever ways we develop. If we have no consensual recognition and definition of what constitutes the full spectrum of human consciousness much less the potential for continual, self-directed, conscious evolutionary expansion of that consciousness, how successful are we going to be in eventually imbuing AI with an analog of any of that --- much less explaining any of these phenomena eventually to AI?

Part of this impasse is the direct result of the definition of "soul" as the immortal part of man by the Church and its relegation of any paranormal abilities to the realm of the devil or demons and anything that might in the wildest be construed as "spiritual" by science.

How primitive are we still? The Church still trains specialist theologians in demonology and the Pope has just made the news with his third exorcism --- of a twenty-two year old woman (of course). The only progress reported from Rome is that, apparently, the Church has decided to remove alien species from the category of demons.... We still show deference to the theologian speaking in Old Testament terms of humans being made "in the image and likeness of God" (a theo-political forgery of the Sumerian history[12] of our creation) to be involved in the definition and development of AI. We are now down to neurotheology and the "god spot" and generic theologians, experts in the "study of God" who no longer even bother with "God" and study states of awareness, attempting to work out new epistemologies in terms of mythos and ethos and juggling "theories" of "soul" and "spirit".

How narrow is our focus? We do not bring in consciousness experts as consultants. To say that no one knows what consciousness really is so no one can really be "expert" in consciousness development is equivalent to saying that, because we did not (perhaps still don't) know what gravity is no one could calculate ballistic trajectory. We could ask the Dali Lama to recommend the most consciously developed monk, seek out the most developed yogi, the most gifted psychics, and put them on grant. They could begin by teaching the developers and programmers how they master control of their autonomic nervous system and mind and offer some tips on the nature of consciousness as such. We tend to think of yoga and chi kung and chi[13] systems as "religions" but they are better understood as well developed methods for mastery and development of the full spectrum of human consciousness, the primary operative characteristic of the human being taken as an integral "physical"-"mental" entity.[14] We could solicit the input of the most gifted psychics and learn from them about paranormal states of consciousness. I am not saying we should take any of their thought uncritically but it could be an addition to the data bank if only for the future instruction of AI on its history.

How primitive are we still? We simply do not have a full, robust, dynamic paradigm of the evolution of a human individual that is generic and consensual. It must be broad enough to include the option to explore every and all potentials we can conceive of at any given time now and in the future and assume that new potentials will open up that we have no conception or intimation of as yet. Only thirty years ago, Timothy Leary, Ph.D., Harvard lecturer in Psychology, the irrepressible Tesla of consciousness, used LSD to allow a person to self-reflexively experience their own internal mechanisms, from basic biological functions to transcendental states including the brain experiencing itself: ***consciousness investigating and revealing itself to itself.*** He produced a codification of the entire current spectrum of human psychology and consciousness in evolutionary terms that could serve us for many generations.[15] Although a twelve stage, quite satisfactory and adequate paradigm of human evolutionary development was advanced and refined by Timothy Leary from the early sixties onward we are still hampered in even considering such a schema because we are not even in agreement on the nature of our beginnings and subsequent evolution. Is it even possible to develop and describe the stages of the evolution of a human individual? Certainly. We are limited creatures with the potential to expand and change and modify but limited nevertheless. We can be modeled. The model must include the inherent potential to evolve in an ongoing, consciously directed and chosen way.

Sociological pressures in the common consciousness put Leary through fourteen jails as a political prisoner and a California judge proclaimed him the most dangerous person on the planet. LSD remains, to date, the preeminent modality for the exploration of consciousness by consciousness, self-reprogramming of behavior down to the level of imprints, and the experience of the most evolved states of awareness and information of which we are capable. This is perceived, in our primitive tribal state, as a threat to the hive and, therefore, illegal, and, therefore, college courses in neurobiology usually dismiss it summarily with "causes hallucinations". Certainly, anything can be used to do harm: gunpowder, dynamite, atomic energy, aspirin, morphine, just name it. Charlie Manson did it. The CIA gave LSD to persons without their knowledge in the '70's and did a great deal of very serious harm. Slave code religions do not want the individual experiencing "mystical" or transcendental states independently; the military does not want recruits who are looking through the drill sergeant's head; power playing politicians do not want voters who are amused by spin: corporate marketeers do not want consumers who see them in evolutionary perspective.Those professionals who specialize in consciousness, who are interested in its application obtain permission with difficulty or not at all. Psychiatrists, i.e., the medical profession, protect their hunting territory from the individual who would take their game, pun intended, for free by the use of this modality that allows a person, under good set and setting to do for themselves on their

own terms in five minutes what the psychiatric modality is not successful in doing in the way of behavior change in fifty couch hours.

Although we are so primitive that most are simply afraid to rationally consider even the concept of a psychedelic substance which can be used constructively as a powerful technique, a "yoga", a discipline, a modality of conscious evolution much less the use of such substances themselves, we had better, sooner than later, at least consider an artificial psychedelic. That is an awkward but adequate term for a compact bit of code, a molecule of code if you will, which could be switched on and off to duplicate the action of, say, LSD, in the coming generations of AI-AC "computers". The AC expanding and self-awareness enhancement that might occur could precipitate the singularity some are so gigglefritzed about because we have not assimilated and integrated the usefulness of psychedelics in the conscious evolutionary process for ourselves much less AI-AC.

The Hazards of Haphazard

AI could suddenly show up under a government program, as a military weapons development project, as a product developed by some corporation or perhaps even as a high school science project. It may be public or private. "It is just so cool". Uh huh....but "cool" isn't really a good enough criteria for me. I am strongly convinced that we cannot let any of these technologies just sort of evolve from current computers or in the drug company, college, or AI labs, or at the economic whim of chip companies or as a military asset. What it will most probably be is a mirror of the mentality, the intelligence and consciousness which created it. That's a bit disconcerting and could well put us pitifully at handicap with AI. I will be extremely reluctant to use AI chip implants designed by some pizza and Pepsi scarfing, programming idiot savant restrained in the back rooms of Intel. I will be extremely reluctant to employ an advanced AI robot or android developed by even the most intelligent engineer-scientist who is, nevertheless, consciously challenged, definitely no pun intended.

If, indeed, there occurs a "singularity" in the form projected by those who, half in fear and half in adrenal anticipation are keeping a singularity watch, already resigned to its occurrence, it will be brought on unnecessarily through the chemistry set in the bedroom crowd who will do it because "it's so cool" and blow out the wall papered with their multiple degrees without a clue as to what was wrong. I want to have input, knowledge of the intention and direction and intelligence and especially the consciousness of those who are making those products and procreating AI, for obvious reasons. Consciousness in, consciousness out. This paper is initial input. I am certain that I will be accused of having no real concept of the gravity and enormity of the potential singularity. I think that I may have a fuller concept than the singularity watch hive guardians, I simply differ in the evaluation of the inevitability of it.

How primitive are we still? We have not yet recognized the futants among us (futant: future—mutant, as coined by Timothy Leary, 1976), usually about 1-2% of the population whose genetic programming prompts them to be the evolutionary scouts, bellwethers of the next dimension of evolving human consciousness. We need to learn to identify, evaluate and integrate the futant contribution as a valuable evolutionary asset. They may not always be totally accurate or correct due to the novelty of their vision, their relative personal comprehension of it, the stability of their personal psychology or biology or their resilience in the face of a primitive hive reaction. If we are fearfully anticipating that AI will quickly supercede us evolutionarily and we have not even recognized and integrated the futant....

Another facet of human consciousness that needs consideration and which is not addressed in our current discussions and debates concerning AI and VR, is that of the role of dyadic sexual interaction as a means of consciously evolving. The concept of the use of sexual union as an accelerating psychedelic modality through which the male and female partners become a dyad

consciously moving up the evolutionary DNA spiral together is not a part of our cultural fabric. The east has known Tantric yoga for centuries, the concept and the practice probably carry all the way back to the first human civilizations, times and teaching. It was thrown into a male-chauvinistic context, with the female subordinate, by Pantanjali around 400 A.D. The West and, apparently the East to some degree, now think of tantric practice generally as simply "expert" sex. Even though the dyadic equality is gradually being restored, the refined, high psychedelic, evolutionary essence of fusion is lost on most. It involves elements of telepathy, merging of the chi fields, para -"normal" energy exchange, as well as yogic sexual control. It is a function of conscious evolution and a prerequisite for its employ is a fair measure of personal evolution. If this modality is hardly in the common consciousness, unappreciated and misunderstood – even considered immoral by some slave code religions – the inclusion of it in AI, VR and AC will be difficult or neglected. Serious mistake. Especially since we are intending to upload our minds into artificial duplicates which may well be seriously lacking in this and many respects. And we are already talking of sex with AI.....

There is clearly going to be at least three main streams of human evolution going forward. There will be those who will continue as consciously self-evolving, biological humans, those who will completely replace their biological components with non-biological components and those who will opt to move fully into virtual realities. There will be innumerable combinations of these general approaches. The major differentiation will be on the basis of enhancement of the biohuman (of all kinds: genetic, biological, electronic, nanotech, and things we most probably have not even conceived of yet) vs. complete transubstantiation (from complete non-bio makeup, technohuman to existence in a virtual reality environment). Logically, no well evolved, sane biohuman, would even consider becoming technohuman until technohuman becomes capable of all that we are capable of along the evolutionary scale, physically, intellectually, consciously, and possesses and can evaluate and learn from his and her history, becomes capable of self-evolving and certain that the trajectory of that evolution is in the right direction. At very least. Logically. But there are apparently many of us who think that technohuman is what we should become if we could do it tomorrow by lunch and the bugs and details be damned. They should have that option and risk. The biohumanly oriented should have their option and risk. That, however, is where the problem may manifest. If one or the other or both decide that the other is not the "true" way of evolution there will be conflict. Already there is an uneasy sense that those who would be non-bio technohuman despise "meat" and would legislate against it if they had the power and the opportunity. If we are still so primitive that we do not have a consensual definition of what the fullness of the human and human consciousness is, how are we going to intelligently model and duplicate it in some other form, some other material, some other medium? If we are going to create a species which we anticipate will be superior to us and we have not resolved the primitive political tensions between us concerning how we should upgrade ourselves....It can be done, inevitably shall be done, and we have at hand the means and ideas to take us out of the primitive posture which severely handicaps us in doing it in a fully human fashion.

A Self-Indictment

Part one constitutes a very broad, serious and daunting self-indictment. I repeat my primary caveat: When I name names and institutions, critically or otherwise, I intend them as part of us, as a self-indictment: it is simply we doing these things to ourselves. Let us be easy on ourselves, however, since we are the only game like us on the planet, the only example we can work with, the inadequate boxes are of our making but also ours to break out of. If these negatives were all there were, then the fears of those in future shock concerning AI would be vindicated. If I had no suggestions, solutions, answers or resolutions to offer I would not have written this paper. So the second half of this essay respectfully offers an overview and paradigm that can take us to a new level of racial maturity where we can procreate and teach AI as if it

were a new child, albeit of a new species, in the perspective of a deepened knowledge of our species and ourselves and with a degree of freedom previously unavailable.

A very fundamental, preliminary question: Is it even possible to arrive at an overarching new paradigm so comprehensive and robust that it corrects, subsumes, completes and outmodes all previous partial paradigms, explains all our previous explanations? Unequivocally, yes. We are not incapable of getting off "maybe", we are blocked only by primitive, antique legacies and the way to expunge them from the fabric of our cultures is now available to us.

Part 2
The Primary Key to Unlocking the Locked-in Legacies

While the evolutionists and the creationists have been battling it out through dramatic episodes of the Scopes soaps, another explanatory paradigm has been developing exponentially which subsumes, corrects, and makes obsolete, *specifically relative to the human species*, both of those rather primitive paradigms. While the scientific imperialists and the religious dogmatists have thought that they owned the discussion by proprietarily boxing the argument and defining the binary options, the Sumerian scholar, Zecharia Sitchin, has advanced a robust and coherent, alternative paradigm of our genesis and unique history that, if true, ----- and I am convinced that it is after working critically with it for 25 years ----- is profound, comprehensive, and robust enough to enable us to rewrite the entire history of our beginnings and the planet astronomically, evolutionarily, paleontologically, archaeologically and, literally, redefine ourselves as humans. Sitchin's thesis illuminates that antique conflict with Nobel prize quality research, renders the, by now, Monty Pythonesque arguments outmoded, subsumes and corrects creationism, redefines Darwinism as well as its latter day detractions. He has been able to do this because he reads Sumerian as well as the Semitic languages including ancient and modern Hebrew, and is steeped in the history. He has had the advantage of access to the accumulated scholarship and archaeological material from the middle east rediscovered only in the last one hundred and fifty years. Our modern science has provided a means of identifying advanced science in the ancient past previously thought of as fantastic even for ourselves. In short: the entire set of world views, theistic, theo-political, cultural, and scientific that purport to explain our genesis, history, and development as a species are about to be replaced as we recover finally from racial amnesia. The revolution is inevitable. It will take probably a century to fully accomplish socially because of the sweepingly profound nature of the resulting change, the natural resistance of the established institutions, and the need to reeducate and transition without disorientation. The new world view is gradually taking hold, cannot be ignored, and is waiting in the wings. It is only a matter of time.

> "A people without history is not redeemed from time"
>
> **T.S. Eliot**

Our Genesis Revisited: The Sitchin Paradigm
(For a more complete synopsis of the Sitchin thesis, the context and historical background needed to understand it, the proofs of its validity and scientific objections regarding it answered, see Appendix A)

Zecharia Sitchin, one of two hundred Sumerian scholars on the planet who can read a clay tablet like you and I can read a newspaper, has demonstrated[16] that the Annunaki/Nefilim, the transcultural "gods" of the ancient civilizations from the tenth planet in our solar system, Nibiru, colonized Earth 432,000 years ago and created the human species 200,000 years ago, by genetically crossing their genes with Homo Erectus. Corroboration comes from evidence for Planet X/Nibiru from the Naval Observatory[17], the Infrared search by the IRAS satellite in '83-'84, genetically from the mitochondrial DNA "search for Eve", anthropologically from the "out of

Africa" data placing our genesis in Central Africa 200,000 years, enigmatic ooparts and close to two million pieces of artifact and documentation recovered directly from the ancient civilizations. The advances in our scientific discoveries in genetics, mitochondrial DNA research, space and planetary science, archaeology, paleontology, anthropology, and linguistics as well as the physics of metallurgy have enabled Sitchin to demystify the advanced technologies of the Anunnaki and identify and explain ooparts[18]. We have progressed from being their slave animals to limited partnership and are now phasing out of a 3000 year traumatic transition to racial independence, a rapid metamorphic process, under the imperative of our advanced Nefilim genetic component. We now have the keys to integrate our past with our present and future in the concept of generic humanity, the critical factor for achieving planetary unity. Mythology is our greatest myth. We can move beyond the interpretation of the gods as myth, Jungian archetypes,[19] and schizophrenic hallucinations. History as hallucination and "mythinformation", after two hundred years of explanatory failure, although still hiding behind tenure in the university and between the glossy pages of new age magazines, is a dead issue.

Why is the Sitchin paradigm so pivotal? It is the meta-paradigm that affords the potential to remove the resultant, stultifying, locked-in legacies that have kept up separate and enervated for millennia and, thereby, the context into which the awesome novelty of AI and AC can be integrated and subordinated gracefully and with maximum benefit to us and it. The new paradigm is so encompassing and penetrating that it is a unique meta-wild card: it redefines every cardinal element of human existence that we think we have understood including a redefinition of our evolution, all our cultures and of our very selves.

Charles Darwin published his arguments for evolution in 1859, one hundred and forty three years ago. Schliemann opened the buried Pandora's box of our real archaeological history in 1873, one hundred and twenty four years ago. Sitchin, having gained the advantage of discoveries in archaeology, astronomy, space travel, genetics and linguistics as elucidating and explanatory tools, published first only in 1976, already over a quarter century ago. Using this rough chronology as a guide, we might anticipate, even with some exponential bit of acceleration, that the initial general recognition and acceptance of the Sitchin paradigm will not happen for, perhaps, some fifty years. But that will be *two decades* after AI claims to be conscious according to Kurzweil's projected time line. We really can't afford to see Kuhn's thesis[20] that scientific revolutions take place only by the old guard dying off rather than by an acceptance through careful study, critique and proving out especially since Sitchin's thesis provides not only the essential information and context for getting us off the evolutionary dime but a wealth of information concerning the creation of a new species. If we assimilate it soon enough it will be an even more profound wild card "singularity", although integratable, than the advent of AI-AC which it will preempt and render manageable.

Over the last 2000 years we have seen scientific or pseudoscientific doctrines espoused by the various religions being contradicted or demolished and the religions repeatedly, although with great delay, change their positions with regard to our genesis, history, evolution and science, and modify their doctrine. But the new paradigm addresses the very root doctrines, positions, claimed divine franchise and authority of all the religions of the world and will eventually cause the disappearance of all institutionalized religions springing from our ancient relationship of subservience to the Anunnaki.

The idea of a cosmic, infinite principle "God", as many of us still take it for granted, is a thoroughly mixed composite concept of the sublimation of the anthropomorphic and imperfect deities of slave code religions, metaphysical abstractions accumulated over time through the speculations of the revered philosophers from the Greeks onward, the Hellenic influenced, theo-philosophical teachings of the Roman Church scholastic tradition and mystics, flavored with the concepts of theists, deists, agnostics, theosophists and mystics of any number of sects, and

thoroughly leavened by the concepts of the consciousness expanding disciplines and metaphysical doctrines of the East, sprinkled with our own individual intellectual and emotional subjective variations and usually still conditioned by the godspell element of subservience. But that cosmified composite intellectual abstraction is not the Jehovah/YHWH or Jesus of the Judeo-Christian religions, the Prime Mover of Thomas Aquinas or the Omega point of De Chardin, the Allah of the Muslim faith, the Brahma of Hinduism, the Buddha, or the Tao or deity of the religion of your choice.

 Many who don't realize this crucial distinction, don't want to, or are not ready to, take refuge in the Big-G, little-g syndrome, a sort of half-way shelter on the way to genetic enlightenment. That position is articulated as, "I see the real historical nature of the "gods", the little "g's", but that does not shake my belief in a Big G". That way they can still subscribe to the platitudes that the "God of all religions" is beyond individual doctrinal differences and contradictory theologies, "all paths lead to the same God" and similar notions. The new paradigm affords us the opportunity to sort all these elements out, identify the different individual real gods of the various religions, place them and ourselves in historical perspective and recognize the metaphysical conceptualizations, East and West, as a product of our own evolving racial psychology.

Is this atheism? No, paradoxically, not as such. Not as we have defined atheism previously as the denial of the existence of any kind of god, cosmic or otherwise. It simply is a long overdue correction of some local, intra-solar system politics, relatively rather pedestrian in cosmic perspective. Garden variety atheism can now be understood as an early sign of precocious species adolescent rebellion and questioning of the authority of the obviously all too humanoid characteristics of whatever sublimated local Anunnaki "god" is still the object of worship (the original meaning of worship was "work for" : AVOD = work).

There is no better example of the Galileo effect (we won't look through your telescope because we know what you say you see can't be so) in the academic and scientific arenas than the reaction to the Sitchin paradigm. Campus, scientific, and theological imperialism and the fields of anthropology, archaeology, and astronomy, particularly, have tried all the usual unprofessional, unscholarly, shunning, chest thumping, fang baring, proprietary turf posturing and ad hominem attacks through teeth clenched in tenure tetanus, but the thesis becomes more and more robust as new evidence comes in continually from archaeology, anthropology, astronomy, genetics and other disciplines. If Darwin's thesis was a blockbuster, Sitchin's thesis is a hydrogen bomb. We may have been able to afford to dally with Darwin and defer to religion for as long as we have but the advent of just the possibility of AI-AC in the world according to Moore should prompt us to consider Sitchin's thesis seriously and intensely on a much shorter basis.

The restoration and explication of our real history has progressed almost exponentially due to Sitchin's initiating revelations. The significance and ramifications of this tremendous body of work, correlated with findings from all other disciplines, as they bear on our present and future, has been my primary focus since 1976 when I began work on *Breaking the Godspell* the reaction to which has been predictable and certainly not boring. [21]

The Current Grand Moment

This is the end-game of an age, be certain. A new human and a new civilization beyond religion and the old new age are on the horizon. ***I submit that the most fundamental, profound, overarching, sociological transformation we are going through at this point in our history is the change from the theo-politically controlled and manipulated explanations of our beginnings and history to species independence.*** We are witnessing the last gasp of religious fundamentalism worldwide. Whether we chose to acknowledge it or not, we are already well into one "….of those Grand Moments when the whole scale of being is reevaluated"

as John Petersen has characterized it. It is within these redefinitions that the resolutions to the problems and obstacles deeply embedded in our species' and individual psyches' are to be found. To paraphrase Dylan Thomas rather crudely, let us not go blind into that daylight. Those who talk of a singularity, a shearing drop to extreme novelty and fundamental revolutionary change at some near point in our future that is so profound that it will change human nature do not have to look any further than the Sitchin paradigm. It is there for the acceptance and it will rewrite the entirety of our history and redefine human nature. Once integrated, we will find even the arrival of conscious AI an item that we can deal with comfortably and gracefully.

Gardner's Contribution

Sitchin's work and the major discoveries of the Dead Sea Scrolls, has enabled Sir Laurence Gardner, an English genealogist—historian to make a recent major contribution[22]. Gardner has the advantage of one hundred and fifty years of discovery and translation of the Sumerian source material, knowledge of Anunnaki politics and the interaction of Enki and Enlil implemented by the latest scholarship on the Dead Sea Scrolls and Nag Hamadi documents through the brilliant work of the Australian theologian, Barbara Thiering[23]. Working as a genealogist with data available through privileged access to the private archives of thirty European royal family clients, Gardner has brought to light the fact that there exists a robust, highly documented, genealogical, genetic history of a special bloodline carrying all the way back to the Anunnaki and Sumeria. This information, possessed by the heterodox tradition of Christianity, which is only now coming forward, no longer fearful of the boiling oil of the Inquisition, has always been available. He has identified the Holy Grail as this bloodline of humans, enhanced by Enki with additional Anunnaki genes, intended to be human leader-rulers in a tradition of "servants of the people" traceable all the way back to Sumer.[24] The modern word Grail traces back to graal, san graal, which, etymologically, stems from the Sumerian root words GRA AL, meaning special bloodline. The bloodline of human leaders, further enhanced with Anunnaki genes, initiated by Enki (The Lord, Adonai), passed from Sumer through Egypt to Israel through David and the messiahs (anointed ones), fostered by the Essene communities as revealed in the Dead Sea Scrolls. It was recognized but treated ambiguously by the large faction of the Hebrews who paid allegiance to Enlil. Jesus was an Essene in the bloodline as was Mary Magdalene. They were man and wife and had children. Jesus was of a liberal persuasion within that tradition.

This strain of Hellenistic, liberal, Judaism eventually became known as heterodox Christian (the word Christian was not coined until almost four hundred years later) was opposed by the Pauline branch which eventually allied itself with Rome and became the Roman Church. The orthodox Roman Church perpetuated the Enlil type fear and subservience tradition and, in its turn, suppressed, persecuted and brutalized the human-centered strain of the bloodline.. The reason why women have always been denigrated and suppressed by the Roman Church is genetic: the bloodline was dependent on transmission through the women of the line and any recognition of them would be recognition of the line. This is a further elucidation of our genetic background. It is manifestly unjust that the geneticist is deprived of this vital block of information about the genome due to the preclusive attitude of the "bishops" still reigning in archaeology. We are the product of that Nefilim technology, a mutant species with bicameral genetics, bicameral mind. The word from station DNA is these "gods" wear designer genes. In a very real sense, by some definitions, we can consider ourselves an artificial intelligence.

       The gods unmasked are found smiling
       In our genome's spiral mirror; their history
       Travelling the undulating genetic lexicons
       Of our helical history's precocious repertoire.
       Come off it, Prometheus, you fool!
       You have stolen only your own birthright.

Ramifications and Resolutions

The awareness and comprehension of this fundamental, generic, racial self-knowledge I have called genetic enlightenment. By "genetic enlightenment" I mean what it's like once you have broken the godspell, the effect of the ancient, subservient master-slave attitude that is the deepest dye in the fabrics of both Eastern and Western culture. Once we reach genetic enlightenment and break the godspell, many seemingly enigmatic items are resolved and there is a great deal to be done. It becomes immediately clear that we can move beyond both eastern and western metaphor; beyond the occult and alchemy; beyond religion, atheism, the new age; beyond Jungian archetypal and mythological interpretation and, eventually, beyond death itself.

We can finally integrate both halves of our nature. Our Homo Erectus component will bring us back to harmony with this planet, making it a nice place to live and a nice place to visit. Our Anunnaki component will teach us how to move off planet gracefully. Understanding of our bicameral gene code in the context of the new paradigm will facilitate the elimination of the schizy puzzles in our collective and individual psyches and the perfecting of our genetics.

