

2001

SCRAPS

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PARADIGM SHIFTS FOR THE NEW MILLENNIUM A PROLOGUE

Before listing candidate paradigms toward which to shift, perhaps it is appropriate to question the whole concept of paradigm shifting [initiated by Thomas Kuhn, *Structure of Scientific Revolutions*, 1962]. Should the idea of a shift, replacing one paradigm by another, be abandoned in favor of a set of co-evolving alternative paradigms? This would entail enduring the ambiguity of alternative possibilities, or even worse, contemplating that the universe is not a "oneness" [as its label suggests], but an aggregate of co-existing facets whose coherence cannot be subsumed under the rules of logical consistency. That is to say, the universe is to be replaced by a *metaverse* which contains, and/or is contained within, multiple [parallel?]¹ universes.

The universe [or the concept of consistency] may be compared to a jigsaw puzzle in which all the pieces fit together to form a single picture, there being no empty spaces nor overlaps among the pieces. But it may be that subsets of the pieces *consistently* fit to form a picture, there being several such pictures within the collage of the metaverse. Some of the pieces may be shared by several of the universes, some pieces may belong to none. [The inference here is that there may be many logics, each of which is internally self consistent, but appear as nonsense to the others; a particular logic being an attribute of a particular universe or sub-universe.]² In posing this metaphor we are challenged to interpret the meanings of a "piece", of a "picture", and the meanings of "fit" and "shared".

However, in developing the details in this attempted example of a set of alternative paradigms to replace a single paradigm, we have paradoxically begun to create a single paradigm. Perhaps Freud was right, we are not capable of enduring for long with ambiguities, we invariably, one way or another, seek to contain all in a single container. [And the insistence on consistency is but one example of our compulsive search for some form of "oneness"].

¹ A note about "parallel": Parallel infers co-existing universes that do not share space. Something like a set of bubbles embedded within a larger bubble [the metaverse]. However, there could be many ways for multiple universes to share within a metaverse. These include what the communication engineers designate as ADMA [the parallel case], TDMA [time], FDMA [frequency], CDMA [cell], and SDMA [scale division multiple access].

² Gödel's incompleteness theorems would suggest that no universe is self-consistent, and that every universe of necessity has the attributes of what is here called a metaverse. This would infer a hierarchy or network of metaverses.

THE MUTUAL WORLD

We may think of the world as consisting of **nodes** [things, objects, or beings] and **links** [relations, bonds, or forces]. In the realm of human perception, the nodes are visible while the links are invisible, being in general perceivable only through their effects on the visible. Much of the history of religion, philosophy, and science consists in speculations or explorations of the invisible portion of the world, i.e. of the relationships that exist between the objects or things that are visible. The philosopher John Locke ["On Human Understanding", 1689] maintained that it was the visible that was important and meaningful and speculations about the invisible were meaningless. On the other hand, in the 20th century the Structuralist school of philosophy maintains the opposite: Reality is not composed of things but of relationships, and every object has both a **presence** and an **absence**. Therefore it becomes important to explore not only the relationships between objects but relationships between the relationships themselves.

We might distinguish:

Class I relationships: Relationships between objects

Physical forces such as gravity and coulomb forces would be examples of Class I.

Class II relationships: Relationships between Class I relationships

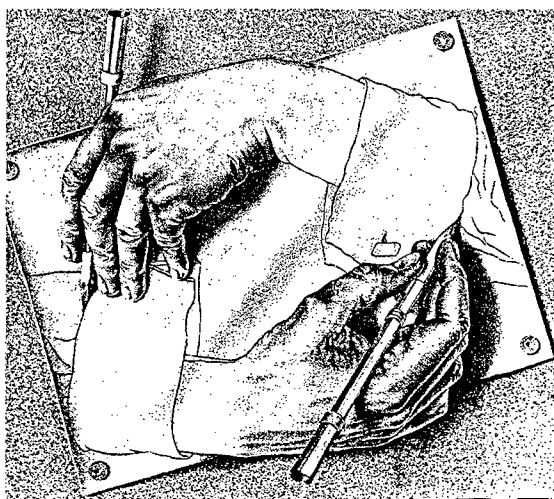
The relationship between gravity and coulomb force would be an example of Class II

But between Class I and Class II there is a "semi" class of a relationships, those between a class I relationship and an object. For example,

The *mutuality*, Force \Longleftrightarrow Form.

The question involved is: Is form, being visible, an attribute of objects, or is it also a force?

Hence the need for this additional class of "*mutualities*"



Drawing Hands —M. C. Escher

Mutuality ~~is~~ creation ex nihilo

THE STARS

One of the earliest memories of my childhood was an evening walk with my parents. As I recall we had left the city and were in the country walking along a railroad track. My father took my arm and pointed out to me the stars up in the dark sky. For some reason I became very excited, as though I had just been told I was going to receive a present, a new puppy or even a pony. I just had to look and look and look at the stars. Then my mother taught me the little verse, "Twinkle, twinkle, little star, ..." And I kept saying it over and over all the way home.

Today I sometimes wonder if, with the stars obscured and our eyes constantly trained on ourselves, we inevitably limit our identities to "me and mine". The stars teach us humility, but they also give us a sense of being an important part of an unfathomable profundity. When we look up at the stars we cannot help but feel a oneness with them, we recognize that we are part of them and they are part of us. Not only because in their wombs the carbon basis of life was incubated, but that from their selfless radiance our lives are sustained.

As we contemplate voyaging to their abodes, our "me" focused identities dissolve. And as we join hands in this enterprise with those we once thought of as foreigners or even enemies, and launch the human venture into space, we find that our oneness with the stars has brought us a oneness with ourselves.

LONE WOLVES

How are Lone Wolves to be identified? They are:

Not part of a lineage
 Ahead of their time
 Against the tide
 Inner directed
 Innovative
 Self confident
 Ridiculed, or worse
 Want no disciples
Need

A lone wolf may be an iconoclast, if so that is only incidental. They are not mere rebels, rebelling for rebellion's sake, nor are they advocates of some cause. They are creative, imaginative, innovative. They effect emergence without an Hegelian dialectic. The verge in which they operate is with the innovative, the original, not with the contrary. They do not think or act in conventional and traditional channels. Nor do they take the path less traveled; they take an entirely new path. In terms of current jargon, they are not pushing the envelope, they are thinking outside the box. A lone wolf can neither succeed nor fail. He can only do what he must do.

CANDIDATE LONE WOLVES

FORMER TIMES

Daedalus
 Cain
 Akhnaten
 Socrates
 Lao Tze
 Hsün Tzu
 Elijah
 Deutero Isaiah
 Nagarjuna
 Shantideva
 St. Anthony
 Wycliff
 Pascal
 Blake
 Kierkegaard
 Nietzsche
 Dostoevsky

20TH CENTURY

Ray Bradbury
 M. C. Escher
 Paul Feyerabend
 Frank Gehry
 Henry Geiger
 Roger Penrose
 Nicholas Roerich
 Nikola Tesla
 William Irwin Thompson
 Ken Wilber
 Fritz Zwicky

REBELS

(Not Lone Wolves)

Icarus
 Prometheus
 Sparticus
 Wat Tyler
 Jan Huss
 Luther
 Tom Paine
 John Brown
 Billy Mitchell
 Hitler
 Spong

Add Rollin W. Gillespie

Bart Prince

Charlin

Joan d'Arc

Is Dionysius the eternal Lone Wolf?

Always seeking to escape the boxes of Apollo

Re Cain & Abel

God is the source of the conflict!

Does God want conflict? DIVISIVENESS, US/THEM?

Curious: GOD wanted the Animal sacrifice
rejected the vegetarian

Lone wolf & Mystic?

Is the "HERO" the ideal lone wolf?

HERO & LONE WOLF

Perhaps

HERO: MAHAYANA!! LONE WOLF: THERAVADEN

Roger Penrose diversity the meme-pool

p7

p731

consciousness

Subj: **Driving home thoughts**
Date: 1/15/01 3:12:49 PM Central Standard Time
From: H Pollock
To: AIW1871

Dear Al,

For your consideration, I thought up a few more names, focusing mainly on women in history. They are: (please excuse the spelling)

Madame Currie
Katherine the Great
Florence Nightengale (or whoever began the Red Cross)?
Amy Sempleton McPherson
Mary Baker Eddy
Mother Teresa
Cleopatra
Hildegard of (Bingen) - 11th or 13th century
Elizabeth the First

Nostradamus
Edgar Casey
Disney

Again a pleasure to visit with you. One of life's mental treasures.
Love, Helen Pollock

Thank you, Helen, and please forgive me for leaving out the distaff side. Certainly many of those you mentioned meet the standards of being lone wolves. But somehow, it seems the requirements for males and females are somewhat different. I would allow females to have disciples, Florence Nightingale with the Red Cross, for example. But not for males. Male disciples are on power trips using the innovations of the lone wolf for personal agendas. I don't see that happening in the case of female lone wolves. Now I am trying to think of other women to add to your list. St Hilda of Whitby comes to mind. She sought to protect the Celtic Church in Britain from the Papacy take over in the 7th century. A strange twist to history. But that is what lone wolves are about, twisting history.