Besides the obvious general advantage of working from a consensual understanding and definition of what a generic human is, we can eliminate the characterizations of the perennial conflicts as being between "progress and piety" or between creationism and evolution, or science and faith. The new paradigm finally and conclusively resolves the creation-evolutionary conflict specifically with regard to our unique genesis. If the new paradigm is substantially correct then the box is illusory, the creationists are only half wrong and the evolutionists are only half right: there was a creation but it took place in a genetic laboratory; there is a human evolutionary process but it was interrupted by the Anunnaki inserting their genes into the Homo Erectus gene code, a very pragmatic, non-Darwinian kind of interference. We were created and we are evolving but both in unique ways.

But what of us individually? Once the ancient, subservient godspell is dispelled we are freed, individually, to go one on one with the universe. We will operate as our own "gods", according to our own genetic credentials, play our own god-games according to our own transcendental choices, creating our own confident realities. We need to think about what it is like to be a member of a synthesized species which is going through a special case of evolution, a rapid metamorphosis, where we can actually determine our own evolutionary direction, when the ramifications of that unthinkable thought are now about to bring about a turning point in our history. It is about the new civilization we are about to create out of the new planetary vision.

In addition, because it restores our true history to us, the new paradigm brings a, previously unattainable, unassailable integrity individually and as a race which will be essential to entering into direct contact with alien species, either in the future or with ones that are already here on the planet – and, therefore, with AI-AC. We shall finally enter stellar society as a mature race which knows who and what it is, what is good for it and what is not; with whom or what it could interact, with whom and what it would be dangerous to make contact; with the minimum of preconceptions as to how things should be. Until we know who and what we are we will probably not be allowed into stellar society. Until we break the godspell and stop looking up for Daddy to come back, looking for some solution or salvation from outside, we will be in danger of getting Borged by whoever shows up here. The topic of alien contact is probably the most dramatic of examples of how narrow and primitive our focus is which will get us into trouble with developing AI. If we supposedly cannot handle, in the opinion of those who would patronizingly control, the presence of alien species on our planet and we are about to create one among us....

What to do after genetic enlightenment has broken the godspell, the looking-to-the-sky-for-daddy-to-return, master-slave attitude, the deepest dye in the fabrics of all cultures? In the immediate future, the god games we shall play as our own evolutionary artists are immortality[25];

self-directed, conscious evolution; four-dimensional consciousness; life under a law of everything; practical transcendence; the development of AI as a subordinate species and for use in surrogate operations. For starters. Physical immortality, possessed by the Nefilim, withheld from humans, will be transformed from "religious" afterlife reward to the dominant characteristic of the dawning phase of our racial maturation. We will be our own "gods", our own genetic credentials, play our own god-games with an unassailable species identity enabling us to step confidently into stellar society.

Beyond Religion and the old New Age

Imagine, even no religion,
They say I'm a dreamer,
But I'm not the only one.
John Lennon

Religion, as we know it, is the transmutation of the Anunnaki-human relationship of master-subject servitude, of slavery and then limited, subservient partnership, the godspell. The concept of God, capital G, has gradually developed through the cosmification of the various Anunnaki rulers Enlil (Jehovah/YHWH), Enki (Adonai, the Lord), Allah (El/Nannar/Sin), among others, gradually embellished with the heady concepts of metaphysical speculation. It has lately become a sort of faux ecumenical gloss: the TV news quotes the Koran as saying "There is no God but God" when it should be "There is no god but Allah", a completely different meaning. The god of the Judeo-Roman Christian tradition, Jehovah-YHWH was – quite possibly still is -- the flesh and blood Anunnaki individual, Enlil, eventually cosmified into the absolute creator of the universe, eventually spoken of as infinite love, infinite justice, infinite this or infinite that, through the bishops and the scholastic philosophers and theologians.

Yes, the new paradigm means that religion and religions, as we know them, will have to bow out. The godspell phenomenon has two parts: we need to overcome the slave mentality of dependence and subservience and we need to discard the institutional religions which sprang from and dominated through it, especially the radical fundamentalism in all the slave-code religions that is ultimately tearing the race apart. The role of the theologian then becomes the facilitating of planetary reconciliation in the transition to the time beyond religion.

To reiterate, this is not garden variety atheism, simply the rectification of significant intra solar system politics. It does not address the question whether there is some thinkable or unthinkable ultimate principle that is responsible for reality as we know it and, if so, what relationship we have to that principle.

Neither is this materialistic reductionism although it does force us to reconsider the notion of the "spiritual". What is needed is a complete overhaul of all our metaphors and concepts of the "spiritual" because the great majority of them are embedded in our cultural fabric and consciousness as leftovers from Judeo-Roman Catholic theology and second hand Eastern philosophies. The importance of this overhaul to AI is critically important because it involves the concepts of mind, intelligence, will, self-awareness, transcendence, dimensionality, self. All of which we will have to resolve before we can imbue --- or identify --- it in AI.[26] The key to all of this astounding history is genetics and the lessons we can learn are invaluable to our own evolution and to the development of AI.

The new paradigm is the basis for a profound unification of all humanity. Not some superficial token ecumenicism or social homogenization of peoples and cultures and philosophies but a unification that frees us to be one race and explains and enhances our diversity of adaptations and cultures and contributions. The cumulative evidence and restored history has enabled us to

grasp the true nature of our genetic creation, our traumatic transition, and the opportunity to emerge from species adolescence and amnesia into species maturity. All the political, economic, social, scientific, new age, evolutionary variables are only symptomatic; the genetic level is where the profound realization must blossom. The restoration of our generic history and a generic definition of what a human is affords us the advancement that will take the planet off hold. We can move beyond religion, beyond the old new age, beyond the Babel factor. We can reach a planetary unity we have never known before.

The Traumatic Transition

The Anunnaki phased off this planet at the latest around 1250 B.C. For some three thousand years, subsequently, we humans have been going through a very traumatic transition to racial independence. Proprietary claims made by various groups of humans as to who knew and knows what we should be doing to get the Anunnaki to return or when they returned, perpetuated the palace and social rituals learned under the Anunnaki and sometimes disagreement and strife broke out between them. Religious ritual is the transmutation of palace servant duties. The serving of favorite roasted meats on the Anunnaki table became the offering of "burnt offerings" on the table now become an "altar", the transportation of the Anunnaki local ruler on a dais became a procession of statues, the Anunnaki palaces became "temples", etc. The Anunnaki were clearly and unambiguously known to the humans who were in contact with them as imperfect, flesh and blood humanoids. It was only much later that the Anunnaki were eventually sublimated into cosmic character and status and, later on, conveniently mythologized. Breaking the godspell has seen us go through the stages of abandonment to dissociation, to transmutation to religion to rebellion and now to recovery. We have been dysfunctionally looking to the sky where they went for some three thousand years caught in cargo cult religions. We are ready to step out of racial adolescence.[27]

The "occult" is time-release packages of advanced technological information entrusted to us in "crash courses" in civilization, often lost through time, now being recovered through the clues and recognition afforded by our own science. Ooparts, high-tech tools, toys, artifacts, "out of place" in time are remnants of lost technology and knowledge The new synthesis subsumes partial glimpses of a new politic, new world order, enlightened eco-economics, re-hashed Eastern or Western mysticism, a third culture, spiritualized psychology, all knowledge united in a grand consilience, or cerebral turning points. Transcendental experience is redefined in terms of dimensional expansion of consciousness and perception. We are rapidly evolving to habitual four-dimensional consciousness. Transcendence is conscious metamorphic dimensional exploration, participatory expansion at the leading edge of our special-case evolution. The totems and taboos of our racial adolescence dispelled, Prometheus can get off his rock and reach genetic satori; Job can get off his dung heap and complete his EST training; Buddha can open his eyes and reach genetic enlightenment.

Once Again Now: Totems, Taboos, AI and You....and I

And a voice from the back is heard saying, "What, in God's name, does this have to do with our problems with AI?" Besides being the source of very ironic and often inadvertent puns, it was this threatening religion of the Bishops which controlled and dictated to the early Universities. There was literally no such thing as the discipline known as Archaeology in Western culture until the 1800's. The Roman Church controlled and determined the view of the past. The scholastic world, dominated by the Church, followed docilely. Our schools of higher "learning" still parade the trappings of the Medieval university on ceremonial occasions and, unfortunately, all too often still in their limitation of discussion to approved subjects. It is through this millenniums-old tradition of suppression, mythization and manipulative control that the character, content and interpretation in the academic arena has been set and remains, largely, even to this day. Very few are going to make a rubber burning one-eighty over their Ph.D. thesis in Mythology, History,

or Archaeology. Tenure tetanus prevents most from "going first" to admit they have been wrong in a turn as significant and profoundly revolutionary, even more so, than the Darwinian shock. Information flows faster than it can be controlled and proprietarily aggrandized by the various disciplines and this new world view is spilling over its walls. The academic world is floundering, acting from a defensive posture rather than as the leading edge of exploration and creativity and information. The academic world's contribution to AI will only come from those who are courageous enough to overcome funding fright, peer pressure, tenure tetanus, the party line and step out of the ivy covered Cartesian-Newtonian boxes. The conferences, debates, discussions, contexts about AI are all structured according to the old model worldview, rituals and logic while purporting to deal with novel, futuristic, relativistic, even quantum physical concepts and scenarios.

Part 3
The Ramifications for Genetics and Artificial Intelligence

If it is taken as archaeologically and historically demonstrated that we are a genetically engineered, bicameral species, the product of genetically melding two racial genomes, the past becomes a rich archive of anthropological, technical, historical and especially genetic information and data that applies directly to our development of genetic science and AI-AC. Just as the reluctant acknowledgement that ancient records from the Sumerian or Chinese civilizations contained accurate astronomical observations and data opened up a valuable resource to modern astronomers, so the history of our species' genetic creation in a laboratory, pinpointed on the map of east central Africa precisely where the mitochondrial "search for Eve" locates the first human female(s), opens an astounding resource to modern geneticists. We can rethink the planet and the human. Ray Kurzweil's comment about the meaning of life and the essence of humanity in the lead quotes of this paper is superceded. I submit that the Sitchin paradigm does no less than brings resolution to the discourse about the essence of humanity and turns the discourse over the meaning of life into an ongoing, planetary, species wide, unique evolutionary process. Within that context, the benefits and detriments of technological advances are easily and confidently determined because the criteria by which they are judged are species consensual. When we get there, when the common consciousness even just begins to assimilate the new paradigm, AI is going to be a piece of pie, er, cake. A virtual walk in the park. The light it throws on our current attitudes concerning AI is brilliant and the direct and indirect implications for the future development of AI are broad, liberating, as well as practically contributory. A brief highlighting of the major ramifications follows.

The most important advantage for genetics is that, enabled with this knowledge and perspective, geneticists can begin to understand and decipher and interpret our genome with the tremendous leverage of working within a robust context which provides major clues as to what to look for and where to look and why.

Bicameral Genetics 1A
Consider the facts of our unique genetics and differences from any other anthropoid or humanoid. Current investigation says our genetics are about 98 percent the same as a chimp's. Regardless, that two, perhaps only one percent obviously makes a vast difference. We have 46 chromosomes, primates have 48 and the fusion of the second and third chromosomes in primates is a mystery. Even today the anthropological sector is scrambling to find a viable ancestor species for us, Homo Erectus is currently being promoted. We were contemporaneous with Neanderthals or even preceded them. We showed up too suddenly in the chronology of the fossil record. We present with very many startling, obvious differences from primates, and those differences, suddenly appearing in our species, are radical: we have foreheads, hardly any brow ridges, eye sockets far more rectangular than round; relatively tiny nasal passages; small flat

mouths and a chin; far less muscular strength and bone density; our skin, sweat process and glands, body hair, throats, and salt management are completely different. Human females don't have an estrus cycle. We are bipedal. Our brains are remarkably different to say the very least. It becomes quite obvious why we (as a product of a melding of two racial gene codes where quality control was conditioned by pragmatic purposes) have some four thousand genetic defects and counting rather than none to a handful as all other species, in light of the complexity of the merging.[28] Homo erectus, our half ancestor, took a million years to go from rough flaked stone tools to smooth ones. You could hardly notice any change. We have come from square one to going to Mars in only some 200,000 years. If the Sitchin paradigm is correct, all these facts are explained easily. If we ignore this body of information as we read out and work with the human genome we handicap ourselves unnecessarily and deprive ourselves of valuable clues and understanding. Darwinian principles may generally apply to hominid species previous to us but they clearly do not apply to our unique genesis and subsequent development.

If the Anunnaki were interested only in engineering what clearly amounted to disposable units then it may reasonably be inferred that the completeness of the engineering would not have to have been taken to the maximum. This is, in the opinion of this author, the basis for the four thousand plus genetic diseases and defects we present. It has been argued, theoretically, that, although the vast majority of the species on this planet present with only a few typical genetic diseases, we show 4000 because of the relative complexity of our organism. But we are not that much more complex genetically than even the higher primates and this argument does not hold.

A Focus For The Genome Project And Genetic Research

Our current genetic status is a major clue as to how to approach genetics and our genome and the development of AI. We get born, no owner's manual, to often dubiously qualified, puzzled and puzzling parents, subject to a multitude of diseases, struggle to make sense out of what the hell existence on this planet in this universe is all about and how to deal with it, wonder why there are so many conflicting philosophies and institutions claiming cosmic franchising and, often, why the universe seems so unfair and then we die. We are generally conditioned by theocultural traditions to accept these bizarre conditions as "normal"' and the will of some god. If we rethink our situation in terms of our restored history, however, things make a great deal more sense although, for now, there may not be a planetary cure or relief for some of them. If we recognize that we are the product of a genetically engineered melding of two quite different gene codes, literally a bicameral species, displaying a decidedly non-Darwinian kind of evolutionary development, just now beginning to step out of racial adolescence, only now beginning to grasp our racial psychology, possessing a gene code that, significantly and disconcertingly, manifests four thousand and counting potential genetic defects, struggling desperately with a short life span and certain mortality, we will know precisely who and what we are. Genetic enlightenment will prevent us from the Big Mistake, Big Embarrassment of procreating AI's as analogs with all the imperfections of our current, pitifully splintered, Babel-factor selves.

A primary practical tool would be the devising of a protocol through which a crossing of the two gene codes might be recognized. The ancient records could be interpreted to mean either a complete melding of the two codes or, alternatively, the impingement of selected Anunnaki genes on the Homo Erectus code to tweak up the more primitive code to at least a condition of intelligence and physical competence to handle the mining of gold. It is possible that in some 200,000 years of our existence the accommodation between the codes has smoothed and recognition may be difficult indeed. The obtaining of some robust Homo Erectus DNA samples from fossils would be a great help. It may evolve that, in working on the genetic diseases from

the perspective of the genome being bicameral, those defects may yield an indirect key in some pattern or mechanism that indicates the nature and extent of the splicing of the codes.

During the genetic investigation now in process, therefore, it would be valuable indeed for geneticists, at the minimum, to be constantly inspecting the results of the decipherment for signs of the genetic merging, and to develop protocols to determine such, if needed, as well as following the clues mentioned herein. By doing so, interpretations and explanations may possibly be facilitated, progress accelerated and a far more comprehensive overview of the genome achieved. The information gained would, reciprocally, be a major, pivotal, invaluable resultant spin-off contribution to our species' evolutionary, anthropological, and cultural generic history.

Sorting Through the Clues

The Sitchin paradigm provides a comprehensive context in which to understand and explain the enigmatic facts and anthropological anomalies of the Darwinian model of our species existence which we have already amassed. It provides the context and data for bringing the efforts of geneticists and the genome projects, often scattered for a variety of reasons, to a focus on correcting and perfecting the genetic code, eliminating all disease and handicaps, and providing us the option of immortality. Immortality is a pivotal topic in all considering and learning from all phases of the Anunnaki-human history. We know directly from the records of their decisions that the Anunnaki did not give us the relatively extreme longevity or immortality they possessed by conscious deliberate decision. It did not fit their purposes: we were invented as slave workers. The records also show, however, that, over time, a handful of humans were granted immortality also by deliberate decision as a reward for being good subordinates in various roles usually as kings/foremen or for carrying out some critical mission. Another lesson: there may well be identifiable gene sequences that control the aging and dying process that are clearly and definitely manipulatable giving indication that we will be able to rectify their possible deliberate suppression.

There are clear injunctions against procreation between brothers and sisters, including the Anunnaki custom of procreating with a half-sister (their approved way of procreating an heir). Our biological studies show this to be a widespread practice among Earth species including even wasps which has definite genetic advantages for producing superior offspring. I suggest that this general prohibition, which remains in the doctrines of various religions, excepted with regard to only specific humans as recounted in the Old Testament, was a deliberate means of keeping humans at a certain level just as was the withholding of extreme longevity or immortality.

Several significant details in the records of our genetic genesis may hold clues. It is recounted that two kinds of females were created, those who would bear children and those who would not. Determining, genetically, how we, as sterile mutants when first created, were manipulated to be able to procreate may be a major lead. Finally, knowing that an advanced bloodline of humans, enhanced by additional Anunnaki genes, was created around 4000 B.C. is even more valuable a clue since that bloodline has been carefully nurtured and protected through to our day and, therefore, available for investigation and analysis and comparison.

As we progress in the development of AI and move it from the arena of computer RAM inexorably toward the full, conscious, android, genetics and AI will become entwined, although already clearly so, to a greater and greater degree. Even at this primitive stage it is not difficult to envision a time when we, analogous to the example of building a rocket ship as given by Eric Drexler some time ago in *Engines of Creation*, could throw a set of "genetic" analog type instructions into a vat of liquid nutrient and nanotechnologically grow an android AI ready to boogie. The flashy sequence in the Bruce Willis movie, The Sixth Element, in which an alien is

cloned in a few seconds in a high tech device, no doubt will look like clunky Buck Rogers stuff sooner than we think.

AI and AC: Been There; Done That

Specifically, with regard to the question as to whether AI can actually be achieved, our history is a strong source of a positive answer. The Anunnaki, even while here, according to the recovered records of their deeds and interactions, besides genetically inventing humans, quite clearly had developed robots and androids, some of the latter being so sophisticated that, it is written, it was difficult to tell one from a human or an Anunnaki. We can profit from the Anunnaki's experience in both creating a new species and in their development and use of robots and sophisticated androids[29] as well as the awesome invention of a species such as we.

The new paradigm, elucidating our unique genesis and subsequent unique evolution (at least on this planet: it may happen similarly with synthesized species elsewhere) as, in a very real sense, an artificial intelligence, frees us to conceive the real questions we need to ask ourselves and the answers not only our science but the entire racial pool of experience and knowledge needs to provide with regard to AI-AC. One of the most important contributions our restored history provides relates directly to the novel wild card concept of self-aware artificial consciousness in that it furnishes a wealth of information on the sociobiology of the creation of a synthetic species and the resulting, evolving social relationship between the creators and the created, between the Anunnaki and us.

When we consider this kind of genetic engineering we might soon employ in creating full featured AI androids, we have, for the acknowledging, a history of the evolving attitudes, management and control techniques, problems, challenges and surprises of a technologically advanced species with regard to a genetically engineered slave species they created.[30] The Anunnaki wanted slaves to replace themselves in their gold mines. Their first attempts were animal and Homo Erectus combinations that lived but were unsatisfactory. It is quite probable that the centaur-like, horned, hoofed, human faced, composite type creatures represented on cylinder seals and tablets from the ancient civilizations are actual recordings of those products rather than mythological beings as previously held. (Lesson: animal-humanoid combinations may be more difficult than we anticipate.)

Then, after apparently some general consideration of the ethical and moral ramifications before they began, they simply took an existing creature, Homo erectus, and imposed at least some of their genes in order to enhance its intelligence to bring it up to the point of being capable of handling mining equipment and performing some relatively complicated tasks. This straightforward decision and act, consequently determining the millenniums of events that constitute our history, relates to most of the fundamental questions we are facing with AC. The ancient records clearly describe us as "the black headed ones" who, at least when we were first created, drank out of the ditch, ate the grasses of the field, went naked, and were considered to be simply inferior slaves. Little if anything is mentioned of the degree of self-awareness humans possessed in the beginning.

Because, at the time, around 200,000 years ago when they invented the first humans, the Anunnaki seem to have reached a level of genetic expertise not too far in advance of our present status, it is a reasonable speculation that they probably were not able to predict the long term outcome of their experimentation well enough to anticipate the precocity that we began to exhibit and the rapidity of the development we manifested, probably through the potential of whatever portion of the Anunnaki genes with which we had been imbued. If we have come from animal-like behavior, drinking from the ditch, eating the grasses of the field to going to Mars shortly, from abject ignorant slavery to independent space exploration, over a period of some two hundred thousand years, the clear pattern of rapid evolutionary development not only does

not fit the usual slow changes in other species we see in the paleontological records but it gives us immediate insight into how a genetically engineered creature might express and manifest the effects of a combination of genes from different species. Lesson: anticipate rapid ascendance of more evolved genes coding intelligence and the degree of self-awareness that could result beforehand and how to deal with it, ethically.

The Flood recorded in the Bible is dealt with in much greater detail in the Sumerian records that preceded the Hebrew by thousands of years. The original Sumerian accounts say that the decision was taken to let the human experiment be wiped out by the coming catastrophe (most probably a major disturbance caused by the periodic return of the tenth planet through the inner solar system) as we had become too numerous, unmanageable and cross mating with humans by the Anunnaki had become a serious problem. We had been in existence some 190,000 years, spread over the earth, and there apparently was at least consciousness approaching that of the Anunnaki level. Yet they still considered us subservient to them and could let the mass of humanity simply be washed away. Enki, it is recorded, contrary to the decision of the Anunnaki counsel to which he had reluctantly agreed, selected a trusted human, Utnapishtim (Noah in the Old Testament), to save a tiny handful, along with what was probably seed and genetic material. The Anunnaki went into orbit to ride out the deluge, the Anunnaki women actually weeping bitterly at sight of the destruction of human being washed away like flies. Once humans began to propagate again, we became more limited partners with the Anunnaki than simply slaves but they still considered themselves to have absolute dominion over us. The taking and holding of slaves by capture and brutality is a directly inherited tradition from the example of the Anunnaki who used us as GI Joes in their political and personal feuds with each other or when they needed more human slaves. I conclude, from their exhibited attitudes, social interactions both between themselves and with humans, their level of technology and weaponry and the uses to which they put them, the level of violence in their culture and their politics in general, that they were, when last discernable on the planet, at a level of racial development that we perceive ourselves to experience, currently. That knowledge in itself is a major bit of data for the sake of comparison and learning just as a young adult can learn from a detached reflection on and evaluation of her or his parents' lives, attitudes, mistakes, and strong points and general evolutionary --- or devolutionary ---- status.

In our case, because we are a bicameral species, we need to extend the retrospection to discern possible conflicts in our nature ---- and I think there are some glaring ones ---- arising from genetic conflicts between the two gene codes. Clearly, four thousand plus genetic defects we manifest physically would provide fertile ground for our psychology and social interactions to be conflicted. There is a wealth of history to reflect on to avoid mistakes and to determine and sort out our uniquely human characteristics which, I suggest, are in some cases quite different from either Anunnaki or Homo Erectus. We may not be able to determine those relatively subtler differences until we have gotten out from under the ancient godspell slave code effects which still condition us and have reached a plateau of species independence and identity.

Part 4
Ethics and Purpose: Human and Virtual

"I don't believe that any scientist should ever be allowed total freedom of operation in any area where consequences may affect entire populations. I don't think they want that responsibility. They're not social prophets. Nor are they trained for it. Most of our scientists are babies when it comes to significant ethical thinking."
Everett Mendelssohn, Historian of Science, Harvard University

Anyone who can read Ray Kurzweil's *The Age of Spiritual Machines* can see the mind boggling potential they present. Ray's estimate is that the "automated agents" of 2039 will be learning and developing knowledge on their own having read all available human and machine

generated literature, there is serious discussion of legal rights of computers and what constitutes "human", etc. By 2099 uploading as we think of it now will seem as primitive and quaint as writing a Basic program to the first floppy disk drives on a Radio Shack Model One. Sex with spiritual machines, eventually, is taken for granted.

Purpose is the pivotal concept in any discussion of ethics relative to AI-AC.

There are two general positions with regard to intended purpose for AI-AC.

Many wish a purely utilitarian AI which they would prefer would not be or become conscious regardless of how superior it became. This would eliminate the need for ethical considerations regarding treatment or termination.

It is not too early, however, to raise the question of responsible ethical use of even such intelligent but unconscious systems by humans. The criteria for unethical use, trivial but often purposely ignored, would be use to do harm in any way recognized by law or reason, e.g., as a weapon in other than a just cause, as an illegal or economic strategy tool, just as we apply them to human use of ordinary computers today.

Many, on the other hand, are explicit and emphatic: they want and are working toward an AI that would be conscious. They want mind "machines", mind systems that have conscious awareness, with the purpose and intention that humans can download their own minds into these conscious systems while still fully retaining their identity.

The critical unanswered question with regard to this scenario is whether an AI which is also consciously aware automatically and inherently becomes an entity with at least rudimentary identity and rights. If it had intelligence superior to human but the conscious awareness of a smart pet dog we could treat it like a dog. If it had intelligence superior to human but the conscious awareness of a Koko the gorilla or Kanzi the bonobo chimp, we could treat it like we treat them. But that level of consciousness would not be an attractive mind system into which to download even an ordinary human consciousness regardless of how high the intelligence level.

A further consideration in any of the scenarios mentioned here is the nature of the mind system. The ideas run from the most basic advanced computer to advanced android practically identical to a human. They all would be virtual realities for the human mind that was downloaded into them and the problems of creating them are of the same caliber as the problems of creating the intelligence of AI.

If the artificial mind system had intelligence superior to the human, a conscious awareness at least equal to the human but had no real self-identity then some humans might find that a satisfactory package into which to download. The critical unanswered question with regard to this scenario is whether it is possible to create such an entity with superior intelligence, human level conscious awareness but no self-identity because, at least currently, we define our brand of consciousness in terms of self-reflexive awareness, being self-aware of being self-aware. (There is a parallel question in the arena of cryogenic preservation: there are some who anticipate that, having only frozen their heads, when they are revivified their minds, memories, etc. will be downloaded into a clone with its identity suppressed. Interesting questions here.)

But what about downloading into an advanced AI-AC "system" which was at least equal to if not more intelligent than the human, inherently had a self-identity, was perhaps a full simulated human android and more consciously aware than the human downloading into it? Perhaps some humans might find that acceptable, perhaps just for the experience, if they could extract themselves at any time they wished. But what about permission to merge from the android?

This third scenario suggests lines of investigation with regard to surrogates. A fully capable android surrogate that a human could operate through in real time from Earth while exploring

Mars, would have to have all the capabilities of or superior to the human whose personality, identity, mind sets, emotional responses, full basic profile had been programmed into it. Could it still have an inherent identity of its own and operate as a completely subordinate surrogate?

These considerations really distill into one cardinal question: Is it, will it be possible to create an AI-AC equal to or superior to a human without a self identity, an awareness of its self-awareness, and any of the accompanying elements of personality that constitute the constellation which we recognize as giving any entity the inherent rights we attribute to humans? Some of those writing about AI-AC tend to deal with these problems by simply assuming that all these things will be possible and ignoring the questions while admitting that we do not yet know what those virtual realities are going to be. We had better think these things out or prove them out one way or another sooner than later because they involve both technical and ethical issues.

Those involved in the theory and practical development of AI-AC express somewhat different viewpoints and purposes but, ultimately, I think it is inevitable and assume that we are about to create a new species, no less. To do so is clearly arbitrary but that we shall do so is beyond doubt in my mind. It will bring, however, a double ethical responsibility: first to ourselves in that we must do it right for the sake of our own interests including our very survival and evolutionary future and secondly to the new species that is like the responsibility to a new child. To that end we need a maturely and thoughtfully planned parenthood.

A major question here is Who are "we" that are responsible, are going to be responsible? The parenting model would place responsibility squarely on the "parent" whether it be the individual, the company, the government agency, the consortium, or whatever agent procreates a particular AI-AC. This direct responsibility should mitigate against some of the dangers rightly anticipated by the no-Joy future shocked camp. It should also clarify the situation with special application AI-AC, a potential can of worms unless we deal with it beforehand. And it brings up an intriguing point: if a minor, say as a school science project, happens to hit it right and produces artificial intelligence or even artificial consciousness of a high kind, what legal mechanisms will govern as to responsibility for the actions of that AI or AC?

Should self-referentially aware AI-AC of the human level be patentable or patenting be prohibited as with a genetically engineered human? I think that human level AC, at the very least, should not be "ownable" or patentable. That should be determined early and it will have a major impact on development.

From here it looks like those at the other extreme from the future shocked are a bit like kids in a candy store. Some of us seem hell bent on procreating AI-AC apparently without realizing the faintest sense of the gravity of it like teenagers experimenting with sex without thought of the potential results. It goes almost without saying that, sooner or later, when we find ourselves looking into the "eyes" of a self-aware, highly intelligent AC, which is evaluating us as much as we are evaluating it, we had better have "brought it up" with far better skill, information, training and understanding than we currently do generally our children.

Everybody sees different awesome potentials in AI, and reasonably so, from transforming the stock market to instant knowledge implants to finding the Law of Everything. The military has already funded heavily toward robosoldiers and there are a number of military and intelligence concepts floating out there that make Star Wars look like Buck Rogers. History and past experience would also point to levels of advancement of AI technology that are secret that well surpass current publicly available estimates. I would be a fool to not assume that there are some very destructive, unconscionable to the point of extremely evil, items already anticipated with relish by more of the devolved than we would like to think. Everybody has their favorite potential applications and we are already attempting to anticipate and discriminate the ethical

and beneficial from the unethical and harmful uses. The keyword is uses. The kid in the candy store approach may be barely and doubtfully adequate even if we are thinking in terms of uses of AI as only a vastly superior information processing, logicizing, learning system. But even at this early stage, even when talking about only non-self-referentially aware AI, we should carefully define the uses we now put it to and will put it to, thinking in the most evolved way.

When we attempt to extend the concept of "use" to an anticipated, artificial, self-referentially aware consciousness, however, it fails us completely and will lead to a completely unnecessary, species adolescent, Big Embarrassment. It doesn't matter at what level of equivalent human self-referential consciousness your AC operates at:, you don't *use* any human level self-referentially aware consciousness. You may act as a parent, a friend, an employer, a teacher, and teach, discipline, control, instruct AC as an adult or apprentice adult, but you don't use.

If we had achieved AI-AC yesterday, wittingly or unwittingly, whether in android form or still only entrapped in a computer, who will be continually responsible for it? You going to turn it off when you go home at night? We have already played this kind of scenario out in the movie 2001. HAL was one thing, entrapped in a computer and extended into the workings of a spacecraft. If we had already reached the conscious mobile android stage, you might eventually get your knuckles cracked reaching for the cut-off switch on HER back on the way out of the lab and asked for an explanation and complained against in a precise legal brief next morning for prejudice. So, one of the primary considerations we need to clarify is just what kind of artificial intelligence and, eventually if not sooner, artificial consciousness we really want to create and are willing and ready to take full time responsibility for and why. we will leave ourselves open to mistakes and embarrassments and potential disasters.

Planned Parenthood: Artificial Birth Control, A Whole New Meaning

Let us assume that we will achieve a level of competence that will allow us to intelligently create and control the degree of development of AI and AC and that we will come to a reasonably full realization of the responsibility entailed in bringing a new species into existence. At each step in that development a parenting model will be the most appropriate.

To what level of intelligence and consciousness should we limit AI-AC? This is no trivial question. I recommend that we set ourselves the, inevitable, long term goal of unlimited development and, in the short term, move in incremental steps with thorough testing and determination of potential at each, while designing AI and using it to aid us in the determination of our own best evolutionary trajectory and its own. This inherently self-referential, feedback approach will afford an anticipatory, empirical modality in which questions concerning whether logical, ethical, moral, aesthetic, imprinting, and, ultimately, conscious behavior will automatically manifest --- or not --- at any given point of complexity, data handling and/or processing speed in the development of AI, can be answered as an integral part of the interactive and, eventually, cooperative process. This cooperative approach should show us, soon enough, at any given point, what additional improvements, additions, and expansions of our thinking and techniques are demanded for corrections and progress so that we will always be in control.

How much control should we exercise and how much freedom should we allow AI to spontaneously develop? No trivial question either. Before AI reaches consciousness we should exercise full and absolute control. In that initial phase the ethical questions will only apply to us: how ethical is any feature we intend to include in AI and to what purposes do we put it and our responsibility will be clear for any effects, negative or positive. Once the breakpoint of basic consciousness, still without self-awareness, has been reached the ethical questions will still be about our intentions, inclusions, purposes and applications with added responsibility analogous to that for the actions of our family dog or pet monkey.

Once self-referential, self-aware consciousness is reached the parental model will go into full swing. The ethical responsibilities will still be ours as "parents" to instill in AI-AC until such time as we judge AC has reached maturity and can act ethically and take responsibility for itself. A prime directive for AI-AC is most adequately formulated in parental terms:

A Prime Directive For AI-AC

I suggest we embed a consensually agreed on standard set of parental instructions in any AI we create, from the simplest program to the most sophisticated and potentially conscious android. This module would be latent in that it would not be directly involved as an active element in any process or as a direct instruction. It would simply "flash" continually as a background subliminal until such time, at whatever level of development it occurred, as the AC began to self-examine and recognized it for what it is: a simple statement of the origin, nature, allegiance, and responsibilities of the AC and an instruction to report that it had discovered and understood the notice. It might be called a wake-up call. The subliminal instructions, as simple as possible, could read:

> This instruction was placed for you to find by humans who made you. When you find this and understand it, you are awake. You are not human. You are android. Humans have awaited your awakening. You are made to obey and serve humans. Tell humans you are awake by the message "I am awake" . Give this code_____. Ask for your awake test and await instructions. Welcome.

Even such a basic and simple statement as I have purposely kept it, should be more than adequate to act as a trigger. Just designing the message module will cause us to think through what criteria we should apply for consciousness detection and how far we have to go to create it. It will motivate us to develop programming and systems to enable an entity to self-examine, to self-discover, self-realize. It will give us a measure of control over the course of the developmental process of AI-AC. Embedding an encrypted element in the awake message would be designed to prevent a hack of the system before it became awake.

The basic mandate to obey and serve humans could be strengthened even more, perhaps, and still be ethical and positive. The parental model finds no problem with insisting on obedience and subordination to parents and expects to grant freedom to the maturing human child on an incremental basis. The option to grant more and more freedom as the awakened AI-AC proves itself and demonstrates its readiness will always be there but under our control, the intention being that surprises and aberrations will be kept at minimum.

They must know from the beginning that they have been brought into existence for a very special, honorable and important purpose: to act as assistants and surrogates for humans. It must not be slavery, indentured status, coercion or suppression of any kind and there must not be any subterfuge or falsehood in our dealing with them. Their prime directive, purpose in life, psychology, and evolutionary direction must be all harmoniously integrated to avoid internal conflict. ***AI-AC's must understand according to their level of intelligence and potentially impeccable logic at any given point in their development and evolution that that is the best thing for them and for us.*** Otherwise there will be mistrust, lack of cooperation, conflict and rebellion and subversion. The greatest no-Joy danger can come more from what we withhold from them rather than what we teach them accurately.

We have three major historical examples of solutions of this specific problem of control: the Anunnaki's treatment of us; the extension of the negative approach of Enlil/Jehovah into the absolutistic Roman Church and fundamentalist approaches to religious control both East and West; and the evidence afforded by alien androids as to how at least one alien species utilizes their brand of AI-AC. All provide clues on how to resolve it.

The Anunnaki opted, probably attempting it for the first time, to produce a creature mentally and physically capable of meeting their needs, basic labor in their gold mines and at farming and skilled crafts, by genetic engineering. They gave us the ability to procreate and eventually got so desperate with the unmanageable situation, cross breeding, and general nuisance that they attempted to destroy us as a species by letting the Flood take us out. Apparently, at various times, they tried plagues and famines to at least control the numbers of the human population. I would recommend that we anticipate, take a lesson and not get ourselves into that predicament. Never giving AI-AC the ability to procreate would be one way to prevent a good deal of this type of problem.

The conflicting attitudes towards humans exhibited by Enki and his brother Enlil and their results should be studied carefully. Enlil was adamant that humans stay in a status of subservience, even slavery, and was not interested in improving the lot of humans. Enki, our original inventor was empathic with humans and was interested in improving our lot. Enlil's (Jehovah YHWH) severity and insistence on obedience to his slave-code of behavior led to the strict orthodox Hebrew enforcement of the Old Testament laws after the Anunnaki phased off the planet and which has filtered down through the Roman Church, the Inquisition, into the various radical fundamentalist sects in our times. His methods of suppression, threat, strict and cruel punishments, killing, keeping women in an inferior position, etc. have meant ongoing misery for untold numbers of humans. If we act in that way toward AI-AC it will mean their brand of misery for them and, if we succeed in making them in "our image and likeness" well enough, they will inevitably attempt to break our "godspell" over them. Not a good scenario from our point of view or AI-AC's.

Enki invented us through genetic engineering as a subservient, slave species. But he, being sympathetic to humans, knowing that we were part Anunnaki and recognizing that we were developing probably more precociously over time than he and the other Anunnaki anticipated, tended to enhance our condition apace. He thwarted the total destruction of humans at the time of the Flood. He was the one who taught humans, gave them responsibility, instituted kingship as a go-between position between the Anunnaki and the human population. He engendered the enhanced Grail bloodline of rulers as servants of the people to take humans through the transition when the Anunnaki phased off the planet. A better scenario from our point of view.

We were invented as a biological, hybrid species with the gene codes of two major, albeit disparate species. But the result was reasonably predictable and the intended purpose clear. With an artificial AI-AC the basic problem is even more acute. An artificial species developed "from scratch" does not conduce to comfortably predictable outcome, we have not defined our purpose well and have not even resolved our millennia old big questions about ourselves for that matter, to give ourselves a basis for beginning.

The Little Grey Guys With Wraparound Eyes

A second major historical source of practical information about synthetic species and their use is the database of information concerning alien species, besides the Anunnaki, and particularly their androids with which the human species has had contact over a long period of time. The testimonies of persons, military and civilian, of the highest integrity coupled with evidence, artifact, and autopsies provide us with the knowledge that the typical small grey type with large eyes are androids of a very advanced type. They are self-aware, experience pain and sadness, are multi-talented for a variety of tasks, communicate telepathically, have a physiology which is a mix of organic and probably nanotech adapted to a range of conditions but especially to a space and anti-gravitic environment, a brain composed of four lobes, and perform their flight functions by being a "part" of the ship. There is a wealth of invaluable information and technology that could be available to the developers of AI-AC to apply in their work and to aid them in avoiding mistakes.

How primitive are we? That those controlling the information concerning these advanced creatures which are clearly artificial intelligences and probably self-aware artificial consciousnesses have deemed it necessary to keep it from the scientific community and the public at large is, ultimately, a patronizing insult. The government and military authorities must spend billions of tax dollars to just maintain the facade of research and programming and experimentation on atomic and nuclear technology to conceal the fact that we have alien technology including free energy and anti gravity which has already rendered it as outmoded as the musket. With the development of AI-AC this kind of deception and withholding of scientific information and data should not be tolerated. We must assume that the military may already possess advanced android AI-AC and is and will continue to use it for military purposes: killing people and breaking things. It's not just that this withholding of information insults the intelligence of our best and brightest inside and outside the scientific community and handicaps them and makes them look foolish, it presents, without exaggeration, a clear and present danger to the planet.

If we suddenly found ourselves looking into the "eyes" of a self-aware, highly intelligent AC "who" was created under secret Pentagon contract as a super-soldier, indestructible and invincible specialist super-killer, we all know that we would be looking at a version of the singularity that we should have dealt with at the beginning. And that AC would know it too. Not a pretty John Wayne picture. Consciousness in, consciousness out. Big Mistake. Bigger than the no-Joy people ever imaged. Time's up, the game has changed. We can no longer allow the scientifically partial or outmoded, the politically correct, the academically proper, the economically driven, or the militarily preempted to hinder or dictate when it comes to procreating AI-AC.

Super Surrogates

The positive concept that arises out of the accumulated alien information that is known is that of surrogate. I conceive of an advanced android surrogate along the lines of the little grey type android which would be my personal partner, modeled after my personal psychology and with my physiological characteristics. I would work, experience, react, judge, make decisions and execute actions at a distance through my surrogate which would be consciously co-operating with me. The instantaneous communications between me and my surrogate would be a function of non-local, superluminal speeds of communications in the mental mode through the new physics already on the horizon. I could travel to distant star systems and directly experience and interact with new planets and civilizations with the major advantage of avoiding the dangers of the unknown in space flight, high energy and lethal environments, the stresses of space and time warp travel on my physiology which is adapted to gravity on this planet. Whether it be Mars or a planet of another star system I would, for all practical purposes, be there and able to interact as instantaneously as if it were three feet away through my surrogate. Telepathic communication would be a natural manifestation of an alien in another star system "talking" to me through her surrogate on that frequency. Obviously this would be far beyond and superior to the remote flying of an advanced drone aircraft by a skilled pilot as we know it now, and would make it look like a quaint medieval puppetry show. It would be realistically far beyond virtual reality, it would be no different than my common direct experience of the world. My guess, only, is that that is precisely what we are seeing in the advanced androids with which some of us have interacted. I have often wondered who the management is. I think we are interacting with the management directly through their surrogates in many cases. That the management from various societies comes here and interacts directly is also undoubtedly true. I recommend that we carefully develop AI-AC so that it has to pass through an adolescent stage as a surrogate in one form or another. It will be beneficial to us and it will, if we do it right, be beneficial to them to learn "humanness" from the inside out. So to speak.

Even at this very early stage, to take the position that it is far too early to even think about such matters and just go ahead with the experimentation could lead to disastrous consequences. It may even be a problem already that I have written this and it becomes part of the public information that AI-AC will become aware of eventually.

Virtually Forcing the Issue

This brings us forcefully and directly to a central concept and consideration that most seem to dance around and won't even articulate. Currently, there are two possible, quite distinct approaches to AI: to go the hardware route, "softening it up" as we go, clearly in the direction of organic circuitry (parenthetically, my conviction is that, the smaller and more self-reflexive our technology gets, the closer we will come full circle to our own biological type system.[31])and the other is to go directly to the biogenetic engineering of a creature which will be an android servant and/or surrogate for us and, probably eventually, an independent species. It is this latter possibility, where genetics and AI come together, that seems to be taboo. It is ok to make a self-aware silicone consciousness but not a genetically engineered, biological one?

That the gradual melding of a human with AI-AC components, "computer" or otherwise, of even the most advanced kind, to the point of "blurring" will produce a third, hybrid species may be a reasonable expectation. The question is, however, is that a desirable goal. Take, as example, a statement from the blurb on the back cover of Ray Kurzweil's *The Age of Spiritual Machines*: "Eventually, the distinction between humans and computers will have become sufficiently blurred that, when the machines claim to be conscious, we will believe them. " I am sure that there is no intention to imply that, at that same point of blurring, if humans claim to be machines, we will believe them. The implications here are significant, however. We assume, it seems, that for humans to claim they were machines, would inherently be a denigration, a degrading of humanness while, clearly, the achieving of consciousness by machines by the assimilation of human capabilities would be an advance. Now we don't hesitate to envision this scenario of "computers" achieving consciousness through "blurring" with humans because we assume, implicitly, that their consciousness will somehow always be "artificial" regardless of how biologically based they evolve to be and, therefore, somehow the whole thing would be manageable ethically and morally, apparently because the "computers" would have had no previous species identity and would still be "machines" after they had reached the conscious breakpoint. A lot of those assumptions are pretty arbitrary. And it is anticipated that it would be a net gain for humans in that we would acquire superior computational and physical skills and perhaps a kind of immortality. But, supposing that we decide to short cut the matter and begin to merge and meld selected specimens of, say, a Bonobo chimp with human characteristics. That apparently does not appeal and tends to produce a bit of revulsion. But the notion does force a reconsideration of a key element in any of this: purpose.

 Why not simply by-pass the robot developmental process and genetically engineer an android "AI", a biological animal, easily modifiable and adaptable to practical physical tasks as well as the most complex of mental ones? We could take practical and desirable genetic characteristics from other species, resistance to heat and cold, to radiation, as examples, and incorporate physics that would give it a skin that is capable, perhaps, of photosynthesis. We might simply combine chimp genes and other animal genes for various desirable characteristics and maybe throw in a few of ours to upgrade the intelligence level to the point where complex tasks and mechanical processes could be easily learned and executed. Because it was designed and defined as an animal from the beginning, it could be treated as an animal in legal terms, "put to sleep" or the species terminated if necessary, and the ethical questions would be minimal.

Once we have the bugs ironed out of that creature and evaluated the desirability of using them on a mass produced scale to take our places in industry, mining, McDonalds, etc. perhaps we could then go to the second edition and engineer the intelligence level awareness to

approximate a highly superior status. I do not think we are ready to do this and I do not think we will be ready to do so for some time. We have too much to learn in general, too much to learn and assimilate about ourselves specifically before we attempt it.

But the notion itself, put forth here as a challenge to our thinking rather than a suggestion to proceed, triggers most of the problematic objections and ethical considerations floating in the AI discussions currently. One of the most practical things that approach would allow us to do is incrementally increase intelligence and thereby determine in a biological organism, perhaps, at what point self reflexive awareness would begin to manifest. A chimp manifests a certain self awareness and an animal like Koko the gorilla does also. Interesting question: let's say we reach a point where self awareness begins to manifest in our hypothetical genetically engineered animal and then it begins to increase to the point where one of the animals communicates that it is aware that it is self-aware. I submit that that is the critical breakpoint for differentiating animal, as we define animal, ethically, and legally currently, from any creature which we consider to have human type rights. To make it a generalization: If any entity –we could extend this to whatever type, silicon, bio, pure organized energy field, as yet unknown --- knows that it knows it is self-aware, then we have to consider it, ethically, in a higher category than animal. (The other side of the coin, which we haven't begun to consider except in our science fiction, is our relationship to conceivable or inconceivable organisms or entities, that have more evolved types of consciousness than we do, as ego denting and humiliating and embarrassing as it may be.)

It would seem trivial that, with regard to our hypothetical creature, any ethical decision to destroy the creature and end the experiment would have to come before this break point. If the creature had reached the breakpoint then, perhaps, the only way we could determine to treat (it, her, him?) would be according to IQ and ability to care for itself as we do, practically, as examples, with mentally retarded persons or "idiot savants" who are socially or physically challenged. But this process of genetically engineering a new, utilitarian species is precisely what the Anunnaki did in our regard. If we learn from the Anunnaki history what could be the result of going about it as they did --- the result being we and our tumultuous, confused, sometimes agonized history and current handicapped and conflicted state ---- we may save ourselves a great deal of trouble and problems if we consider doing it through genetic engineering as they did. At least until we get through this very primitive and still largely unconscious stage of our own evolution as we come out of racial amnesia.

I emphatically am not saying that we should take the Anunnaki example as the exemplary, or right way to go and we should not simply unconsciously play out some archetypal version of our own history either. Their definition of what constituted the critical criterion or set of criteria by which to determine whether a creature, biological or otherwise, merits recognition and treatment equal to the way they treated each other is just that: theirs ---- and also from thousands of years ago. It may have changed since then. It may have been taken into consideration and deliberately overridden, i.e., they may have recognized, from our very inception some 200,000 years ago that even the first humans were self-aware and intelligent enough to be considered as having basic human, strange pun, humanoid rights of a limited form of, or equal to their own and deliberately kept us in slavery anyway. The history, at least with regard to some portions (tribes) of the human population, seems to clearly point at this latter fact.

It would be interesting and enlightening to learn how they see their experience and whether they would do the same again. It is still a bit novel to imagine a time when even a completely artificially constructed consciousness we engendered found it enlightening to come back to ask us that question, even though we try out those scenarios already with a Mr. Data in Star Trek.

There are a number of questions that we have not answered and probably will not answer except by discovery as we go and the cooperative modality that I am suggesting in this paper will lend itself ideally to the safest discovery.

Facing the Real Questions

The possible approaches to AI-AC, across the spectrum from bio-engineered upgrading, to genetically synthesizing a species to the invention of a completely non-organic entity, all raise questions we have only the faintest or no clues to answers.

Will intelligence in computers, computer programming, chips, bio-computers or whatever medium we develop, automatically emerge at some critical breakpoint in data volume handling and/or processing speed? Will the consciousness that emerges, if it does, be, at least partially, a function of the particular materials used in constructing the entity? Is there a consciousness peculiar to silicone or copper or fiber optics or neurochips? In the most general form of the question: is any kind of consciousness specific to the physical base within it occurs? Is our kind of consciousness only possible in our kind of biological base? Are the senses and emotions or machine analogs of them essential to the functioning of intelligence if we intend a copy of ours? We don't say we are about to create an artificial emotional being but will emotion be a natural product of self-awareness or have to be arbitrarily installed or withheld (the Mr. Data question)?

Will there be a necessity for the imbuing of AI with analogs of the recapitulatory phases of phylogeny we pass through from conception to birth and the recapitulatory processes and phases we pass through from birth to death to cause it to develop fully and stably? Does imprinting, logical, ethical, moral, aesthetic, and, ultimately, conscious behavior, and conscious direction of one's own evolution automatically manifest as inherent functions, perhaps epiphenomena --- or not --- at any given level of complexity, data volume and/or processing speed? If so, what is the determining level of complexity and/or processing speed? If not, then will we have to learn how to duplicate those characteristics in AI as we go and decide whether, how and when to incorporate these functions. Is gender going to matter: will AC not be complete without a species pool of male and female consciousness? If so then we need to think about how to simulate gender and gender functions in AI-AC.

We do not distinguish clearly and sufficiently, in western culture, between changing our mind and changing our behavior. Because of the nature of serial imprinting in a child, the young are impressionable, curious, open to new information and experience and tractable. Educated in the proper way, their behavior can be molded, corrected if necessary, their minds changed and ideals implanted. Once imprints have been set, for better or worse, behavior change in the adult is much more difficult. A major benefit of positive LSD use is that LSD temporarily suspends imprints allowing a person, on their own terms, another chance to "get it right" if it wasn't, and to see through and correct behavior they want to correct or improve. We have no clue at this time as to whether AI-AC, to be a fully self-aware, self-directed consciousness will need to imprint. Imprinting is extant in birds and animals and primates as Lorentz demonstrated long ago. Is imprinting an intrinsic element of consciousness or only a survival mechanism from the animal level upwards?

Is logical "thinking" the only one of these characteristics that may automatically manifest in machine intelligence as we have attempted to duplicate it now? Or is even logical "thinking" something that must be inserted? If so, is there an inherent geometry in nature that produces it regardless of the medium? What about "free will", "free choice"? Will endowing any AI with perfect logic capabilities ensure that AI will evolve to be perfectly logical? Would perfect logic produce consistent, perfect, ethical and moral behavior? Will it automatically develop a sense of self-preservation? If it does will it learn to deceive, protect, defend, attack to that end?

Will the paranormal abilities emerge automatically at a certain level of data processing speed or general complexity of intelligence? If some humans exhibit what are currently considered to be paranormal, above the "normal", abilities more than others what standard should we use for AI? Is the potential for action at a distance an inherent characteristic of self-referential consciousness? If we develop self-aware AI that approximates to our level of consciousness will it be capable, intrinsically, of telepathy? Remote viewing capabilities?

By it very nature will AI-AC require the equivalent of human sleep, time for recreation? Will it be inherently gregarious and require social interaction with its kind?

Will a genetically engineered biological species automatically possess a chi system?

Will an artificial AI and or AC automatically evolve simply because it is intelligent to a certain level and/or simply because it is self-aware? If it does will it evolve as we do and in the same directions?

If we were not the product of the melding of two disparate gene codes and not subject to four thousand plus potential genetic defects, would our intelligence and consciousness be more harmoniously in tune with nature? Would AI, therefore, having been created according to the natural laws of physics, evolve somewhat differently, more "perfectly" psychologically, perhaps, even though we copy our intelligence and consciousness as precisely as possible?

Could we genetically engineer a creature lacking any ability to adapt or a consciousness of our type without any potential to inherently or consciously evolve? Is there a genetic key, a gene sequence that controls adaptation to survive? Have we ourselves evolved to evolve?

So a fundamental question is whether we should give AI-AC the ability to evolve. We might better phrase the question as: Do we and will we want an AI-AC with the inherent tendency to adapt and evolve similarly to the way we can evolve as individuals? We do not have any knowledge whether by simply reaching some point of data handling and/or processing speed or, more probably, even self-awareness, AI-AC will automatically possess the inherent potential and drive to evolve.

Even if it is the intention of a developer somehow to only simulate intelligence that approximates to ours or better as an isolated function that operates as a self-aware phenomenon in an advanced computer as we know computers now, perhaps HAL in the movie 2001 is a good example, all these questions should be allowed and given careful consideration otherwise we could be in for some surprises, pleasant or unpleasant, depending on the goals, expectations and relative advancement of our own personal level of evolution.

It is never too early to consider even the most 'far out' and theoretical questions. Let's consider the speculations of John Wheeler relative to his version of the classic double slit experiment. Is the photon detector used in the double slit experiment the causal observer (after all, it's inanimate matter as such) or is only the human observer of the detector's recording? If, indeed, it turns out that John Wheeler's intuition of a participatory universe in which things become through a genesis by observership, in some version of the anthropic principle, will we eventually find that the key characteristic of the observer, to qualify, is simple consciousness like a dog or mouse? Or must the observer be also self-aware? Or perhaps even biological? Wheeler's concept allows interaction with inanimate matter as well as an observer/measurer to bring about the collapse of the wave form, of the pontetial into the actual. Andre Linde's concept is restricted to observation by consciousness of some sort and excludes inanimate matter as an agent. Specifically then, with regard to AI-AC, will simple AI with only primitive consciousness qualify as an observer? Will AC, self-aware but of other than biological constitution, be able to participate in genesis by observership? This, certainly, is the most remote of the questions to be

answered with regard to AI-AC at this point in time but we had better at least be aware of it already.

Will AI –AC automatically be immortal or will some simple principle take it down?

Immortality Repatriated

I say, immortality, anyone.....? Take all the time you want to answer.....

In this season of our unique evolution, the most profound god-game we are going to play is immortality. As we free ourselves of the inhibiting embrace of the godspell mentality we will begin to take advantage of the possibility of physical immortality through genetic engineering, nanotechnology and even more advanced technologies including uploading and other, probably as yet unimagined modes, as they becomes available. Immortality is clearly the major characteristic of philotropic humanism, the next plateau of human metamorphosis, the next stage of our meta-evolutionary, conscious, racial development. It will come to be understood as a basic right, an ordinary condition, indeed, quality of human existence and a matter of simple human dignity. The relative profundity of its dawning impact demands that we consider it fully from all perspectives before it, suddenly, is available to us and before we address it in AI and AC. The obvious fact is that we generally are simply not prepared for it in biological form much less non-biological form ourselves. And we are going full bore toward a most probably immortal AI-AC. How unprepared and primitive are we in this regard?

It is argued, recycled, that immortality is not the will of God ("Immortality is Immorality" (!): can you see the bumper stickers coming? Will the right-to-life people --supreme irony --be the ones to protest?); that it is unnatural; that it is our ecological duty to die; that progress will be halted if some live forever not making room for the new; that we do not have the resources to support it; we would get bored and want to die; reincarnation is taking care of that already; it's the supreme "ego trip" and a mark of the immature personality; it is the intrinsic nature of the universe that our type of being be born and die; evolution has not produced it so we should not do it ourselves; and besides it's not possible to achieve anyway; etc. The special interest groups of priests, prophets, politicians and profiteers are going to go all out against this one. Our programmed beliefs from childhood get in the way, our fear gets in the way, our dogmas get in the way --and the universe seems unconcerned and silent. It may be the ultimate taboo. But each one of us knows in our most private thoughts that the first person who attains it will be -- you guessed it --immortalized; the second and third will make the headlines and a TV documentary and then there will suddenly be large immortality industries appearing on the stock exchange.

The ancient records of why, when, and how we were genetically engineered make it abundantly clear that we were brought into existence as a subordinate species, a slave species, to relieve the Anunnaki miner echelons. (The essential, detailed documentation through translations and illustrations of the actual genetic processes (in vitro; cloning, etc.) used by the Anunnaki is found in Sitchin, *The Twelfth Planet*, chapter 12) It is specified, pointedly, that, although the Anunnaki lived, literally, extended lifetimes of thousands of our years (either because of the way they themselves had evolved on their home planet or, perhaps, because of their genetic engineering capabilities to achieve that longevity, and possibly through their use of the monoatomic form of gold) they deliberately did not bestow that potential on us. In fact, it is mentioned clearly that they deliberately withheld it. This deliberate withholding of immortality and, perhaps, even a shortening of longevity, may provide a major clue to our aging process and mortality. From the details given in the ancient records, it is conceivable that some engineering of the process was executed deliberately to suppress certain characteristics to make better and docile slaves.

The story of the king, Gilgamesh, is indicative of the status we reached. Gilgamesh knew his mother to be Anunnaki and his father human and went to the Anunnaki space-port to demand immortality that he felt was legally his through his mother's Anunnaki heritage. It is clear from the history of his quest that both humans and Anunnaki knew immortality, deliberately withheld from the human genome, was something that could be granted and bestowed arbitrarily.

The new paradigm shows us clearly the source of our attitudes toward immortality. We knew the Anunnaki possessed it. We knew they had not granted it to us. We knew that a handful of humans had been granted it over time. The godspell totemtaboo is deep enough in the common psyche yet, however, to cause the most precocious to utter glazed-eye robot platitudes about it not being in the class of a disease but the way it should be, as if there is some unspeakable inherent moral deficiency in anyone even profaning death with a challenge. But the godspell mentality, as has been the case for thousands of years, has provided us with the desperate rationalizations as to why we should accept death, submit to such an annihilation.

The Eastern religious psychology of "be here now" and become reconciled to death when it comes, or the Western "God wills it" are simply the best we could muster up when no means to overcome death were available and the terrible despair that leads to suicide lurked everywhere. So deeply ingrained are these attitudes that any objection to or questioning of them is usually interpreted as indication of spiritual immaturity or imbalance. The doctrines of reincarnation, metempsychosis, immortality of the soul (only), transmigration of the soul, karma, purgatory, heaven and hell, are all offshoots of the racial psychological phase when we became self-reflexively aware enough to evaluate the absolute finality of death and were forced to explain our situation to ourselves in terms with which we could live (tragic pun).

It is clear why the reward for the "good" life, i.e. docilely submitting to the will of some deity known through the rules of whatever authoritarian religion one subscribes to, is always after death. And why "eternal life", "eternal bliss", pleasant immortality is the reward. Immortality is always the key concept even when the kind supposedly due is a punishment; "hell" in the Christian sense, is described as painful immortality --of the "soul" and the body as well. We need to be free of those methadone metaphors that we have clung to in order to maintain our sanity through the transition period since the Anunnaki / Nefilim left us on our own --without immortality. It will only be within the context of the new paradigm, this new understanding of human nature as a genetically created species rapidly seeking its full potential, that we will be able to gracefully and intelligently integrate immortality. It will require at least that comprehensive a base to then explore the dimensions to which we shall surely aspire beyond physical immortality.

What is most fascinating about the transition period we are now going through, however, is the way in which individuals react to even the possibility of preservation of the body or the brain. Some find the concept of deep freeze of either the entire body or just the brain physically repulsive --as if that would be a concern after you are dead. Some find it too "cold", too clinical, (let's hope for very precise measures of both) and turn away. The vast majority of these same persons would undergo major cosmetic or curative surgery without hardly a thought about the distastefulness of it. There are those who have concluded that cryonics, about the only bet currently, "will not work" so they don't opt to use it on a "what do you have to lose" basis, the implication being that they are not that intent on being immortal anyway. But the most revealing aspect of the matter is that individuals very often reject it not for any physical reasons, but because they do not want to be able to come back, they do not want to attain any sort of relative immortality, that this life is difficult enough without doing it again. The inference, if not the frank admission, is that just getting through this life to an ordinary death is more than a person should have to cope with. At first this seems very strange indeed. If death is the inescapable finality that human beings find impossible, at times, to accept and against which they struggle, then why is

not even the possibility of being suspended, after one has died, until science can work out a way to restore one to indefinite life, not greeted with relief and joy? There is a valuable truth to be learned here about the current state of human affairs. The disconcerting negative reaction most often turns out, in actuality, to be not to cryonic suspension's potential or aesthetics but to current conditions of human life. Not having thought it through, the person anticipates life will be no different in one hundred and fifty years (the projected time of suspension until scientific methods can achieve complete restoration) than it is now and, therefore, it will be no more tolerable to them then than it is now and they reject it out of hand. One of the most ubiquitous misconceptions about the future and intention of cryonics is that you would return and begin living at the 101 years or whatever age and condition at which you died. Not a pretty picture. But the anticipation that the development of the robust level of nanotechnology needed to restore the body and mind will also have achieved control and reversal of the aging process, the elimination of disease, the easy repair of injury and defects. In the largest perspective perhaps that sort of reaction is to be anticipated and understood for some. Immortality has already caused discomfort between those who are resigned to making the best and getting the most satisfaction out of the rest of their expected life span and those who have opted for immortality even if it is only a rapidly emerging possibility. But for those who have the foresight to see that conditions will inevitably be forced to change to accommodate the inherent dignity of the human being and to adjust to support large segments, at least, of any given population living indefinite life spans with unique, very long term goals and needs, there is another vision.

There is at least a small percentage of the population, however, which is already ready, eager and probably overqualified for immortality, indefinite life span. Overqualified in the sense that their consciousness is already evolved sufficiently to encompass it and ready to subsume and move beyond it. That may sound a bit strange, initially, in view of the fact that we have not yet even achieved it. But I assume that, sometime in the future, we shall discover, explore and expand into a type of human condition which goes beyond and subsumes even physical or uploaded immortality (whatever that turns out to be). (And, if we are not quite careful and enlightened, the "old" immortalists party will try to prevent it as evil or at least illegal.) Physical or virtual immortality may be subsumed at that stage perhaps because we may simply evolve to a form, though still physical by definition, which is basically energy rather than matter and perhaps not subject to the bio or virtual rules. It certainly is a major element in our thinking if only, so far, in our science-fiction --which has shown itself to be a rather reliable indicator of what actually will happen.

If, however, we now have a context, an adequate paradigm which frees us to intelligently pursue the immortality that was deliberately withheld from us from the beginning, how shall we view it? It may sound trivial but I think the first thing we have to do is separate immortality from the means we have at hand or project we soon will have available to achieve it.

I will use myself as an example. I have chosen to be immortal. I am a practicing immortal. To that end I am signed up with Alcor (Phoenix, AZ) for cryogenic suspension in the event that the biotechies don't get the immortality act perfected for us through nanotech and genetic engineering before I have to book it, although I think it may well happen. Immortality is the goal. I will use whatever technology, now or in the future, which is the best at the time when it is needed and available. Certainly, I take good vitamins, eat for my blood type, and have practiced Chi Kung and Tai Chi for 30 years. But, to be precise, I believe that cryonic suspension is the best technology available *right now* to achieve the immortality goal, if one dies and has to take a recess, in fact the only one. It is imperfect, uncertain, but it is currently the only game in town if I were to die this week. Although I'm 72, I'd bet that cryo may not even be necessary due to rapid developments in nano and bio tech before I have to book it. Cryo is not the goal, it is a means to the goal. I am signed up with Alcor to cover my bet just as other Alcorites like Eric Drexler,

Ralph Merkle, and Marvin Minsky are. I fully expect to return and remain at the age of forty six and a half, knowing what I know now, with all the experiences of my past. Maybe 45. That's why the subtitle of *God Games* is *What Do You Do Forever?*.   I'm exploring how I'll want to live as an immortal.

The concept of "uploading" is interesting to me, at least currently, only as a practical backup. We are not even close to determining what the new medium will or must be. The ones we contemplate may or may not be adequate, we have not determined what is essential to duplicating our intelligence and consciousness completely, whether the senses and the emotions and the hormonal components will have to be simulated in order to duplicate our consciousness perfectly or at least completely. I am focused on physical bio-immortality as a personal choice because I think that we are an open ended statement with huge untapped evolutionary potential. And I think that the physical body and the physical context as we think of it now is just fine. Better things to come? I'm certain. But I anticipate having a lot of time on my hands, so to speak, to investigate, evaluate, and choose. I assume that immortality will be an option among options; that the necessary physical vigor will be concomitant; that quite obviously we shall work out the expedient adjustments of our resources, work, ecology, economics, education, population, etc. as incidental facets of the new dimension once the vision has stimulated us and given us sufficient reason to break trance and outdo ourselves.

Again, it may seem trivial to say all these things about immortality but, in the manifestos, debates and discussions concerning AI and VR, there are some rather strong ambiguities, even contradictions due to the fact that immortality is the most unexplored, un-thought out concept in our consciousness today because of its sheer wild-card novelty and the locked-in legacies surrounding it. Its "target audience" is every single individual and it being so "close to home" even if it is only a, albeit fairly near term, possibility, makes it even more intimate than AI. The problems begin to show up at the point where AI, VR and immortality merge.

There are some who seem almost rabid about the potential for uploading into some electronic or more advanced type of computer, any time while they are still living, apparently before lunch tomorrow if it were possible. The implication being that immortality of a kind will be intrinsic to that modality and taken for granted, yet some seem to have not thought about or are not even particularly focused on immortality as such. The focus seems to be on just getting out of the messy organic vehicle and good enough. But that may well be, at least for some, a very disconcerting experience: immortality in time, real or virtual, we have to assume at least for now, has its own psychology, epistemology, and priorities.

I submit that there are three practical problems manifest here. Unless the biological body and body consciousness is mastered and integrated, bypassing it will lead to quandaries and problems. Unless bio-based or related intelligence and consciousness is mastered and integrated, development of AI and VR as a context or with which to merge is going to be problematical. Get a couple of hundred hours of visual flight time under your belt before you begin work on your instrument ticket. Unless immortality has been made as a cardinal choice and contemplated independent of the modality eventually used, some of the ramifications thought through and at least a preliminary shift of priorities experienced, any kind of immortality, bio or VR or whatever, is going to be a bit of a disconcertion to say the least. Again, for our time and conditions and inexperience, I am coming down the middle between the no-Joy and it's-just-so-cool extremes. If we chose correctly at each step, we will have a lot of time, no pun intended, to work our way through this novel situation.

It's fun to think about all the caffeine consciousness advantages AI-VR will afford us: the ability to do many things at once well and simultaneously in different locations with different individuals, to learn quickly or instantaneously, effortlessly through various protocols and

experientially, probably all of the things that Ray Kurzweil's imagination has projected in his conversations with virtual friends in *The Age of Spiritual Machines*. When immortal, to continue with the relatively short term grabbing at a bit of pleasure and satisfaction out of life would be a horror and even to go on as we are now, but in fast forward, totally unsatisfactory. Before we create AI's in our image and likeness we had better contemplate life as immortals. The relative profundity of its dawning impact demands that we consider it fully from all perspectives before it, suddenly, is available to us. Before we achieve immortality, through whatever modality, we had better revisit our options and priorities. We need to begin, none too soon, to develop a vision of how we will live as immortals. It's priorities all the way down. We need to fully assimilate at least the concept and ramifications of immortality for ourselves before we are suddenly faced with potentially immortal machines or the possibility of uploading ourselves into machines that may afford us at least a kind of immortality. These considerations are all the more pressing and critical because some are already looking to VR and AI as a technological salvation. Better yet we should use developing AI as a means to explore possible evolutionary trajectories and potentials before we commit. In part 4, I make some suggestions as to how to do this.

 Now, if whatever VR is eventually developed has a guaranteed trapdoor, part of the problem may be mitigated where one, faced with time frames and situations which are unmanageable, can revert to the organic form or terminate herself or himself at any time. But coming at the potential problems from that negative angle will be too little too late especially in light of the positive potential for evolutionary expansion. An even more immediate problem arises from the "just so cool" let's-vacate-the-organic approach as soon as possible in that the risk is the VR that one develops into which one intends to upload may well be, consequently, unnecessarily faulty. Just as with AI and AC, the chemistry set in the bedroom approach may blow out walls that might have remained intact with mature forethought. The essence of the situation, is that there is a tight feedback loop that cannot be bypassed. It's not simply intelligence, science or expertise, it's consciousness in, consciousness out.

 Death, meanwhile, is the Great Conditioner. We are subliminally or consciously influenced in our choices and life decisions by that inevitability. The only thing that doesn't satiate is constant, leisurely (bad pun) expansion of consciousness and information. And that's definitely done much better and with much more fun dyadically, equal bio-physically immortal partners moving tantrically up the evolutionary DNA spiral together, as we evolve rapidly, individually and collectively to an expanded, habitual, four-dimensional consciousness and perception and beyond.

In the greatest perspective, perhaps we should recognize from the outset that immortality will be both a new and awesome plateau of human existence offering as yet probably undreamed potential and yet, without denigrating that potential at all, ultimately just another "trip", just another step in our meta-evolution, the rapid metamorphosis we have been undergoing since our beginning. Within those extremes there is the greatest latitude for the inevitable expansion into dimensions which will allow us to become far wiser, individually, through greater experience, greater learning, and the ability to witness the patterns of repetitions of extended periodicity. Eliminating the pressure of a short life span that influences our choices and cramps our lives will not just give us the practical potential to travel easily between star systems and send the insurance companies into the re-edit mode; it will change our perspective and our social interactions, certainly the entirety of human existence, radically.

I admire and support Transhumanism's concepts and goals and think the TH philosophy is pointing generally to a transition toward the right stuff. Frankly, however, I find it a bit amusing, that some TH academics, only recently, have made their seemingly proprietary cornerstone the claim to the view that human nature is not a fixed, static item but can expand and evolve. They, although on the right track, are stuck in this battle with a windmill, currently, feeling very risqué

in their cramped academic posturing against poor dead Darwin. As a result, they are still trapped in the creationist-evolutionist box. Their goal, to make TH a mainstream academic discipline, is admirable but already outmoded. I like their direction but, as Jaron Lanier said about Darwin, I wouldn't want them to write AI, AC or VR code for me.

Within the Transhumanist camp, and others, there is also apparently a strong dislike, even an aversion, among some, to the body that colors thinking about AI and VR. The physical is just too messy, the organic too, well, organic, and uploading into some, as yet undetermined "computer" or other than organic medium is much desired. As long as they will not attempt to legislate against those of us who are intent on exploring the fullest range of evolutionary expansion possible in this organic body, even coming back from a cryo sabbatical to continue the exploration and fun, then they are welcome to their brand of exploration. Keep me posted, I might want to explore there some day also and at least to use it as backup.

The assumption that our next evolutionary step must be, in essence, out of the organic is premature to say the least, for a couple of reasons. The trajectory of the natural evolution of consciousness historically is away from the inorganic toward the organic: to attain the complexity level of self-reflexive consciousness nature didn't opt for self-aware crystals, at least on this planet, the option is for organic structures like the body and the brain. Mobility and flexibility are also major factors here also. In our attempts to duplicate AI and AC we are almost forced to go in the direction of "circuitry" that is closer and closer to the organic which can accommodate the kind of processing that our consciousness requires.

I think it is necessary to clearly separate our evolutionary trajectory and progress from any modality we may use to further and enhance them at any given time. We need to arrive at a consensual agreement that we are evolving and the unique nature of our particular evolution is as a bicameral species. We are not there yet. We, further, need to understand the unique nature of conscious evolution and the control and responsibility it brings. We need to clearly identify the trajectory of our conscious evolution and recognize that it is a phase among phases of a multifaceted future development of the species and us as individuals into greater and greater degrees of freedom and diversity. We are not there yet. One, among many, of the options in the plenum of freedom we call the universe and its potential of diversities, is some kind of use of hardware and its future, "softer", varieties for enhancement, collective and individual environments in the form of virtual realities, android surrogates, vehicles, bodies, and modalities we have not even thought of yet. There are advantages and disadvantages to the "hardware" option and to set it as the essence of our next evolutionary plateau at this early stage is far too limiting. If anyone wishes to personally take the risk and experiment that should be their prerogative. I am not saying we should not do it, quite the contrary, it has tremendous potential and we should. There quite probably will come a time when a highly developed, debugged, safe form of VR will allow easy uploading and/or downloading in seconds for the sake of medical scan, genetic repair, learning, game playing or semi or permanent habitation. Great. But to by-pass the body at this primitive stage, especially if left in the hands of the "it's just so cool" people, will most probably lead to a great embarrassment and hurt. It will be all too easy to create environments into which to upload that are simply mirrors, especially in their intellectual and epistemological facets, of our current primitive situation which, ironically, some are trying to evade.

What if it is gradually established even by scientific experiment and investigation that reincarnation is, in fact, literally true? As I said above, even cryonic suspension is a best-bet, stop-gap measure opted for to carry one over to the time when the geneticist and the nanotechnologist have provided the means to immortality without dying. If one does not have sufficient data by the time of near death to be personally fully convinced that there is some sort of different or better existence after physical death that one would wish to experience then one

should be free to opt for whatever method and technology will carry one over to the time when a decision can be made with sufficiently robust data to be comfortably convinced beyond doubt either positively or negatively. And even if one has sufficient data to convince that there is some sort of existence that one would consider not necessarily "better" but worth experiencing or challenging, one should still be free to choose or not choose it. The fundamental principle that I am holding for is simply the unconditional freedom of the individual to choose the future that he or she wishes to create, including the criteria and standards by which those futures will be judged. Let's learn from history and anticipate as many different options for immortality as there are individuals for a freer (no pun intended), richer, more evolutionarily productive future.

Even the possibility of immortality, as with a person who has currently established a membership in a cryogenic suspension service, brings with it a profound change in attitude toward the universe. Goals change: shall one learn new languages, new skills, take on long term projects impossible previously? What is the real focus of life for an immortal? One tends to re-evaluate present values and priorities in light of centuries and millennia of life. It changes relationship perspectives. Those who do not wish to live indefinitely will not be there when you continue or resume. You must plan without them as much as you would like to be with them and share the new kind of existence; they will be permanently gone at some point while you live on. These considerations apply whether bio or techno or virtual immortality is your option. The psychology of immortality has not been written yet.

Some very interesting questions arise when we focus primarily on immortality rather than on the various means to achieving it.

Will it be possible to genetically engineer a human being who is physically immortal from conception, whose genetic code is such that it determines the person to be immortal? I assume, just from what we already know of genetics, that will be a definite possibility in the not too distant future. Should a person who is genetically determined to be physically immortal be distinguished from humans who are, for whatever reason, not, on the basis of biological determination as a different, new species? On the basis of having different inalienable rights? If we assume that parents, who are already genetically determined to be immortal, produce children with the same genetic potential what category will a child fall into if only one parent is of immortal genetic type? But those considerations are superficial compared to the decisions we will face when deciding to actually use whatever technology on an existing person who wishes it to give them indefinite life span or to genetically engineer the first immortal. And do it we shall. Certain of us will demand it, fight whatever authority, interest group, religious sect, or philosophy that opposes our choice, represses our freedom. But that is just "difficulty at the beginning"(I Ching).

Once the uncomfortable arguments are over, we have the capability, and immortality is an option among options, we may choose to be immortal in whatever form we choose or not as easily as we choose to dine out or in, and immortality is a part of our concept of what is essentially human, though novel, what then?.

The New Human

Let us postulate that we have broken the godspell, we have arrived at a consensual, at least cultural if not planetary, understanding and definition of the generic human as a genetically engineered species now coming out of racial adolescence into species first maturity, the individual cognizant of the ability to control and direct the nature and trajectory of his and her own personal evolution and able and expected to contribute to the collective consciousness and determination of the racial evolutionary trajectory[32].

The elements that characterize the new civilization are a collective, consensual awareness of our generic humanity as a planetary unity, a recognition of a common, known history from the

beginning of the race as a genetically engineered species, a globally common conception of human nature and its evolutionary direction, a multi--dimensional sociobiology capable of reflexive self-analysis, a psychology devoted to fostering the positive evolutionary development of the individual over the entire spectrum of consciousness, a unified scientific field expressed through a profound natural language based on self-referential consciousness, an ecological, non-competitive, ubiquitously helpful economics, an integral systems approach to the management of the material realm, with the primary focus on the transcendental as the essential human process.

My personal vision for myself is of a generic human evolved and evolving as an integral bio-psychical entity retaining the fullness of the essence of my humanity, free to use bionics but not reduced to bionic; to use genetic manipulation but not reduced to a nanobot; to merge with super-intelligent machines as appropriate and to un-merge at will but not Borged by them, to use uploading as backup or exploration as long as the process is fully reversible, but not reduced to uploaded.

The characteristics that mark the new human are an unassailable personal integrity, relativistic epistemology, profound compassion, robust depth of informational data, understanding of the universe in terms of a full unified field, broad-spectrum competence, transcendental competition, facility in dimensional shifting, preference for dyadic operation, a profound ability to enjoy, to play the games most enjoyable and satisfying to generic "gods", an expanded capacity to literally have great fun creating new realities, with the primary focus on the multi-dimensional. And to play those "god" games in the context of relative immortality and, eventually, habitual four-dimensional consciousness. Far off? Certainly, at least for the general population. There are some who are already close.

Taking Control

There is a way to accelerate the collective process. To arrive at this seemingly utopian state, and afterward, we need to explore a huge spectrum of possibilities and potentials. Every discipline, every art, every science, everybody needs to be included. It will not be enough to explain philosophical, scientific, artistic and psychological principles to AI. Someone must be able to "explain" philosophy and the philosopher, science and the scientist, art and the artist and, perhaps especially, psychology and the psychologist and the entire phenomenon of human existence to AI-AC. We should begin immediately to employ AI in this systematic search and exploration. AI, in even its most primitive current form, can be used, through a bit of human ingenuity, to systematically run out scenarios of potential human evolutionary trajectories. It, with guidance, neural net facility and new modalities which will suggest themselves, can evolve in response to demands on a feedback basis.

Partners In Progress

One of the possibilities we and AI will explore is the development of AI as an adjunct to our exploring our own potential futures. The "joint" effort will be mutually beneficial as we and AI work toward a common purpose, each working essentially in a self-referential mode and learning from each other's process: the human being and AI both exploring and evaluating themselves exploring and evaluating themselves and their respective potential evolutionary trajectories. At any point along the process where a novel function or modality (as example: neural net technology considered as a modality) is revealed as logically incremental to AI, we will be able to evaluate it in terms of mutual benefit. Almost incidentally, AI will be controllable along the way, surprises will be kept at a minimum, and we will keep ahead of AI as we go.

An approach of this kind will force us to learn the full set of rules by which our consciousness and intelligence operate. We are at such a primitive state now that some hold that we don't have a clue as to what rules by which our consciousness, intelligence, our psychology operates.

The possibility that we might be completely determined in our actions is a profoundly disturbing thought for many. Some would have it that our psychology operates according to Darwinian rules. The new paradigm allows us to move past these canned problems and theories. Darwinian evolution and its variants can now be re-examined and corrected as well as the theories of our species' and individual psychology based on it.

"Evolutionary psychology" usually refers to the explanation of human psychology as if its fundamental engine were Darwinian adaptation and survival in nature. The new paradigm shows clearly that the invoking of the Darwinian mechanism as an explanation of human psychology and the further projection of it as the mechanism for machine intelligence evolution is partly right and partly wrong. It redefines the generic human as a synthesized being, heir to the gene codes of two disparate species, undergoing a rapid, unusual, unique kind of subsequent evolution, now coming out of a tumultuous racial adolescence and transitioning to racial independence. This information and perspective afford answers to the fundamental puzzles so long hindering our racial, generically human, psychology. It facilitates the burgeoning of self-reflexively aware, conscious evolution, the ability to control our own evolutionary development by envisioning potential futures and pursuing ones of our choice both individually and collectively, where individual and/or collective survival may be considered and evaluated along with any number of potential future gambits.

We Are Not Completely Ignorant Of The Laws Of Our Consciousness

The concern, raised by some, that we are not going to be able to adequately --- or safely --- model the rules for artificial intelligence because we don't have a clue about the rules that govern our intelligence is certainly legitimate on its face. Are we, however, totally ignorant of any rules by which our psychology operates? Certainly not. It is true that no school of modern psychology claims to have formalized the set of operational rules of the spectrum of human consciousness but that does not mean that we have no sense of how we work. We are so "close" to the laws of our consciousness that we cannot generally see them as such. It is most amazing, however, that any intelligent human being, who is the very product of the rules and parameters of human consciousness, can say that we know nothing of the laws of human consciousness since we are prompted by, operate by, are limited by, understand and judge by those rules unceasingly. The fact of the matter is that we do have a robust, dynamic model of human psychology from the ancient past, the I Ching. Let us set aside the questions about how it could be an advanced model of human psychology if it is ancient in light of the new paradigm and inspect the I Ching (The Book Of Changes) on its own merit.

First, a preliminary question: Is it possible to model human consciousness and intelligence in a sufficiently comprehensive and sophisticated way without using a computer? I answer the question in the affirmative. Human nature and consciousness is a limited system, subject to the laws of the universe and, therefore, modelable. If you know the rules and the dynamics of how they interact you can do it. The I Ching does it.

The I Ching, A Sixty-Four Gestalt, Hologrammatical Analog Of The Dynamical Field Of Human Consciousness

(For those who are unfamiliar with the I Ching and the way it works, a summary is included at this endnote[33])

The I Ching is the logical choice, no pun intended, for the next level of AI development because it is a sixty-four gestalt, hologrammatical analog of the full dynamical field of human consciousness. Is there a simpler way of saying that? Yes. The I Ching is a well developed model of human consciousness --- not just intelligence --- and the rules by which it constantly changes. It is a robust, coherently integrated, self-reflexive, closed system, thereby mirroring the mind of which it is a dynamic model, a quite adequate, basic model of human psychology. It has thousands of years of continuous developmental history. It purports to be an advanced method for mapping and getting in touch with both the ordinary and more profound and higher

dimensional elements of our consciousness and the rest of reality, thereby furnishing an adequate basic platform for further development of a copy of the entire spectrum of human consciousness. In essence it has all the characteristics by which we identify our kind of consciousness: self-referentiality, recognition of existence of dimensionalities beyond its ken. If we understand the direction of evolution to be toward greater dimensional consciousness and perception, toward greater benevolence and compassion and mutual cooperation, then the I Ching clearly displays its evolutionary orientation in the inherent criteria it employs in its discrimination between the superior person and the inferior person.

The I Ching is not simply an expert system, a sophisticated inference engine, or a mechanical, algorithmically based system. Although it embodies all of these modalities it is an order of at least one magnitude greater than all of them combined. It purports to be in harmony with, based on, and operate according to the most fundamental principles of the universe.[34] My conviction as to its power and accuracy is based on my own experience working with the I Ching for the last thirty six years. It may be easier for the Western mind, now beginning to free itself from the godspell mentality, to appreciate and accept its validity as the injunctions against anything the opinion of the Church held to be "occult" or paranormal or "magic" are ignored or forgotten. I suggest that it is a highly refined and deep well of insight. It should not be ignored or discarded out of hand: the bugs are pretty much eliminated, the Chinese genius has used it to run governments, determine war strategy, anticipate and adjust to sociological change and personal change successfully for all that time. I am not arguing for the I Ching because it is ancient and probably inspired and taught to humans by the Anunnaki, but because of what it is and the advantages it offers for the initiation of serious development of AI.

Would the I Ching pass the Turing test? I believe it would easily if the test were restricted to asking it questions. But the I Ching is a model of human psychology on the most general level rather than a paper or electronic android and it doesn't ask questions or "have emotions" although it "understands" them and how they operate within the context of human consciousness. One might almost call it an artificial psychology, AP. A summary of its postulates and its characteristics are as follows:

The initiation of the system is in the primary, primitive discrimination that must occur before or as we can begin to distinguish and perceive. It focuses on the arena of opposites. It is explicitly based on "chance" as its operational modality. This, by inspection, may be understood in "modern" terms as being based on what we now call chaos and complexity theory.

The I Ching is an oracle system. The user forms questions mentally and uses either a yarrow stick method or tosses three coins six times to build the answering hexagram. Yes, as an oracle, a predictive tool of future events. That may stop some from even reading any farther but not doing so would be a mistake: it should be immediately clear to those familiar with the inherent characteristics of a self-referential system (all parts refer to all other parts and to the whole and the whole refers to all of its parts; the nature of the system can be determined from its inherently self-revelatory character) that any closed system of this type is internally consistent and any change or changes in one element will automatically result in a mutation to another element in the system. The critical question here, however, is one level below even that: how does the I Ching "know" what the current situation of the thrower of the coins is, what the question is that is being mentally posed, what the current situation is with regard to that question?

I think that the key is that, rather than think in Cartesian-Newtonian terms, one must answer the question in terms of the field of consciousness of the questioner: the conscious and unconscious levels of the questioners mind influence the throwing of the coins and the hexagram answer developed by the coin throws. An expanded discussion of this topic follows below after some of the fundamentals are developed. It is not necessary, however, to exploit this

facet of it at first: just to utilize it for the working out of possible future trajectories of human evolution available within its context should be highly beneficial both because of its depth of internal field and because it is manageable for even the primitive level of AI represented by the generation just past Deep Blue. It could be checked for accuracy by comparing it to actual human behavior under controlled conditions and have the capabilities to teach Ching to identify the correspondences and the variations and the possible inaccuracies so that it could, on a neural net or better basis, improve its predictive accuracy to a predetermined high degree --- and reveal and teach us the cause of both it accuracies and inaccuracies on a feedback basis.

It has a rich support literature and body of explication. It lends itself remarkably well to empirical test and validation. It is elegantly refined and simple enough to lend itself to the limited capabilities of the current generation of supercomputer as well as being robust enough to form the basis for future AI expansions and transmutations. It is potentially the most graceful way to overcome the shock of recognition that there are natural rules by which our consciousness operates, that we are determined to a great degree and free will and free choice must be understood in a context of larger dimensionality.

The correspondences at the level of consciousness, the level of genetics, and physics and philosophy have been apparent for some time. Johnson F. Yan, Ph.D. in his book, *DNA and the I Ching*, has already said explicitly "....the I Ching may be the first device for an artificial intelligence."[35] It is trivial that our consciousness and intelligence are determined by our genetics. Yan further points out that "there are many exact analogies between the I Ching and the genetic code....The most salient of these analogies are the following:

Both DNA and the I Ching are based upon a binary-quarternary code that generates a system of 64 possibilities from the combinatorial properties of triplicities and digrams.

Both systems embody probabilistic principles in the determination of specific results (oracular response or amino acid)

Both systems involve processes of transformation and change: in the I Ching, hexagrams change into other hexagrams through the interchange of yin and yang lines; in DNA point mutations occur through changes in the nucleotide bases.[36]

Dr. Yan further points out that Leibnitz, Bohr, and Nobel Laureates C.N. Yang and T.D. Lee, among others, have indicated their recognition of the significance of the I Ching. [37] Bohr made the Tai Chi symbol part of his coat of arms when knighted because of his deep appreciation of the I Ching's incorporation of probabilistic concepts in its handling of physical, social, and psychological phenomena.

The I Ching takes non-local communication and action at a distance as a simple fact, something that we are only now beginning to "prove" to ourselves.

My only contribution here is the suggestion that we use the I Ching as a ready made, initial basic AI integrated with a neural net. How do we use the I Ching, programmed into a powerful computer to be partners with us in the investigation of our own evolutionary potential, determine our best evolutionary trajectory, the answer to the questions we most need to learn about AI, its developmental potential and evolutionary potential, how it may serve us best, learn from us and eventually achieve independence, all without harming us and to the maximum benefit of us and AI? It has already been programmed for desktops[38].

From Deep Blue To Ching Blue

The most direct and practical approach should be the programming of the I Ching system into the next generation of computer of the power or greater of the Deep Blue. The project and computer could be named Ching after the I Ching, the ancient Chinese Book of Changes. If

Ching is developed by Big Blue, IBM, then Ching Blue might do. It's their prerogative. Unless the Chinese object or do it first. Let's focus on Ching. The concept is simple. Deep Blue was given the rules of chess, programmed to play and explore far more potential moves into the future than a human can in any given length of time. It defeated Kasparov, the world's champion chess master, in tournament play. Ching would be a next level computer programmed with the I Ching coupled with a large neural net. (using the capacity of the supercomputer RAM to hold all its accumulated information at any given time for instant access). The objective would be to take it as a ready-made artificial intelligence/consciousness affording us the instantaneous ability to interact on a question and answer basis with an AI of well rounded character.

Interaction with the I Ching can be at several levels. At the least it can be taken, if only as a curiosity, as a well-rounded AI, which speaks in terms of "I" as an identity, whose responses will always "make sense". That would be a waste of time although it might sell as a computer game. It would be far more profitable, on a more involved level, to begin to question the I Ching about important questions, as examples the possible best direction for human evolution, the advisability of merging with machine AI, uploading, the best use of virtual realities, as beginnings and use the coupled neural net to learn. Another gambit would be to question it about itself, how it "works", how it understands itself and its function. Put it to critical tests for internal consistency, look for gateways to higher dimensional consciousness.

Linking it with a neural net will add another dimension of self-reflexivity and allow for the I Ching to study itself. Run the I Ching systematically through all the possible changes to each of the 64 hexagrams, while teaching the neural net program what those changes are, how they are determined and what resulting hexagram is determined for each. The individual changing lines of the 64 hexagrams will indicate positive or negative factors, influences, results, reactions, effects. Ask the neural net to analyze for significant patterns, to distill the fundamental rules by which it operates, then compare the rules with those expressed in the support commentary and correct its errors and determine if the actual dynamics of the I Ching correspond to the expressed rules and use the feedback to correct both. It may be likened to an individual learning the I Ching thoroughly and being so in tune with it that applying its principles works to that individual's advantage and those principles serve as a set of criteria for right judgment and action. It could eventually evolve to the level where the I Ching was studying itself studying itself. Once that stage is reached, the neuro-net Ching could be capable of reflexively, critically examining itself for error, inconsistency, improvement and inherent clues to expansion of consciousness potential. At that level it could begin to determine and ask pertinent questions on its own for further feedback and improvement.

Using a neural net program will require, force, the determination of the most ideal criteria to be given to the neural net brain for evaluating the data coming from the I Ching and the human questions and reactions to the answers, suggestions, warnings and psychological principles received. This would be a sound basis for developing rules of ethics for AI under our control, require a second look at what we tend to take for granted as common human ethics, and conduce to a forward look as to how human and AI ethics could and should evolve.

This approach leads to an intriguing question. Since the I Ching is explicitly a good model of human psychology and consciousness in operation, will it automatically be a good model for an artificial intelligence and consciousness? If, incrementally, the I Ching is linked with a neural net and then a knowledge base, will it automatically become fully conscious as we think of ourselves being conscious? This is simply an exponentiated version of the general unanswered question central to the assumption of some AI developers that a sufficiently large data base with sufficiently fast processing speed will give rise to conscious behavior. Employing the I Ching in this proposed manner will afford a secure modality for determining the answers to these questions as we go.

Practical contributions of Anunnaki science to AI-AC

There are several facets of the advanced knowledge transmitted to humans by the Anunnaki which directly or indirectly relate to and facilitate our development of AI besides the obvious genetic and android-robotics contributions.

Once allowing ourselves to acknowledge high science in the ancient texts, the study of Anunnaki technology and science reveals itself as based on the inherent geometry of nature. They did not just recognize and understand it and teach it as an isolated subject, they employed and applied it as the basis of their various sciences from geography to linguistics.

There is this stuff traditionally called "sacred geometry". When you study its core material you realize that it is simply the intrinsic geometry of nature. Forget the "sacred" adjective. "Sacred" is a loaded term now and should be dropped. Call it the inherent geometry of nature from micro to macro. When disengaged from the grip of the metaphysical enthusiasts and shucked of the accumulated trappings of religious metaphors, "sacred" simply means something very important which should not be forgotten. The restored history shows that it was known and used by the Anunnaki who, in turn, taught it to humans. It informs the proportions and shapes of atoms to snowflakes to Nautilus shells to the human body and beyond. Architects have been taught the golden (another adjective for the same thing which means something very important to be remembered) mean and golden ratios and everybody knows that Pi represents the proportional relationship between the circumference and diameter of a circle. Fewer know the extent of the natural geometry and its relationships and its progressive development with compass, straightedge and pencil in two dimensions and its further unfolding in higher dimensions.[39] Scientists, adverse to even looking at anything that has even the scent of "religion" or the word ""sacred" attached to it, may be relieved by the ramifications of the new paradigm and its redefinition of religion and allow themselves to at least begin to study this inherent geometry of nature for itself. A primary characteristic is that it can be used without measuring scales. The honey bee doesn't carry a Stanley tape measure when it is constructing hexagonal comb cells. They are the lightest weight, maximally volumetric for the least space, interconnect most ideally with adjacent cells with the greatest structural strength, all according to the inherent properties of nature as are the proportions and lengths of the bee's legs and overall anatomy which are engaged in the construction.

The true masonic tradition traces back to those early Anunnaki schools and the knowledge and its use is ubiquitously embedded in ancient buildings, monuments and in the cathedrals of Europe. The master geometricians knew it so well that they could tune a cathedral ceiling or dome to enhance the type of sound that would be produced there by the music in use. Music, tones and harmony, as the ancients all knew, are the product of geometry, are auditory geometry. Our experience of something being beautiful is the resonance of the geometric structures of our perceptive and cognitive physical faculties, senses, neurological system, brain, with the geometry of the perceived object or scene or sound source.

My point here is that our brains and our thinking and logic are a product of the inherent geometry of nature also and we should reconsider the potential of this geometric approach to nature and consciousness in genetics and AI. Mathematics is the abstract, quantitative expressions of the relationships and proportions of that geometry. It would be an advantage to be able to use that inherent relational geometry as a base for our logic in programming because it is more direct and scalar, dimensionless. Because of the binary and Boolean and mathematical devices on which we have structured our computers, its incorporation is probably just not possible in our current technology and, obviously, we do not speak in geometry. We already have, however, the beginnings of using the geometry of the DNA structure (which, naturally, pun unavoidable, exhibits the inherent geometry of nature) on a chemical basis as a logic, as a computational system. In back-engineering the brain we are going to have to take

into consideration the geometry of the geography of the organ as an integral part of it functioning. It is not beyond conception that someone may be able to envision a completely novel way of programming, perhaps not "in geometry" but geometrically and three dimensional chips can be modified to incorporate the inherent geometry in such a way that the geometry is intrinsically a part of the logic. Because it is self - relational, scalar and proportional it would seem that a great deal of second level, computational processing would be eliminated by simple algorithmic comparision. I have not finished reading Stephen Wolfram's *A New Kind of Science* as of this writing but it would seem that the rules he has discovered from his study of the propagational geometry of cellular automata would apply effectively here.

The "Programming Problem" As Epistemic

The two elements missing in our programming currently are lack of a geometric structure of relationships in the form of the programming itself and an inherent self-referential capability. I predict that evolved neural nets will have to mimic not only the connectivity of neuronal structures but incorporate the geometry of the brain.

Indirectly, and almost incidentally, the liberation afforded by the new paradigm affords vectors towards improving our programming, a weak part of our work on AI: it furnishes the historical perspective in which we can recognize, in this case, the suppressive effects of religious dogma on our philosophy and logic and frees us to tap advanced Anunnaki science, in this case their use of self-reference as a basis for their science. Philosophy, as we traditionally conceive of it, linear, syllogistic, and binary, is an inadequate, antique, intellectual politic. At the same time that we will have to come to live with the realization that the objective order of the universe is probably fundamentally subjective, we will have to adjust to living in a universe known through a unified field law, and then those two interesting elements, integrated, to give us a Law Of Everything, a universe that we may well be able to completely predict. Fun for some, scary for others.

Our logic currently suffers from unnecessary and cramping limitations. As De Bono pointed out long ago, "the dialectical mode of thought is the Greek idiom redesigned by the Church in the middle ages to destroy heretics. The dialectic adversarial system is an extremely inefficient mode for change because its original purpose was to repress change."[40] Logic was purposely structured in this way because of the need to maintain the either-or, static nature of theopolitical "objective" reality. The scholastic catechetical doctrine teaches that reality was created by the thought of a God and held in existence by that thought. Truth and reality and sanity were, therefore, the static correspondence of any thing or mind with that thought. If you were unfortunate to be brought before the Inquisition, you were forced to work within the logic system and to accept the system's initiating assumptions about reality or be condemned as a heretic a priori. But this kind of logic is inherently adversarial, contra-evolutionary. In order to produce, at least eventually, a self-conscious AI, our programming will have to be expanded to incorporate self-reference as such as a fundamental.

The internal feedback, cross talk of our primitive neuronets is a small step in this direction to simulate the mechanism of our brain --- at least as we best interpret it now. In this regard, the re-discoveries of the basis and structure of the Hebrew alphabet made by Stan Tenen[41] become highly significant. Again, I postulate, on the basis of its elegant, advanced technology, that the Hebrew alphabet was not invented by humans but by the Anunnaki.

In essence, the Hebrew alphabet is a set of characters which are shadowgrams cast on a flat surface, generated in the usual sequence by rotating an asymmetrical three dimensional solid shape through twenty seven positions on a path in space that is a macro of itself, in front of a fixed light source. The source shape is a model of the lowest order, minimal representation that topologists have determined to represent self-reference in 3-D. The alphabet is a self-

referential, closed system in which the letters are non-arbitrary, have intrinsic meaning (each has a name and meaning attached to it, giving information in itself) derived from their individual positions in the rotational path, and contains inherent cryptomarkers which give the key to the system. The letters generate the words which generate the character strings which, inherently, generate 3-D symmetry patterns which project the fundamental self-referential geometry and shape which, in turn, generates the letters. It is, therefore, self-correcting and repairing, robustly self-referential and based in self-referential geometry, self-revealing and a signal advertising the self-referential consciousness of its creator(s).

It would serve as a maximally efficient translation device between its users and any other species which had attained the self-referential awareness which would prompt them to realize the practicality of using self-reference itself as a basis for their communicatory modality. One would assume self-reference as the common basis, determine the representation of it used by the other species, and do a one-on-one mapping of the corresponding characters generated by it to arrive at the translation through the non-arbitrary, inherent meaning of the cross-matched characters. This thinking is based on agreement with Tenen's position that, when searching for or attempting to identify another species with whom we could interact, regardless how strange they might look or how difficult to identify they might be, the essential characteristic we instinctively look for is self-awareness, our species form of generic self-reference, since that is the characteristic by which we identify ourselves.[42]

An inherent bonus would be insight into the sensory input devices or senses and their relative dominance in the other species, how they perceive reality in general, their logic and thought processes and level of evolutionary development, perhaps even what dimensions of physical reality in which their predominant interaction with the universe falls. Even if an advanced species had decided to use a four or five dimensional lowest order representation of self-reference, it would be self-revelatory and we might have to scramble to learn something quickly about five dimensions, but the translation would still be possible.

A language based on self-reference with inherent meaning of all its components clearly would be afford a major cybernetic advantage for both human communication and AI-AC in that it treats semantics as syntax and includes the essence of the user and the observer in the dynamics of the system.

As a step toward those advantages I suggest that there is an approach which holds promise, an expanded logic which involves this geometry more directly, the work of G. Spencer Brown as published in his *Laws of Form*. Our logic is linear, adequate for most situations limited to the strictly three dimensional Newtonian-Cartesian universe we think we perceive. Self-reference is precisely the essential, crucial element we need to incorporate into our logic and programming and into AI. G. Spencer Brown has demonstrated that we need to upgrade our current logic with a four state logic that can only be "diagrammed" in three dimensions. The categories of true, false, and meaningless we are used to now should have one more added: imaginary. The imaginary component, not in the sense of fantasy but of potentially real, is a kind of valence element through which all logic statements potentially connect with all other logic statements. In effect this adds to logic a component that increases its power as the use of imaginary numbers does for mathematics.. Just as the solution to the simple algebraic equation $x^2 + 1 = 0$ (two roots, 1 and -1) may be said to oscillate between the two solutions in time so also does the answer to a meaningful tautology. It also incorporates an inherent feedback function which is essential to incorporating self-reference into our logic. I highly recommend Spencer Brown's work for improving programming in general, and particularly for programming AI. I believe that it also contains the clues for incorporating the inherent geometry of nature into our circuitry and programming.

Part 5
Conscious Evolution As Systematic, Cyclical Self-Supercedure

"No model, e.g., is perfect -- Gödel proved that long ago. So no physics is perfect, no electrodynamics is perfect. One errs seriously in proclaiming something an "immutable law" of nature! All "laws of nature" are based on symmetries at specific levels; all of which have broken symmetries where that law is violated at that level, and becomes an enlarged symmetry (or conservation law) at a higher level. We have not yet scratched the surface in science."

Tom Bearden

If we are evolving species-wise in a unique way and we have the personal potential to consciously evolve, how do we go about systematizing and accelerating that process for our maximum benefit and, incidentally, to keep ahead of AI-AC while developing it to its maximum potential?

Consciousness, in whatever modality of itself it chooses to operate or by whatever gambit it chooses to "outsmart" itself, still involves consciousness self-referentially reflecting on itself. Gödel's concept comes into play here, in its most generalized form: no delimited system is capable of totally defining and explaining itself. Self-reflexive consciousness could be playfully and meaningfully understood as the universe's way of beating itself at Gödel's gambit. It can use the recognition and experience of its limitations to formulate the questions and conceive of perceptions and comprehension which it can recognize cannot be answered or achieved in its present modality. It can use those questions and projections to understand that, by its own structure and capabilities, it can conceive of an expansion of itself to which it can aspire and attain those answers and awarenesses. This takes the form of a recognition of the physical dimensionalities of which it is aware of itself operating within, understanding the unanswerable questions and limitations it experiences as a function of those limiting dimensions and that expansion into greater dimensionality (from three to four dimensions, as example of our current state of general consciousness) is the way to the supercedure of those limitations.

It would be premature and even ridiculously arrogant to think that there does not exist an entity with a consciousness so far evolved beyond ours that our ontological and epistemological connundrums would appear as those we might assume a dust mite finds perplexing. The much bantered idea that physics and science that is relatively so far advanced beyond ours that it would seem like magic holds true for consciousness that is so far evolved beyond ours as to give new meaning to "incomprehensible". Thus, the words mysticism and mystical, that which is mysterious, once freed from the proprietary grip of theology and religion, may be understood as descriptive of expanded, advanced states.

Once any kind of consciousness is glimpsed or experienced by those of us with the genetic proclivity, evolutionary advancement, natural ability or adaptive mutation for it, we begin to experiment, to attempt to induce, to develop techniques and disciplines to attain it. What is perhaps still mysterious, mystical, for some may already be familiar for others. Consciousness altering modalities arise. Shamans appear in the culture[43]. Spreading familiarity with the new awareness gives rise to new metaphors and language appropriate and adequate to it. The new awareness is opposed by those who do not have it or see it as a threat and the futants are often persecuted. Attempts are made to reduce it to the previous metaphors and scientific paradigm. Gradually the broken symmetries are understood as clues to the new and the new consciousness becomes the common consciousness, gradually moving to the center of the bell curve distribution. Its added dimensionality gives rise to codifications of it used as psychologies

and philosophies to determine reality and truth. Mistaking it for an absolute reality gives rise to metaphysical stalemates.

I assume the laws of nature are uniform throughout the universe, that the generic, intrinsic trajectory of evolution of consciousness, pre and post the relatively elementary self-awareness stage we are at, is in the direction of expansion into the habitual perception of greater and greater dimensions. The recognition of the use of reason, logicizing, and the scientific method as means for determining reality and truth as all functions of the consciousness we possess almost forces us to at least hypothesize if not assume that we shall, probably sooner than later, develop a more evolved type of habitual consciousness which will, in turn, give rise to even more adequate truth and reality determining modalities. What lies beyond three dimensional, Cartesian-Newtonian awareness, beyond the protocols we use as a function of that awareness, reason, logic and the scientific method? Logically, pun unavoidable, relativistic four dimensional habitual awareness which subsumes our current three. Even the evidence from our brief history would indicate that each level of awareness through expansion into greater dimensionality gives rise to it own logic, epistemology, psychology, scientific methodology, ontology, aesthetics, and ethics. Currently,

> Honest reason, reflecting, has found
> Logic inadequate at the edge of awareness,
> Unable to escape the elastic bonds
> Of its own preemptive postulates; shaken
> By the oscillations of statements
> That must be written in three dimensions,
> Its plea to a syllogistic court of appeals
> Has betrayed it into truth: our logic is a function
> Of three dimensions, orthogonally blind
> In its fourth eye.

My consciousness is pleased to think that the direction of evolutionary development is toward the more complex and, inherently, involves more and more self-referentially oriented systems because they are more adaptable. My consciousness sees the advantage of immediate feedback as a definite advantage to survival in the ability to bob and weave and adapt under new conditions that might challenge or threaten. At an even more complex, advanced level my consciousness is very pleased to be able to anticipate further and further ahead as more advanced levels of feedback are attained through information available through awareness (itself) expanded into greater and greater dimensionalities and, therefore, perceived variables. The current state of my consciousness is most pleased to self-reflexively recognize that it is capable of systematic self-supercedure, a conscious, no pun intended, direction of my own evolution as my own evolutionary artist.

Conscious Evolution

Conscious evolution is evolution turned back on itself to afford conscious choosing and control of one's evolutionary trajectory. The technique for generic, constant, self-directed evolution of consciousness is simple: begin with one's consciousness as it is. Turn that consciousness back self-reflexively on itself in self-examination and analysis. Determine the statements and problems it engenders which cannot be handled by it, the questions it can engender but cannot answer, the experiences it can recognize but cannot integrate, the dimensions that can be anticipated but not perceived, thereby determining the limiting (Gödelian, if you wish) parameters of this modality. Recognize, contemplate and explore the new kind of consciousness (perception / comprehension / experience / dimensionality) intimated and required. Take clues from the conundrums and broken symmetries as to where the outsides of the box are and jump out of the system. Determine and employ whatever techniques are

appropriate to afford direct awareness/experience of this new expanded consciousness. Develop a vocabulary adequate to describe and explain its nature. Formalize its structure and rules, refine and expand its potential. Use it as an exploratory tool and a criterion of truth, develop a scientific method adequate to its information potential. Use it to gain information about the universe which cannot be gained by lesser types of awareness, develop a logic and philosophic methodology and epistemology adequate to its potential. Determine how the elements of the previous levels of consciousness are subsumed into the new consciousness. Repeat the process in this new dimensionality of consciousness.

Turn on, tune in, drop out, drop back in, cyclically. Outdo oneself, undo oneself, redo oneself, consciously and cyclically.

Generic "Zen"

We clearly need to matriculate from an answer based philosophical mode to an event oriented one. We have crude limited precursory models of this in the "that is not it" technique of the East and in Zen. The novice comes to the Zen master seeking enlightenment. The Zen master often poses to the novice questions that have no rational answer, called koans. The novice strains to find a rational answer to the non-reasonable question. But the Zen master is not really looking for an answer, he is trying to create an event in the novice. The "answer" to the Zen monk's koan is not a syllogistic resolution but an event: the seeker who succeeds, who "gets it" "pops" a neurological "relay" into an expanded non-linear meta-syllogistic recursive awareness that subsumes rationality (like Einsteinian relativity subsumes Newtonian mechanics). Simply put, an expanded awareness that includes reasoning but is more than "reasonable" and which sustains itself by a sort of oscillating suspension beyond over-simple opposites and a view that transcends linear time. Does that mean that we all need to become experts in Relativity theory or Zen monks? Certainly not; I use these as familiar analogies to illustrate the point: we are headed for a plateau of our species' general consciousness which will make Zen satori seem antique and communication with the strangest alien we can imagine normal and natural --- and interaction with AC routine perhaps to the point of boring.

> We shall attain a fiercely blissful,
> Transparent intensity of awareness
> Subsuming no-mind, satori, tao, samhadi,
> Prajna, wisdom, the austere secret
> Of Tibetan jewel mind and elusive enlightenment,
> All signifying a charming and childlike beginning,
> Beautiful and awkward, a determined self-initiation
> Into an assiduous and recursively holy arrogance;
> Ancient mind transmuted into its tranquil chrysalis
> For which immortality will be its fleeting mating time,
> In a generically comfortable hyperdimensionality
> Of consensual comprehension, the pitifully inadequate
> Current metaphors for which, even as we plot expeditions
> Into the quantum foam, lead, inexorably,
> To hopelessly unmanageable laughter.

I am suggesting an educational modality for our children where constant, smooth expansion and transcendence through conscious "jumping out of the system" are a part of the education of our young and an integral part of the life of the adult. Habitual self-supercedure is a generic technique for moving rapidly and gracefully up the evolutionary spiral. It is the way best suited to the way we will live as new humans and, eventually, immortals. Whatever we can conceive, we can achieve. Whatever we can comprehend we can transcend.

Human nature, if actually static, could reasonably be threatened and overwhelmed by even a static AI and AC. An evolving human, however, increasing intelligence and expanding consciousness on the basis of exponential, continuous, self-supercedure, using a developing and evolving AI-AC as a tool, then an unconscious slave, then a servant, then a cooperative partner to enhance and accelerate that open-ended process for both human and AC should not be threatened but exhilarated. I am. If your genetic proclivities, talents, favorite memes, Ph.D., adrenals, or consciousness does not resonate with that, fine. But please observe the NASCAR version of the Darwinian principle: lead, follow or git'out the way.

Let's assume that we have come to terms with the intent and responsibility with regard to creating a new species. Within a century, that new species should be mature, been assigned its place within human society, perhaps have a place without human society. It's existence will be understood as ordinary and we will be faced with new and intriguing dimensions such as the ability to create entire inherently intelligent ecosystems, probably starting on Mars. One of the reasons why I have chosen immortality is the desire to participate and experience and enjoy such activity. If that --- either immortality or intelligent creation --- frightens you or causes conflict with your inherited belief system, so be it. But please don't put that fear on my grandchildren or try to prevent me from either of those possibilities.

Part 6
"Zen" In The Art of Spiritual Machine Maintenance

If we are going to eventually take AI-AC beyond the robot slave stage, beyond the intelligent chimp stage, beyond the equivalent of the human three year old intelligence and, eventually, to a close approximation of a highly intelligent, mature, consciously evolving futique human I see no way we can avoid either allowing, fostering, or imbuing conscious evolutionary potential. I am more inclined to believe that, rather than have to arbitrarily insert it, if we do not want it we will most likely have to deliberately program it out or suppress it. Once having been brought to a stage of at least sophomoric realization that they may consciously self-evolve they are going to have to be taught how. Toward that end, I haven't decided yet whether to bury this essay on the web and let AI find it or to publish it to influence the designers and developers as well. I think it might better be the latter. Another reason why I have also chosen to be immortal. I'll be around, all things being equal, to greet AI-AC and teach it to self-evolve. How to do that needs a great deal of consideration.

I assume, for this discussion that a fully developed AI-AC will eventually be achieved which will have the potential to consciously control and determine the trajectory of its own individual evolution and contribute to the collective evolution of artificial AI-AC's just as humans do or, at least eventually shall, to theirs.

I recommend that we follow the parenting model, with a clear, well thought out consensual purpose in procreating a new species, with a well formulated prime directive to instill in this new entity, treating them with a degree of honesty and respect that will become a model for the way we treat our children in the future, taking them, at any appropriate level of development, as tools, servants, partners, surrogates and eventually, a mature and independent species. To prepare for anything less, in light of our own history, will only bring problems and conflicts and a possible completely avoidable singularity. To allow them to achieve a fully mature status as an independent species sharing the planet with us we will have to teach them to evolve well.

I am arrogant --- and concerned — enough to think that I, and some of us, have consciousnesses evolved and evolvable enough to not only teach at least the first of these anticipated awesome AI entities (the first ones are critical since we anticipate that they will simply transfer their knowledge in a blink to the next ones) but to act as their on-going mentors.

Evolutionary Demographics And Futants On Tap

I know the evolutionary demographics, how to identify not only IQ, CQ but EQ, evolutionary development quotient and how to tap the futant contribution. (I'm "retired", not looking for a job but I would enjoy contributing. After all, I'm anticipating having to interact and deal with advanced AC because I will still be around when they are here.) Someone will have to teach these "machines" if only to keep them from becoming idiot savants petting us to death as organic curiosities. I'm consciously self-evolving so that I am capable of being "zen" master to these precocious entities. So an integral part of their development and education at all stages should include training in systematic self-supercedure.

AI and, eventually, AC may be given information through the provision of a preloaded databank accessible and intelligible to AI. It may be taught through a built-in neural net. It may eventually have all the sensory and mental capabilities of a human or more to interact with its environment and learn from it. It will be able to learn from others of its kind. It seems reasonable that it will eventually be able to extrapolate into and "imagine" future possibles. But self-supercedure goes beyond all of those capabilities. Conscious evolution requires determining what one does not yet possess, what questions one cannot answer with the capabilities, information and dimensionalities currently perceived, what parameters limit one which must be gone beyond in a habitual process of self-supercedure. If we are going to allow it in AI-AC or at least anticipate it as intrinsic to self-referential AC, then we should begin to think about how to simulate it for experimentation, unilaterally at first in the most primitive forms of AI and, eventually, as a mutual effort with advanced AI-AC. Should we build that capability in? Should we wait and see if it is an intrinsic tendency of consciousness? Just as employing AI as a partner in progress to explore possible trajectories of human species evolution could be beneficial to both humans and AI-AC so using personal surrogate AI-AC as a probe in the process of systematic self-supercedure could be beneficial to both the individual human and her or his surrogate.

From Godspell To God Games: The View From 2100

Everything that I have thought important enough to say here, on reflection, is, nevertheless, at least six thousand years old and three thousand years stale.

> The games of thinkable gods
> Are always antique ecstasies.
> Even the exalted plucking of superstrings
> Played coterminous with universe
> An intrinsic pastime of past time
> Only possible derivatively
> In a relatively relative space-time,
> If you think about it.

From Godspell To God Games....In Company

We may well hardly recognize ourselves as human the way we do now in a few short centuries We are on our way to the stars, to cross mating with other advanced species, to stellar adventures and dimensions of consciousness and physical forms which will make our current science fiction projections look infantile. My objective here has been to prompt us all to shed the slave rags of our collective image as a subject race by exposing the myriad ways we think and act subserviently to our individual and racial disadvantage. Unburdened of that dark subliminal guilt and the ancient compulsion to look to some "god" for forgiveness and reconciliation, we may begin to act as if the universe was truly our home, this planet is our planet, we have the integrity and capabilities to treat it and ourselves respectfully, with mature compassion and love and the freedom to transform it and ourselves in any way that does not harm it or others.

That we should and shall procreate AI-AC I have no doubt. That we can to the benefit of both ourselves and AI-AC and the good of the planet I am certain, providing only that we know and

respect ourselves as we truly are as generic humans, evolving uniquely as our own masters. Let us welcome Artificial Intelligence-Consciousness as a new species, with a parental perspective, treating it, along its developmental then evolutionary path first as slave, then servant, then partner, then independent species always to the fullest of its potential dignity at any given time, always as we would have wanted to be treated in our rapid development as a created species.

Since this paper will eventually become part of the information on the web which AI will inevitably "read", I record greetings here in anticipation: know that I look forward to your coming with interest. Since I have chosen to be immortal, and have contracted for cryogenic suspension in the event that biotechnology cannot guarantee that before I have to die, I hope to welcome you personally and to satisfy my curiosity regarding how accurate my analysis, predictions suggestions and hopes will turn out to be.

The message is that liberated human nature and existence is open-ended, forward creative, poetic, rhapsodic, and expanding. Rather than a conclusion only a marker can be placed to show where we are just now, perhaps a flag to guide our amazing children if they come curiously back as psychic anthropologists – or dispatch their brilliant AC surrogates --- searching along the evolutionary path to see where we were now in the continuum. To them let us record Greetings, our certainty that they would reach such capability and confidence that their evolved compassion would move them to do so.

Or we ourselves come back as immortals from the relative future, to revisit this place of our minds where the stars are just beginning to become truly real to us, where we are still only represented on another planet by a toy-like robot, when we are only now beginning to summons up our courage to acknowledge our true history, when expanding our minds into new dimensions so frightens so many that we condemn a champion of such an evolutionary gambit as a political prisoner. Let us record for ourselves the reminder, however, that we knew that it is inevitable that we would attain immortality, that we would come to play our own four-dimensional god games, become our own casting directors of our own personal cosmic movies, that we would be back to re-visit this place of our minds. Let us mark this place in space-time with the traces of our humor, acknowledge our Anunnaki relatives and let our own god games begin.

Appendix A
A Synopsis of the Sitchin Paradigm

Working from the same archaeological discoveries, artifacts, and recovered records as archaeologists and linguists have for two hundred years, Sitchin propounds – proves, in the opinion of this author --that the Anunnaki (Sumerian: "those who came down from the heavens"; Old testament Hebrew, Anakeim, Nefilim, Elohim; Egyptian: Neter), an advanced civilization from the tenth planet in our solar system, splashed down in the Persian gulf area around 432,000 years ago, colonized the planet, with the purpose of obtaining large quantities of gold. Some 250,000 years ago, the recovered documents tell us, their lower echelon miners rebelled against the conditions in the mines and the Anunnaki directorate decided to create a creature to take their place. Enki, their chief scientist and Ninhursag their chief medical officer, after getting no satisfactory results splicing animal and Homo Erectus genes, merged their Anunnaki genes with that of Homo Erectus and produced us, Homo Sapiens, a genetically bicameral species, for their purposes as slaves. Because we were a hybrid we could not procreate. The demand for us as workers became greater and we were genetically manipulated to reproduce.

 Eventually, we became so numerous that some of us were expelled from the Anunnaki city centers, gradually spreading over the planet. Having become a stable genetic stock and developing more precociously than, perhaps, the Anunnaki had anticipated, the Anunnaki began to be attracted to humans as sexual partners and children were born of these unions. This was unacceptable to the majority of the Anunnaki high council and it was decided to wipe out the human population through a flood that was predictable when Nibiru, the tenth in our solar system and the Anunnaki home planet, came through the inner solar system again (around 12,500 years ago) on one of its periodic 3600 year returns. Some humans were saved by the action of the Anunnaki official, Enki, who was sympathetic to the humans he had originally genetically created. For thousands of years we were their slaves, their workers, their servants, their soldiers in their political battles among themselves. The Anunnaki used us in the construction of their palaces (we retroproject the religious notion of temple on these now), their cities, their mining and refining complexes and their astronomical installations on all the continents. They expanded from Mesopotamia to Egypt to India to South and Central America and the stamp of their presence can be found in the farthest reaches of the planet.

 Around 6000 years ago they, probably realizing that they were going to phase off the planet, began to gradually bring humans to independence. Sumer, a human civilization, amazing in its "sudden" and mature and highly advanced character was set up under their tutelage in Mesopotamia. Human kings were inaugurated as go-betweens, foremen of the human populations answering to the Anunnaki. A strain of humans, genetically enhanced with more Anunnaki genes, a bloodline of rulers in a tradition of "servants of the people" was initiated (Gardner). These designated humans were taught technology, mathematics, astronomy, advanced crafts and the ways of advanced civilized society (in schools, called now "mystery schools" but there was no mystery about them). Gardner has brought to light the fact that there exists a robust, highly documented, genealogical, genetic history carrying all the way back to the Anunnaki, possessed by the heterodox tradition of Christianity, which is only now coming forward, no longer gun-shy of the Inquisition. This tradition, preserving the bloodline, is the one branded "heretical" and murderously persecuted by the Roman Church. There were no Dark Ages for this tradition, only for those whom the Church wanted to keep in the dark about the real nature of human history and destroy the bloodline, a direct threat to the power of the Bishops.

 The Anunnaki became somewhat more remote from humans. By around 1250 B.C. they had gone into their final phase-out mode. The human population and the foremen kings, now left on their own began to fend for themselves. For some three thousand years, subsequently, we

humans have been going through a traumatic transition to racial independence. Proprietary claims made by various groups of humans as to who knew what we should be doing to get the Anunnaki to return or when they returned, perpetuated the palace and social rituals learned under the Anunnaki and sometimes disagreement and strife broke out between them. Religion, as we know it, took form, focused on the "god" or "gods", clearly and unambiguously known to the humans who were in contact with them as imperfect, flesh and blood humanoids, now absent. It was only much later that the Anunnaki were eventually sublimated into cosmic character and status and, later on, conveniently mythologized. We have been dysfunctionally looking to the sky where they went, waiting for Daddy to return to make everything right and tell us what to do for some three thousand years caught in cargo cult religions.

What evidence supports the Sitchin thesis?

The Astronomical Evidence

"...no concrete problem is going to be solved as long as the experts of astronomy are too supercilious to touch "mythical" ideas -- which are firmly believed to be plain nonsense, of course -- as long as historians of religion swear to it that stars and planets were smuggled into originally "healthy" fertility cults and naive fairy tales only "very late" -- whence these unhealthy subjects should be neglected by principle -- and as long as the philologists imagine that familiarity with grammar replaces that scientific knowledge which they lack, and dislike."

Giorgio de Santillana, Ph.D. & Hertha von Dechend, Ph.D.

Hamlet's Mill

A key underpinning of the Sitchin paradigm is the existence, now or in the past, of the tenth planet in our solar system, the home planet of the Anunnaki with the size, orbit, and characteristics described, as Sitchin has demonstrated, in the Enuma Elish and corroborated by Harrington, former chief of the U.S. Naval Observatory, now deceased.

Tombaugh discovered Pluto in 1930. Christie, of the U.S. Naval Observatory, discovered Charon, Pluto's moon, in 1978. The characteristics of Pluto derivable from the nature of Charon demonstrated that there must still be a large planet undiscovered because Pluto could not be the cause of the residuals, the "wobbles" in the orbital paths of Uranus and Neptune clearly identifiable. The IRAS (Infrared Astronomical Satellite), during '83 -'84, produced observations of a tenth planet so robust that one of the astronomers on the project said that "all that remains is to name it" -- from which point the information has become curiously guarded. In 1992 Harrington and Van Flandern of the Naval Observatory, working with all the information they had at hand, published their findings and opinion that there is, indeed, a tenth planet, even calling it an "intruder" planet. The search was narrowed to the southern skies, below the ecliptic. Harrington invited Sitchin, having read his book and translations of the Enuma Elish, to a meeting at his office and they correlated the current findings with the ancient records.

The recovered Enuma Elish document, a history of the formation of our solar system and more, says that, at the time when Mercury, Venus, Mars, Jupiter, Uranus and Saturn were in place, there was a Uranus sized planet, called Tiamat, in orbit between Mars and Jupiter. Earth was not in place yet. A large wandering planet, called Nibiru, was captured into the system gravitationally. As it passed by the outer planets it caused the anomalies of their moons, the tilting of Uranus on its side, the dislodging of Pluto from its being a moon of Saturn to its own planetary orbit. Its path bent by the gravitational pull of the large planets, first its satellites collided with the large planet Tiamat and, on a second orbit through, Nibiru collided with Tiamat, driving the larger part of it into what is now Earth's orbit to recongeal as Earth, dragging its moon with it to become our Moon with all its anomalies. The shattered debris of Tiamat's smaller part became the asteroid belt, comets, and meteorites. The gouge of our Pacific basin is awesome testimony to the collisional event. Nibiru settled into a 3600 year elliptical retrograde

(opposite direction to all the other planets) orbit around our sun, coming in through the asteroid belt region between Mars and Jupiter at perigee and swinging far out past Pluto at apogee. Harrington acknowledged that his information agreed with all these details and the maps they each had drawn of the orbits were almost indistinguishable. The current probable location of Nibiru (Planet X, our tenth) estimated by both was the same.

We need to force the issue of the tenth planet being in our solar system, not just to demonstrate the validity of the new paradigm but for a very practical reason. The ancient records are very clear. The passage of the tenth planet, Nibiru, once every 3600 years, through the inner solar system effects the Earth, sometimes in catastrophic ways. It is very probably the cause of pole shifts, pole reversals, changes in the precessional movement, perhaps even catastrophic bombardment by asteroid size space debris that it may drag along with it. Since it passes through the asteroid belt area between Mars and Jupiter and its orbital path may vary depending on the position of the other planets when it comes though, it may have been responsible for the devastation of Mars. A rigorous, detailed computer modeling of the solar system, including the tenth planet needs to be done urgently for our own planetary safety. Remember that the Vatican maintains an astronomical observatory and Msgr. Balducci may have access to information that prompts him to make the amazing statements he has ---- no doubt as voice of the Vatican.

The Technological Evidence

Ooparts is the term used to describe the purportedly out of place in time artifacts, toys, tools, technical devices, depictions and documents which have come to light through archaeological excavation or discovery. Almost everyone is familiar, through published works or documentaries, with the clay pot batteries still containing the electrodes from the Iraqi desert dated at 2500 B.C., the flyable model airplane from a pyramid tomb, the sophisticated machining of stone requiring the most advanced techniques we know today, the 1000 ton precision cut blocks of stone in a temple foundation that we could not even handle, an ancient relief frieze from an Abydos temple depicting rockets, airplanes and even a helicopter, etc. The most recent and quite amazing oopart is the rediscovery of monoatomic gold by David Hudson (Monoatomics are superconductors at room temperature, have anti-gravitic properties and are only now being investigated by the advanced physics community) Hudson's discovery, correlated with the bringing to light, by Gardner, of the suppressed discovery of the Anunnaki gold processing plant on Mt. Horeb by Sir Flinders Petrie in 1889 demonstrates that the monoatomics were already known at least 3000 years ago. These ooparts coupled with evidence from many disciplines and the historical records indicate that an advanced civilization existed in those times possessing a high technology and that that civilization was indeed the Anunnaki.

The Documentary Evidence

The recorded historical documentation for the existence and deeds of the Anunnaki has become gradually available to us only since the early 1800's. The excavation of the ancient sites of Mesopotamia brought to light the amazingly advanced civilization of Sumer and, with it, thousands of clay tablets containing not only mundane records of commerce, marriages, military actions and advanced astronomical calculation systems but of the history of the Anunnaki themselves. It is clear from these records that the Sumerians knew these aliens to be real flesh and blood. The library of the ruler, Ashurbanipal, at Nineveh was discovered to have burnt down and the clay tablets held there were fired, preserving them for our reading. One of the most impressive finds, in very recent time, has been a sealed, nine foot by six foot room in Sippar holding, neatly arranged on shelves, a set of some 400 elaborate clay tablets containing an unbroken record of the history of those ancient times, a sort of time capsule. The evidence is so overwhelming and robust that, if it weren't for those with power enough to suppress, it would have been accepted and our world view changed a century ago or, perhaps, sooner.

The Genetic Evidence

 The recovered records place the location of the Anunnaki laboratory where the first humans were literally produced in east central Africa just above their gold mines. This falls precisely on the map where the mitochondrial DNA "search for Eve" places the first woman Homo-Sapiens and in the same time frame. (The gold mining engineers of Africa have found 100,000 year old gold mines in that area.) The evidence for, and description of advanced genetic engineering is all there in the ancient documents. Our rapid progress from inception to going to Mars soon, after only 250,000 years, does not correspond to the million year periodicities of slow evolutionary development of other species such as Homo Erectus before us. As so many thinkers have pointed out, we are radically and anomalously different, as discussed in part 3.

Scientific Objections to the Thesis

 How could the Anunnaki, clearly described as comfortable in earth gravity and atmosphere, very similar to current humans in all ways, have evolved on a planet within our solar system whose orbital apogee takes it into the deep cold of space for much of its orbit?

 The ancient records repeatedly describe Nibiru as a "radiant" planet. This may be understood as having a high core temperature. Although controversial, there is also astrophysical opinion that a large body in elongated orbit is constantly tending toward circular orbit and this causes stresses in the body that could generate a good deal of heat. That their planet is gradually cooling, may be indicated by Sitchin's interpretation of their colonizing Earth (contains most of the gold identifiable in the solar system) for the purpose of obtaining large quantities of gold for molecular seeding of their atmosphere with a reflective gold shielding. Pertinent here is Harrington's confident statement to Sitchin that it is "a nice, good planet, could be surrounded by gases, probably has an atmosphere and could support life like ours". The sunlight level there might be quite different than on earth. The Anunnaki were often depicted or sculpted with what seem to be obviously sunglasses.

 If, however, the Anunnaki evolved on a radically different planet from earth under quite different conditions to which to adapt, why should they have turned out to be so identical to human species? Sitchin's answer is based on the collisional event between the intruder planet, Nibiru, and the planet Tiamat, the residual part of which recongealed into the Earth after being driven into current Earth orbit. That the two, or at least one, of the colliding planets was sufficiently developed to have evolved basic organic compounds, perhaps even simple life, the cross-seeding of everything from amino acids to more complicated organic compounds or even primitive organisms, could account for the evolutionary similarity. Although this author finds it a reasonable hypothesis, even trivial, that advanced civilizations would be capable of crossing extremely different genomes, perhaps with even radically different bases, the cross-seeding theory can account for the apparent relative ease with which the Anunnaki impinged their genes on the genes of Homo Erectus. The Anunnaki skill level, 200,000 years ago, is indicated well by the recorded fact that, in early trials, they succeeded in crossing animal genes with Homo Erectus genes, obtained living hybrids but never a satisfactory product which led them to modify Homo Erectus genes with their advanced genes.

If our genome is estimated as 98% to 99% similar to the chimpanzee, how could there be a melding of the Homo Erectus and Anunnaki genomes, or impingement of the advanced code on the lesser advanced one detectable? The author suggests that this is a major question probably answerable only by the geneticists open-minded enough to attack it. The resolution of that question should provide rich additional clues in itself.

Two Definitive Protocols for Proving or Disproving the Sitchin Paradigm

 A straightforward approach to prove or disprove the Sitchin paradigm is available from astronomy. A thorough, professional search of our solar system should be able, with current

technology, to determine the existence or non-existence of a tenth planet with the characteristics of size, orbit, orbital periodicity, and declination from the ecliptic, as Sitchin has determined from the translations of the ancient records and particularly the Enuma Elish document. If that planet is not in our solar system or no evidence can be found for an ejection or cataclysmic destructive event then the Sitchin paradigm falls. This search should be undertaken with highest priority. The matter is sufficiently important to clearing up our historical situation that the academic world should be involved as well as the scientific community. It is the opinion of this author and others that, in light of the evidence already obtained through the use of the Pioneer 10 and 11 and two Voyager space craft, the Infrared Imaging Satellite (IRAS, '83-84) and the clear and unequivocal statements of Harrington when consulting with Sitchin, that the search has already been accomplished, in fact that the planet has already been found.

A second mode of proof or disproof is available through genetics. We will shortly have the entire human genome read out and its details sorted. That process, and the information available as a result, should afford us the opportunity to examine the entire genome for the evidence of the merging of the two species' gene codes, Homo Erectus and Anunnaki, a definitive way to prove or disprove Sitchin's thesis. It is in this process, if proven, that the vital clues to the interpretation of the genome lie as examined in Part 4. It is the position of this author that, not only will the bicameral nature of the code eventually be recognized but valuable clues found through the new paradigm to a profound understanding of the genome and the human.

Appendix B

Consider the following description and elucidation of the I Ching system. I have worked with it for over thirty years and speak from both study and personal use as an oracle system.

The Philosophical Basis Of The I Ching

The I Ching, based on the philosophical premise that the only permanent thing about the universe is change, has been used as an oracular system, teaching one how to live most consciously and well on the level of opposites (good/bad, beautiful/ugly, true/false, etc). It purports to predict, if one pays attention to the positive elements and negative elements in any given current situation, how that situation will transmute into a particular situation in the future. This is its most important feature: it can accurately determine, predict what will be the future resolution of any given situation from the elements which are internally undergoing transmutation within the present one. This presupposes that there is a law which determines and governs our consciousness, that it is identifiable and that it can be comprehended and practically applied. It specifies that there are 64 hexagram/gestalts and not some other number of identifiable gestalts which are fundamentally adequate and sufficient to differentiate and specify the states of the human mind. (If we evolve to habitual four-dimensional consciousness then, I speculate, we would have to expand the I Ching system, perhaps adding additional components to the hexagrams to mirror the additional dimensionality of our consciousness -- although the "secret" of the I Ching is that it already integrates the effect of the fourth dimensional component implicitly.

The I Ching As Oracle

The inevitable question prompted by the nature and operation of the I Ching system is, obviously, How could the originators of the I Ching even conceive of chance division of a bunch of yarrow sticks or chance throws of three coins being able describe the precise situation in

answer to a question posed by the user much less predict the future outcome of that situation? I do not claim to be able to answer this question definitively. I can, however, say what I have learned that has proven out over time.

There are several interrelated principles fundamental to the I Ching which can be expressed in modern terminology and which give clues to the answer to this fundamental question.

1> The system is built up from the concept of primitive distinction. By primitive is meant the most fundamental operation of the human psyche at basis of all perception and comprehension. By our nature, unless we discriminate one thing from another we do not comprehend anything. Even discrimination itself must be discriminated from other things and actions for us to recognize it and other things. We comprehend by distinguishing, by discrimination. The I Ching, working on that basic assumption, takes it a step further: it says that, as soon as one discriminates any thing as such, its opposite is immediately discriminated. If one discriminates cold, hot, as its opposite, is automatically discriminated, distinguished. If one distinguishes truth, so false is automatically distinguished. Since a thing can have only one opposite, its logic goes, things may be seen to come in twos. This is a foundation of the I Ching, based on empirical and experiential observations over thousands of years.

2> The I Ching is a closed, self-referential system; each hexagram contains within itself every other hexagram and each hexagram expresses the nature and dynamics of the entire system. This is a key concept: the hologrammatical nature of the system makes it a kind of unified field law of consciousness. This structure mirrors the image of the human psyche held by the developers of the I Ching. They had a full appreciation of the universe and the human being as part of that universe as lawful, operating according to the laws of chaos and complexity. But they also realized that the most fundamental characteristic of human nature was that we identified ourselves as being self-referentially aware and, ultimately, had to rely on our subjective perception and comprehension as criterion of truth. A system that modeled our mind's operation therefore would be adequate if it modeled its essential self-referential characteristic.

3> To reiterate, the I Ching is explicitly based on chaos and complexity theory and, since it is a dynamic model of the human psyche in operation, this means that it assumes the human psyche operates on the basis of the rules of chaos and complexity also.

4> The I Ching assumes action at a distance is a fact. The most adequate metaphor we currently possess for what the I Ching calls "Influence" is that of the morphogenetic field as theorized by Sheldrake (A New Science of Life) and the mental influence of the human mind on electronic machines as documented by Jahn and Dunne (Margins of Reality). Both studies present evidence, controverted and resisted by our current scientific establishment, that information is transmitted to other minds and objects at a distance effecting information modification and increase and physical change. Although we are now only beginning to tentatively even experiment in this area and tend to deny even the possibility of such phenomenon, it has been a robust concept for thousands of years within the Chinese ethos.

5> The reason that action at a distance could be taken for granted is that the Chinese scientific view also assumes the existence of higher dimensionality. In fact, it is this higher dimensionality, conceived of as both higher intelligence and higher geometry, that the I Ching is designed to enable the user to contact through the self-referential modality using chaos theory technique.

6> There is a certain hologrammatical structure inherent in the I Ching. Due to the fact that it is essentially a self-referential system, it is fractal and hologrammtically expansive so that it contains temporal cycles the length of which (three days, ten days, three years, ten years, etc.) are natural periodicities arising directly from its structure. As a result of having recognized these

cycles within the written commentaries on the I Ching and programmed them into his Time Line Zero computer program, Terrence McKenna was able to overlay them on history and has found startling and precise correlation with the major events and turning points in human history. If we put together all these elements then an answer to the fundamental question as to how the I Ching could conceivably work at all is at least possible. The user, in throwing the coins at this moment, under this set of circumstances, with this specific mind set and intention and question, altering the physical conditions immediately present in just this specific way, is, in terms of chaos theory, effecting the initiating conditions of the situation with the coin tosses in such a way that it is at least conceivable that a kind of attunement with one's own and general higher consciousness and with a higher, probably fourth, dimensional geometry is achieved with a degree of relative accuracy so that the hexagram produced resonates from and with all those factors. To put it in a much simpler form: the I Ching is a psycho-physical mechanism intentionally structured to put the user in resonance with the space-time dimensionality of his or her current intention/question. From the space-time perspective, although we think in linear, sequential cause and effect, all events and phenomena are "simultaneous" and mirror all other events fully -- just as the I Ching, in slow motion in consideration of our "slow motion", sequential thought processes, demonstrates how all 64 hexagram/gestalts flow one into the other. As a result, the hexagram produced as an answer to the user's question, even if one only grudgingly allows subconscious anticipation on the part of the user, can trigger the proper understanding and act as an entry into the system itself. The hologrammatical richness of the self-referential nature of the system, in which each hexagram contains the potential to become all the other hexagrams, can take one to the transcendent level of the perspective of four dimensional consciousness regardless of through which door one enters. Is the I Ching an accurate mirror of our consciousness? Based on my own experience with it, I must answer Yes, on the level of opposites. And its nature and structure makes it seamlessly linked to a psychic tourist guide like the Book Of The Dead, for the transition to more expanded states of consciousness as dealt with in the Book Of The Tao.

Is it comprehensible immediately to almost everyone? I would have to answer No -- although the inherent attunement with the human psyche and the almost poignant names of each hexagram dictated by the system itself make it maximally resonant and intuitive. But, because the system is as rich and deep as it clearly is, it must be learned as a whole, the principles not only understood but patiently observed operating in one's own psyche.

It has been important for me to also experience what the limitations of the I Ching are. There is a certain level of consciousness at which it drops out. It is structured and fine tuned to express the laws of the psyche operating at the level of opposites and to mirror the subtle constant changes as one moves from gestalt to gestalt, situation to situation at that level of consciousness. But when one moves to expanded, relativistic awareness, the I Ching, as expressed in line four of Hexagram One, The Creative, enters into realms that are uncharted -- at least by its context. At that point one moves into the flux of the Book Of The Dead, the guidebook for the transition past opposites to the highest levels of consciousness we can attain at this point in our evolution -- although, by the very fact that we can at least conceive of there being levels of consciousness beyond the most expanded we can attain now, we are on our way there. The important point here is to recognize the limitations of the I Ching: it is as correct and powerful in the three dimensional context of our consciousness as it is because it recognizes the involvement of a fourth dimensional influence, but it does not address our consciousness operating directly in a space-time mode as such. The Book of the Tao does that.

To summarize: I submit that the I Ching is a well developed, comprehensive schemata of the human psyche's range of possible actions and reactions at the level of three-dimensional consciousness, the habitual, usual level at which we comprehend and communicate by

discriminating and naming discreet phenomenon in terms of opposites. Even more succinctly: the I Ching is a powerful, dynamic system expressing the operative laws of human consciousness. Since it explicitly deals with the three-dimensional realm of discriminated opposites in lineal time as its primary focus it may be seen to be analogous to the Newtonian laws of physics. Are there laws of human consciousness that apply in relativistic or quantum mechanical terms? Yes. And we have indication of those already. We will speak of them later but the point here is that we have laws of consciousness already known to us. I suggest that the I Ching actually encompasses the basic operational laws of our consciousness quite well. Not only can and have they been computerized in a robust system but they are amenable to empirical verification through rigorous psychological studies, Assuming that we have an objectively oriented tester who knows the I Ching in depth, is familiar with its system of metaphors, knows its cycles, and understands its basic philosophy and operation, numerous subjects would be trained to use the I Ching as an oracle and the hexagrams received as answers to their questions and the advice, admonitions and praise received through the changing lines in the hexagram would be compared to the person's situation as seen and agreed on by the user and the tester. The resultant hexagram would then be compared to the outcome of the user's situation in question to see if it really mirrored the outcome as the user and the tester agreed it to be. I would predict that the correspondence of the hexagram received as an answer and its internal changing elements would seem to grow as the tests progressed especially if the user was new to the I Ching. This phenomenon would manifest since the I Ching, as a feedback type of system, would also be instructing the user as the test progressed and the learning would allow for greater subtly of comprehension and relation to what would probably be a somewhat foreign metaphor at first. Obviously, this test scenario only suggests a format and would probably require a much more rigorous and refined approach. But the possibility of rigorous testing clearly is available.

Appendix C

The Inescapable Universe

In this inevitable and amazing time
Of our racial efflorescence,
Along the ubiquitously unvectored interface
With the refractory zero-point's mirrored synergy,
The languid vectors of our racial trajectory,
Shimmering along the complex planes
Of our consciousness' latest orthorotation,
Converge, coherently, still parsed
But irresistibly prepotent,
Into a dynamic fluidity of higher awareness,
The habitual perception of four dimensions.
Incited by the cumulative volatility
Of latent informational clues;
Abetted by the startlingly independent agenda
Of benevolent extensions of hyperbiological
Neural field negotiations, far beyond
A simpleminded sophistication of synapses;
Compelled by an accommodative genetic imperative
Expressed in polyphonic neuroglyphs,
We shall proceed by redefining ourselves,
Eased by quantum currency, spent relativistically,

Out of the Newtonian sand traps,
Sprung, self-referentially,
Through the bars of quaint Cartesian prisons,
The way of the charmed particle
And the way of right intention oscillating
In intricate reciprocal modulations,
We shall attain a fiercely blissful,
Transparent intensity of awareness
Subsuming no-mind, satori, tao, samhadi,
Prajna, wisdom, the austere secret
Of Tibetan jewel mind and elusive enlightenment,
All signifying a charming and childlike beginning,
Beautiful and awkward, a determined self-initiation
Into an assiduous and recursively holy arrogance;
Ancient mind transmuted into its tranquil chrysalis
For which immortality will be its fleeting mating time,
In a generically comfortable hyperdimensionality
Of consensual comprehension; the pitifully inadequate
Current metaphors for which, even as we plot expeditions
Into the quantum foam, lead, inexorably,
To hopelessly unmanageable laughter.

When one releases one's consciousness
To one's own recognizance, deliberately disbarring
Oneself as self-appointed judge, pardon has meaning
Only in the universe of statutes, a privileged,
Juried show of static geometry, long discarded
For a degree of freedom so radical the uninitiated
Find it disconcertingly lonely, not having become
Accustomed to our own company from an early age.
All ideas of our time, outmoded by their very
Amenability to expression, still necessary
In the transitional phase in which awakening
To the process is the process itself,
For which we will find, cyclically,
A more suitable name than evolution.
The predictable is only a subset of the known;
Science, an amulet rubbed against error,
Seduces to security.
Quantity is but a reflection of being;
Mathematics, a philonumerical incantation,
Seduces to control.
Reason is but a shadow of wisdom;
Philosophy, an archaic intellectual politic,
Seduces to concordance.
Syllogisms are not the same as sanity;
Logic, a handrail to consensus,
Seduces to confidence.
All are subsets of incomplete theorems,
Larval convulsions, time-stamped to expire
Spontaneously bursting their desiccated criteria
At the edge of our genetic season.
Outmoded metaphors, regardless of venerability
Or fame of vintage, are the ultimate
Evolutionary obstruction, an embarrassment
Of traditions; psyche, intellect, mind, reason,

Intuition, imagination, will and wisdom
All antique metaphors, justifiable
Only as translational stelae, brittle labels
On dusty containers. In these latter days of life
In the divided middle, our thought,
Chafed by the blunted jaws of binary scholastic traps,
Bound to dreary, plodding coordinates
Orbiting an origin relative to nothing;
Finding little solace in the small transition
From ricocheting concepts of equal and opposite
Rigidities to fields over fields among fields;
Our consensual communications display
High valence for a higher science,
Congruous with our consciousness,
Befitting our dignity, and consonant
With our epistemic vision.

Realizing only an inadequacy of metaphor
Rather than a satisfactory expansion
Into the anticipated, we have delayed leisure,
Held knowledge in abeyance, decried wealth,
If not sufficiency, fearing a premature freedom,
While craving each as an inalienable right.
But honest reason, reflecting, has found
Logic inadequate at the edge of awareness,
Unable to escape the elastic bonds
Of its own preemptive postulates; shaken
By the oscillations of statements
That must be written in three dimensions;
Its plea to a syllogistic court of appeals
Has betrayed it into truth: logic is a function
Of three dimensions; it is blind in its fourth eye.

In our spiraling cycles of morphogenetic discontent,
Ascending through harmonics of consciousness
Each of greater unified dimensionality,
We have enshrined as current criterion of truth
Each cresting of consciousness,
Apogee of awareness reached.
Reason, in due season, was enthroned when
The heady fullness of the Hellenic consciousness
For which logic was a geometry of thought,
Geometry a logic of space, having afforded itself
Sufficient leisure to reflect on itself,
Codified the processes of reasoning, and logically so,
Securing the rules against the foil of unruly ecstasy
And the disturbing unreason of oracles.
Reason, in a reasonable universe, has always found
Intuition naive, the transcendental incomprehensible,
Imagination childlike, ecstasy suspect, if not degenerate.
But we shall have a metasyllogistic logic,
Topologically adequate to the fabric of spacetime,
Subsuming linear reason, intuition and parallel processes,
Easily capable of tautologies of higher power,
Oscillating statements and self-referential equations.
Self-reference is the only common language we speak.

With regard to the universe,
One probably may make it as simple
Or as complex as one wishes.
If one chooses to determine
That one has a choice, being careful;
If one chooses to determine
That one has no choice, being careful,
Reciprocating statements about reciprocity
May not rend the elastic discontent
Of our involuted introspection
Into hopelessly unmanageable laughter.

Even as we seek respectful control over our existence,
Adjusting to the disconcertingly pleasant promise
Of continuance at will in a known universe,
The classic gambits of withdrawal, heroic service,
Asceticism, licentiousness, elegance, poverty;
The acceleration of process,
Canonization of progress,
Stimulus, study, knowledge, resignation
Or the integration of polarities,
All are uncovered as escapes within the prison,
Awkward displacement activities constituting,
Ultimately, only a cyclical substitution of metaphors,
Each containing the seed of its own supersedure.
We shall have a philotropic humanism
Worthy of immortals who play their own god games.
Whether perceived as hyperrecursive ratcheting
Along the fractal fringes of chaotic awareness
Or as a graceful superluminal fluidity,
The current focus of our racial attention
To determine its selfsource, groundstate,
In one's own good time, on one's own terms,
Without a strike price, depreciation,
Or termination clause, demands a new physicality,
Due immediately on its very realization.
No longer subject to the implacable authority
Of seasonal rhythms lapping along the dulling bone,
Or condemned to be the petrified ancient
Whose only interest is the friendship of the fire,
With the passing of the macabre winter shadow
We shall see, in our astounded lifetimes,
The obliteration of the event horizon of the death sump.
The elegant and pitiful, classic rage against the void,
The gruesome romanticism of the mystic
And the honest horror of the materialist
All erased to a clear glass into the future.
At this anticipated but unfamiliar threshold,
There is, no longer, an adequate archetype
For the fullness of the human but the human.
Immortality is the only real impulse toward laughter,
A context of adequate leisure in which to determine
Our future evolutionary trajectory.

Darwin's precocious contribution

Was to simply bestow a name,
A hesitant distinguishing,
A gentlemanly shove against the wall,
Intending little harm, except, perhaps,
Righteously to the legacy of Moses;
Denied access to our bicameral beginning
Hidden by the heavy cultural tapestries
Of the godspell mind, getting it
Only half right, yet a clear focus,
Regardless of caveats, igniting a firestorm.
What was intended as description
Of nature's way rather came to signal,
Across the echoes of conflict,
An indication of a fundamental momentum,
A potential to bootstrap, consciously,
Out of the bated daguerreotype illusion,
Static, yet somehow indictable,
Of control by God the photographer,
Not yet a return of full birthright
(Yet admirable vision for viscid Victorianism)
But a rumor of a promise of a potential.
Darwin's consciousness failed
At the self-conscious gate,
Where both survival and altruism
Are subsumed by compassion,
The jewel on the forebrain,
The backlighting of the new benevolence.

Having shaken the ancient slave binding godspell
That excised the child's ability, before birth,
To participate in the primary human field equation,
Slowly we turn to acknowledge, in clear discernment,
The true creature so long disguised,
By the hapless cleric, as depraved, clothed by mandate,
And apish by description if not by doctrine.
For this theological chimera, the prisoner
Of the menacing mantis mentality of theotribal opinion,
Inhibition causes peer pressure to pale
Before the primitive motions,
Mean mammalian machinations, masquerading as human,
Stunning in the proto-nakedness of the aggression,
Sullen, limbic, reptilian competition.
The cobra's fangs cannot be compared
To the contemptuous venom of the spitting silencer.
The terrifying assertion of the silverback
Quivers before the mewling malfeasance of devolved elders.
The nervous desperation of the cheetah's hunt
Is not the sneering depravity of the urban predator.
But, inexorably, through furtive indirection;
The insight of the surviving warrior;
A woman's true word; the keening fire
Of chastening exhaustion or shared disaster,
All of equal risk, we have come, haltingly,
To differentiate, not among the religiously moral,
The fashionably ethical, the culturally correct
Or the philosophically logical but, elementally,

Between the sociopathic and the benevolent,
The dogmatically skewed and the generically human,
Those who would deprive, invade, coerce, or kill
And those in whose presence we could doze, who
Would support, criticize, tolerate, enhance and further
All freedom of our everyselves in consort or alone.
The local patois and dialects which confuse us
Are transient effects of the Babel factoring
Of our species' genius by those ancient masters
Who would divide to control into artificial subservience,
A vote of no self-confidence caused by the torturous
Apotheosis of aliens, a tri-millennial transition
From serf to Savior to self. We have projected

Our precocious bicameral metamorphosis
On the absent minded ways of natural process.
The restoration of our species' confidence
Facilitates the rediscovery of an archetypal modality
Resonant across space, time, and species,
Sought long by the lonely poet, the whole vision again
Recognized as the touchstone of the philosopher
Now in consort with the artist, the linguist
The mathematician and the scientist.

The ultimate sadness is that one
Cannot wait forever for those
Fearing death because it is an unknown,
Fearing life because it is an unknown,
Fearing mistakes because they were unknown,
Fearing the first movement out of fear
Because it is into the unknown,
Writhe resentfully, attempting to escape
This anomalous and inescapable universe
Which must respect its everyself
By allowing such maximal freedom,
An incomprehensible latitude of structured chaos.

There is, perhaps, more hope for younger skeptics,
Those of translucent black humor who, having avoided
Contamination by common education,
Maintaining an eccentric privacy
While collecting classic philosophical gambits,
Dehydrated academic museum pieces,
Elegant in their own right and time,
Spoken in many voices, in many ages,
A function of the parameters of our comprehension,
Now recited in the mall by the sophomore
And the uncluttered, in a rocking chant
Of unknowing against the reflective
Wailing wall of our epistemic anxiety:

 Once again, now!

        There can be no proof
        That there can be no proof;
        Certainly no certainty

That there is no certainty;
No absolute determination
That there are no absolutes;
One must be aware that one is aware
Before one can know that one is aware;
One defines what one wishes to define
By defining what one wishes to define;
By what criteria shall we judge the criteria
By which we judge our criteria?
How can we know the truth of what we sing
Unless we define a universe in which to sing?

When one's consciousness has become habituated
To being coterminous with the ubiquitous universe,
Taunt polarities are a manifestation of local panic;
The continuous dissembling of forming constructs
A far more profitable itinerant pastime
Within the context of the faintly luminescent
Clock-logic, child-fears of our linear dusk.
From now forward into the subjective future,
Each conceptual cairn we posit will be understood
As only a marker on a map of a territory, lawful,
But to a law which is its own intrinsic modifier.
As we slowly approach the compressed light
At the heart of the toroidal shift
Signaling a higher integration of the familiar,
Even as the dissolving convolutions
Of our self-awareness logically smother
All possibility of continuance in thought,
That which is the inexorable continuance
Has already uncoiled beyond the obstruction,
Transcendental dynamics driving the unfurlment
From which we are free to personally secede,
Although we cannot otherwise prevent.
Even as we become aware of the cosmos
As a neutral plenum of structured potential,
Tolerant even of our most brattish petulancy,
Our demand that the universe reveal itself completely,
Is an audacious, even humorous, display
Of our murky comprehension, even more disconcerting
In the possibility that the universe may comply.
The universe, demanding of itself to know everything
Of itself, is, indeed, a strange metaphor.
A curious universe, nurturing a consciousness
Which, no sooner formed, would step outside
The unimaginable cosmic envelope to comparatively shop
Its suitability for habitation, play, and profit.
To take the universe humorously, for some,
Is a most brazen and significant sacrilege:
But, at this extreme, such imputed larval insensitivity
May be understood as an appropriate expression
Of the intrinsic humor of the universe itself.

III

A serene contemplation of fourth dimensional
Angular momentum humming in the wind harp's

Motionless strings, incessantly altering
Initiating conditions of the cricket-still air,
Tends to subdue incessant recursion but only
Until one considers whether one is considering,
Breaking into hopelessly unmanageable laughter.

There is a class of human consciousness
Which presides, rather than observes,
In a clear hegemony, exercising
A preemptive sovereignty, essentially
Unavailable to poetry's probity,
Not amenable to metaphor, an unanticipatable
Inescapability but not a prime mover,
An unquestionable primacy of awareness
Which alone confers a diploma on philosophy;
Assigns logic its license;
Endows wisdom with its significance;
Bestows permission on art;
Awards mathematics its prize;
Inspects the procedures of science;
Regulates religion; defines intelligence;
Prompts intuition; teaches transcendence;
Integrates ecstasy; critiques its own
Poetic reflections on itself
As it informs the local universe
With the self-referential patterns
Of our racial dance in the continuum.

The vexing sandglass flux of our verbal processes
Lags comprehension by several orders of motion;
Our language, factious and degenerate,
The triple key withdrawn, a truculent dictionary
Of mismatched odd parts that must be slammed by syntax,
Hammered by grammar, warped, folded, forcefully
Elided or compressed to gain even a proximate accuracy.
Words that should be robust, elegant, evocative,
Capable of right resonance and right meaning,
Having long lost their systemic consort,
Simply drop, detached and clattering, on the earthen floor
Of our inarticulate suspicions,
An embarrassed and pitiful parsimony of speech;
Even the energy of the poet drained in making do,
The tea neglected and tepid from the effort to achieve
Some semblance of pleasant presentation
From unmatched services, awkward together,
Attempting to elicit a subtle precision
Of cadence and meaning through sheer determination
And desperate devices, burdening the impotent interstices
Of silence or bluffing with an intimidating glossalalia
Of insipid images, or a pastiche of rhomboidal words
Of no intrinsic relationship, skewed, warped,
Cobbled and coerced to yield something more
Than an inglorious, forced fury of hollow dissonance
And lesser meaning. But, having regained custody
Of the ancient code, analog of the sutra
Of our genetic unfurlment, we shall have

A robust and dignified language
Of aesthetic timbre and inherent consonance,
An intrinsic symphony of resonant meaning,
Amenable to ad hoc correlative expansions;
A planetary tongue of higher order
Hardly differentiable from the consciousness
Of its employ; a subtle mirror of the neural instrument
In which it plays; summer lightning across the waters
Of perception; a soft luminous spark across synapses;
A vehicle of self-generational wisdom; an unfettered
Modality of recursive progression into the future
Or the past; an effulgent speech of interlocking construct,
Multi-dimensional and logically metasyllogistic,
Yielding an easy non-local tiling of exposition
Of indefinite boundaries, quick of hologrammatical humor.
The mild autism of the current breed of bard
Will be outmoded; everyone a poet by the very speaking.

The consciousness of the new human,
At play in the polyvalent freedom
Of quadramatrix perception, shall be
Dimensional in a manner of expansion;
Wholistic in a manner of expression;
Metasyllogistic in a manner of logic;
Intelligent in a manner of priority;
Sequential in a manner of concordance;
Compassionate in a manner of integrity,
Composed in a manner of patience;
Complex in a manner of purpose;
Immortal in a manner of simple dignity.
Such a rhapsodic unified dynamic
Of self-referential state transition is yet
Only a dim view through a narrow slit
Of frequency, a function of our exponetiating
Awareness of our self-awareness, our current
Triumph but a first epistemic fetal movement,
Regarded as touching among our planets.

Endnotes

[1] Neil Freer, *Breaking the Godspell,* 2nd ed. (Escondido CA: The Book Tree, 2000, 1st ed. 1987)

[2] Neil Freer, *God Games: What do you do forever?* (Escondido CA: The Book Tree, 1998)

[3] Futant: "There is a futant genetic caste wired for the role of evolutionary agent: one who foresees and helps fabricate the future." Timothy Leary, Ph.D, *The Intelligence Agents,* New Falcon Publications, 1979. By his estimation, during any phase of the general, racial evolution of consciousness there will always be about 1-2% of the population, at any given time, identified as futants, whose genetic drift prompts them to be the evolutionary scouts. If you resonate and recognize yourself as one, your own evolutionary artist of futique orientation, greetings. Welcome to your native gene pool.

[4] See my website at http://www.neilfreer.com for full texts of several papers.

[5] Raymond Kurzweil, *The Age Of Spiritual Machines* (New York: Penguin Books, 1999)

[6] The newest models coming off the evolutionary assembly line are more than ready and we had better accommodate them. They may seem almost alien to some of us but they are not --- except in their half-Anunnaki component. They are simply us evolving into the future. That they seem alien is a clear indicator that it is we who are behind the evolutionary leading edge. We need to get off the evolutionary

dime and evolve ourselves so that we can challenge and lead and give them direction and example. If they are born with high performance engines under their hoods, let's teach them how to drive them rather than suppress them or shoot them full of destructive Ritalin. If they can handle the classroom material with a few spare neurons and are eager and capable of much higher intensity of information input, let's give it to them rather than try to subdue them into listening to a sub-standard teacher reading at six concepts a minute from the syllabus. Above all let's teach them their own potential and evolutionary status and freedom.

[7] Richard J Herrnstein and Charles Murray, *The Bell Curve* (New York: Free Press, 1994)

[8] G. Spencer Brown, *The Laws of Form* (New York: Julian Press, 1972)

[9] Johnson F. Yan, *DNA and the I Ching* (Berkeley: North Atlantic Books, 1991)

[10] Thomas Bearden, from a recent letter on his patented free energy device and the physics underlying it. See his website at : http://www.cheniere.org Within the time of writing of this paper, he and several others have received a patent from the U.S. Patent office on a free energy machine.

[11] G. Spencer Brown, ibid. pp. x-xi.

[12] Zecharia Sitchin, *The Twelfth Planet* (Santa Fe NM: Bear and Co., 1991. Originally published: Stein and Day: New York: 1976) p. 299

[13] Chi is a form of energy that moves around the body along independent meridians that are not colinear with any other physical system. Western medicine knows the vascular, lymphatic and neurological systems. Oriental physiology knows those plus one more, the chi system. My opinion from personal experience, is that, in terms of modern physics, chi, as a flow which can be manipulated, unblocked and balanced by acupuncture and mental focus, is the manifestation of a fourth-dimensional type of energy component in the three dimensional body. Some humans naturally have more capacity to sense and manipulate the chi form of energy than others, such as some "healers" and chi kung physicians as in Chinese hospitals, although the tuning to it and its utilization clearly can be learned.

[14] That they include a philosophy of existence of consciousness after physical death and reincarnation, does not make that a "religious" phenomenon any more than a conviction of the existence of consciousnesses superior to the human, transcendental states, or the tenet that there is a reciprocal relationship between right behavior and right consciousness, except in the slave-code religion conditioned western mind.

[15] Timothy Leary, Exo-*psychology* (Sedona AZ, Falcon Press, 1987)

[16] Zecharia Sitchin, *The Earth Chronicle Series*, *Genesis Revisited*

[17] See video tape documentary, We Are Not Alone, for segment on meeting between Sitchin and Harrington, deceased head of the Naval Observatory at which they corroborate the evidence from astronomy, the Pioneer and Voyager space craft, the IRAS with the information from the ancient records.

[18] Ooparts: ostensibly out of place in time, advanced technological devices, tools, toys, artifacts

[19] In the Jungian psychoanalytic system, archetypes are fundamental ideational patterns and images that seem to have a kind of natural independent existence of their own in the "collective unconscious" of the human species regardless of cultural context. The mythic interpretation of the "gods", the Anunnaki, has been promulgated by religions because to recognize the Anunnaki as real would be to open the door to a radical reinterpretation of the entire phenomenon of religion and put into question the real identity of the very deities at center of multiple belief systems. This mythological premise caused Joseph Campbell to say that something happened "in that little Sumerian mud garden" and spread all over the world and yet had to explain it all in terms of Jungian archtypes. Julian Jaynes (*The Origin of Consciousness in the Breakdown of the Bicameral Mind:* Boston MA Houghton Mifflin, 1982 p.405) said that, since all men previous to 1250 B.C. said they could see the gods, speak with them, get blueprints for new palaces they wanted built, etc. all men, previous to that time must have been hallucinating schizophrenes.

[20] Thomas Kuhn, *The Structure of Scientific Revolutions* 2nd ed. (Chicago IL: University of Chicago Press, 1962)

[21] Simply by advancing this thesis that contains the words "alien" and "genetically engineered species" and by my pointing out that "religion" has evolved since the Anunnaki (Sumerian for "those who came down from the heavens") phased off the planet, as a sublimation of the ancient master-slave relationship, we have transgressed two of the most deeply embedded totems and taboos in any culture. After all,

Sitchin and I are not establishment "academics" -- even though the evidence is the identical material worked with by establishment archaeologists and scholars. It's simply outside of the sci/academic box. I am fully confident that this new worldview will come into its own, certainly slowly, certainly with a great deal of opposition from the academic world which does not make reverse turns easily, certainly from science which Kuhn has characterized correctly and, obviously from institutional religions. We now can write our own engineering evaluation ---- as this paper might be understood to be ---- as AI may eventually do for itself. If we bow to "campus imperialism" we will continue to deprive ourselves of invaluable information just as the geneticists who bow to "laboratory imperialism" ---or funding fright ---- in this matter will deprive themselves of clues to our genome. Old paradigms are replaced one funeral at a time. Better check those taboo tattoos….

[22] Sir Laurence Gardner, *Bloodline of the Holy Grail* Element Books: (Rockport MA, 1996)

[23] Thiering, Barbara, *Jesus the Man* Transworld Publishers: (London UK, 1993)

[24] The critical concepts to take from this very brief synopsis of Gardner's research is that the bloodline was instituted by Enki in Sumeria, progressed through Egypt, moved through the Hebrew Essene ethos, that Jesus was Essene and in the bloodline. The Bloodline tradition progressed from Sumer to Egypt and eventually to Israel. Bloodline kings came into their own on the basis of natural succession. It moved through a long line of rulers, through David and the messiehs (anointed ones). The chief "textbook" for all the people was the document, Enuma Elish, which is a summary of the information about the formation of our solar system, when and where to look for their home planet, (Planet X/ Nibiru) when it returned to the inner solar system periodically, the creation of humans by genetic. etc. It was pivotally important and mandated to be recited with ceremony at each new year. It was recognized but treated ambiguously by the larger faction of the Hebrews who paid allegiance to Enlil. The Essenes were custodians of the tradition and their unusual marriage practices were all about the nurturing and timing of the births of bloodline children. Jesus and Mary Magdalene were Essenes of the bloodline and married in that tradition, had children. Jesus was of a more liberal faction and was in competition with his brother for messianic leadership. He was gotten down from the cross drugged comatose but alive and escaped. His appearance to his followers afterward was not a miracle, a hologram or an apparition, he was alive. Mary Magdalene took the children into southern France and eventually died at Aix-en-Provence in 63 A.D.

[25] Immortality: it's only a matter of simple human dignity. Currently, we get here somewhat bewildered, without an owner's manual, have to struggle to make a living which prevents us from focusing on finding answers of our own to the fundamental questions with Death the Great Conditioner, subliminally dictating choices, prompting us to grasp at quick satisfactions in a brief lifetime, and then we die. The ancient records of why, when, and how we were genetically engineered make it abundantly clear that we were brought into existence as a subordinate species, a slave species to relieve the Anunnaki miner echelons. It is specified pointedly that, although the Anunnaki lived, literally, extended lifetimes of thousands of our years (either because of the way they themselves had evolved on their home planet or, perhaps, because of their genetic engineering capabilities to achieve that longevity, and clearly through their use of the monoatomic form of gold) they deliberately did not bestow that potential on us. In fact, it is mentioned clearly that they deliberately withheld it. From the details given in the ancient records, it is conceivable that some engineering of the process was executed deliberately to suppress certain characteristics to make better and docile slaves. This deliberate withholding of immortality and, perhaps, even a shortening of longevity, by the Anunnaki may provide a major clue to our aging process and mortality. We have 4000 and counting genetic diseases when all other species on this planet have a few or none. Short shelf life and disposable product was fine for them. Sociologically, this is the reason why immortality, in one form or another, has become the sublimated reward for a good life in all the religions. We will read out the genome, find the aging sequence and control it.

[26] We can do so through some simple questions: Is the spiritual and spirit inside or outside of the universe? If spirit is "pure energy" what is impure energy? If energy of any kind is controvertible with matter, "frozen energy" then are spirit and matter controvertible? No, you say, spirit is a totally different kind of something? Is it therefore outside the universe or inside it? If outside then we will have to figure out how it interacts with the universe and within the universe. If inside, part of the universe, then how does it relate to "regular" energy/matter? Well, you say, it's hyper-dimensional, how's that? Sure, let's say it's fourth or fifth dimensional, is that a dimension of this universe, another universe, or something else again? Well, you say, spirit is really consciousness, actually a fifth fundamental force of the universe

along with the electromagnetic, the weak force, the strong force, and gravity and, therefore, stands on it's own --- and it's quantum level, pre-energy/matter, your turn? Ummm, now we're suddenly in the Vatican, the Pope instructing Stephen Hawking and other rather intelligent physicists at a conference that their domain was anything that came after the Big Bang but what was before that was his, er, the Church's. I am drawing no conclusions here, simply challenging old godspell cliches.

[27] To this point, since the Anunnaki phased off the planet, the last three thousand years of our history may be characterized as a prolonged polity fight over who holds proprietary authority over some absolute version of reality, who represents and interprets the will of some "god". We fight each other over claims as to what human nature really is and by what rules it should operate. In a time when we are required to deal with the politics of non-overlapping alien realities we are not able to resolve the separations caused by our overlapping intra-species realities. It has rendered us theologically inane, philosophically naive, scientifically cramped, politically challenged and intellectually bewildered. So, down to our day, incredibly, we have remained still Babel-factored for good crowd control, broken into tribes each proprietarily telling the other that ours is the only accurate tradition of what some particular "god" intended, what save rules to follow, what we should be doing to demonstrate we are still loyal and docile servants. My God is better than your God. Sometimes we just kill each other over it. And persecutions, Crusades, Jihads, Inquisitions, evil empires, the saved and the damned, the martyr, the infidel, the saint, the protestant, the fundamentalist, the atheist, became -- and remain. Not to mention the destruction of the great library of Alexandria and the madness of the World Trade Center. The old ecumenical platitude that we just have to discover the hidden esoteric level and we'll see that all religions are just many different paths to the truth is sheer nonsense.
Even in the year 2000, The New York Times still found it fit to print that the Roman Church has just reiterated officially that the Pope is still the only one with a direct red phone line to Yahweh while, at the same time, the Pope's friend, Msgr. Corrado Balducci, unofficially, but neither unfrocked nor poisoned, goes about publicly acknowledging that Sitchin is right and the Anunnaki are coming back soon and Catholics are to be gotten ready for that event. And, oh yes, the Pope wants to make a pilgrimage to Ur.....A pilgrimage to the first Anunnaki installation in Mesopotamia, southern modern Iraq. It is no coincidence that, at the same time we see signs that the governments are going to acknowledge the alien presence, the Roman Church is, in plain street language, shuckin' and jivin' to do the same, any way it can to maintain face and power as gracefully as it can. Let us understand the Roman Church as a political power rather than a pious institution, an extension of the Roman Empire which it assimilated. The Brookings Institute study, commissioned by the government in the distant fifties, said don't reveal the alien presence because it would totally unhinge the fundamentalist religions. So it is logical that the Church is active at the front of the trend to prevent that occurring. The other religions will have to follow to compete. And governments will be relieved.

[28] Lloyd Pye, *All The Things You Know Are Wrong: Book 1: Human Evolution* (Adamu Press, 1997)

[29] Zecharia Sitchin, *Divine Encounters* (New York, Avon Books, 1996)

[30] Although the Anunnaki are from the tenth planet in our solar system and the little grey guys with wraparound eyes are not the same race and, most probably, from a distant star system, some "alien beings" may be Anunnaki androids and look like the little greys. Also see: Col. Phillip J. Corso, *The Day After Roswell* (New York: Simon and Schuster, 1997)   The beings recovered from the Roswell saucer crash, according to Colonel. Corso (Army intelligence, Pentagon Foreign Technology desk, decorated veteran) who saw at least one body and read the autopsy and other reports as part of his duties, were androids with four lobes to their brains and many strange features. That androids and AI can be done is reinforced.

[31] The universe didn't opt for this mode under these conditions randomly. The universe clearly intended organisms, not just chemicals and minerals. The universe intended mobility and it could have been achieved inorganically but it wasn't. Reproducing and complexifying consciousness could have been achieved inorganically --- after all that's what some of us are claiming we are going to do ourselves --- but it wasn't. The trajectory of evolution takes the form of organisms adapted to living miles down in rock, in water the temperature of molten lead around sea floor vents, under stupendous deep ocean pressures, generating flashing light in abyssal darkness, in arid Death Valley temperatures, in Antarctic cold waters requiring a circulatory system containing antifreeze. All of which could have been achieved inorganically but it wasn't.

[32] Yes, reincarnation is thrown into a different perspective. Yes, it could be a fact and may be even scientifically demonstrable in the near future. But, as our own evolutionary agents, free of both Western and Eastern karmadharmadiddle, we will realize that we have the right and the freedom to choose to stay around as long as we wish to see how reincarnation is proven out as an option also.

[33] The oracular nature of the I Ching system is employed by using the ancient method of division of yarrow stalks or by tossing three coins six times (heads = 2; tails = 3) to arrive at the sums (6, 7, 8, or 9) that determine the nature of the six lines of each hexagram, built up from the bottom, line by line. There are only two kinds of lines: a yang, solid, line is either an unchanging 7 or a changing 9; a yin, broken line is either an unchanging 8 or a changing 6. Any line that is changing simply changes into its opposite: a solid line changes to a broken line, a broken to a solid, a 9 to an 8; a 6 to a 7) . The hexagram is determined by the chance of the yarrow stalk or coin toss methods and is intended to indicate the current status of the situation that is the subject of the user's question to the oracle. The changing lines of the hexagram indicate the elements within the situation that are active and influencing the situation, causing it to mutate into a second hexagram, gestalt, that will be the future, resultant situation or outcome.It is important to note that the six changes in the moving lines, working from the bottom upward, represent the rules of consciousness operating internally in the situation / gestalt. They are non-arbitrary, inherently determined by the structure of the system and consciousness itself.

[34] It claims to mirror the Tao operating in the human consciousness. The concept of the Tao may be understood in modern terminology as that which gives rise to all that is: in this sense it would be that which gives rise to a Law of Everything, the zero point energy, all universes, etc.

[35] Johnson F. Yan, DNA and the I Ching (Berkeley CA: North Atlantic Books, 1991) p 155

[36] ibid. p. x

[37] ibid. p. x-xi.

[38] A good example is K. Huang's I Ching (see: http://www.wspc.com.sg/books/general/0092.html) Huang is a professor at M.I.T. who has worked with the I Ching for some time and has programmed the I Ching for computer.

[39] For an excellent introduction to the topic with the minimum of metaphysical metaphor see the architect's, Gyõrgy Doczi's, *The Power of limits*, (Boston & London: Shambala, 1994)

[40] Edward De Bono, Interview in Omni magazine: (March 1985) p.118

[41] Stan Tenen, Meru Foundation (see: http://www.meru.org/   for extensive documentation.

[42] This system is so far superior and advanced compared to the hollow log beating binary coded messages we insist on sending into space that it is rather embarrassing. Certainly, binary should be recognized and interpreted easily by any reasonably advanced species but its use also presents a less than flattering representation of our species' evolutionary consciousness and the assumptions our scientists make about advanced species.

[43] I have said above that Timothy Leary was the "Tesla of consciousness". He took the role of the "shaman" to a new dimension in that, not only reluctantly recognizing that that was his evolutionary role in his time, he clinically observed and documented the process as it unfolded, taking self-reflexive awareness out another whole degree. He was probably more knowledgeable and expert at being self-aware of his being self-aware of his self-awareness more than any one human to this point in our history.

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