Thanks again for coming up. I do so enjoy our conversations. I hope you and Tom can come again soon.

love to all,

AL

FUNDIES.WPD

JANUARY 2, 2001

FUNDAMENTALISTS *[The inflexible]*

*These people operate from the rear view mirror with tunnel vision and blinders on.
The literal interpretation of their chosen dogma becomes an absolute.*

SOME OUTSTANDING RELIGIOUS FUNDAMENTALISTS.

The Pharaoh Tutenkhamon

Had his father in law, the Pharaoh Ahknaton, the first monotheist, murdered because he had abandoned the traditional gods of Egypt..

Amr ibn al-As

When his armies had conquered Egypt in the seventh century, he was informed of the great library at Alexandria. "If the books disagree with the Koran they are heretical, if they agree with the Koran they are superfluous. Burn them all!"

Abbot Arnold-Amaury of Citeaux

When the city of Beziers was taken by Pope Nicholas III's crusaders, the Abbot was asked what to do, some of the people were Catholics, others were Cathars [heretics]. He said, "Kill them all , God will know his own".

Bishop Diego de Landa

The "Umar" of Yucatan. "We found a great number of books [of the Maya] and as they contained nothing in which there was not to be seen superstition and lies of the devil , we burned them all."

Pope Pius IX

The architect of Vatican I, corrected theological inconsistencies regarding the Theotokis, Mary the Mother of God, with the doctrine of the Immaculate Conception. And for good measure proclaimed the doctrine of Papal Infallibility.

SOME OUTSTANDING POLITICAL FUNDAMENTALISTS.

Lenin and Stalin

We shall prove Marx to be correct even if we have to slaughter 20 million kulaks to do so.

Joseph Goebels and Julius Streicher

The Jew is the corruptor of Aryan Culture and must be eliminated. "Destroy them all!"

Andrew Jackson

When Chief Justice Marshal interpreted a treaty made with Indian tribes in favor of the Indians, Jackson responded, "John Marshal has made his decision, now let him enforce it."

Jackson then sent the Indians on the "Trail of Tears".

Jesse Helms and Oliver North

Any president elected by the other party is not my president or commander in chief

SOME OUTSTANDING CULTURAL FUNDAMENTALISTS

The Kansas School Board

Evolution is only a theory and should not be taught in the schools

The Supreme Court of the United States.

Declared itself in 1803 to be the sole and final interpreter of the Constitution. A power not granted it by the Constitution.

Madison & Marbury

KABUL, Afghanistan PD 01/02/27

Taliban order statues destroyed

Afghanistan's hard-line Taliban rulers ordered the destruction Monday of all statues, including a pair of monumental fifth century Buddhas towering more than 100 feet tall and carved out of a mountain-side.

The order came from the Taliban's supreme leader, Mullah Mohammed Omar, who issued an edict declaring statues, including the ancient Buddhas, as insulting to Islam.

"Because God is one God and these statues are there to be worshipped, and that is wrong, they should be destroyed so that they are not worshipped now or in the future," Omar said in his edict, published by the Taliban-run Bakhtar News Agency.

Afghanistan's ancient Buddhas are in Bamiyan, about 90 miles west of the Afghan capital of Kabul. One Buddha, measuring 175 feet, is said to be the world's tallest statue in which Buddha is standing up rather than sitting.

It's not clear what prompted the edict.

Afghan rulers order destruction of

ASSOCIATED PRESS

KABUL, Afghanistan — Unmoved by international pressure, Afghanistan's Taliban rulers Wednesday delegated the job of destroying all statues in the country to armed troops from the Ministry of Vice and Virtue, saying the issue is an "internal" one.

Asian officials, Buddhist groups and archaeologists have been in an uproar over the religious militia's decision to demol-

ish statues, including two towering 5th-century images of Buddha carved into a cliff face.

In ordering the statutes destroyed, the Taliban's supreme leader, Mullah Mohammed Omar, said Monday that they were contrary to the tenets of Islam, which the Taliban say forbids images, such as paintings and pictures.

But while many Asian Buddhists criticized the decision, most refrained from

criticizing the Islamic rulers, saying that would be against Buddha's teachings.

Thailand, Cambodia, Myanmar and Laos, four predominantly Buddhist nations in Southeast Asia, have not officially criticized Kabul.

In South Korea and Japan, the main Buddhist associations described the Afghan decision as anti-cultural and an affront to humanity.

Neighboring Iran, also ruled by Islamic

This is. America's "anything goes" philosophy. Discrimination is too difficult for extremists, be they Taliban or Rap "artists"

A13

ancient Buddhist statues

clergy, scolded Kabul's move, saying it will likely damage Afghanistan's relations with other governments, Iran's IRNA news agency said. It ridiculed Afghanistan's Taliban rulers, saying the people who ordered the statues' destruction "strangely call themselves clerics."

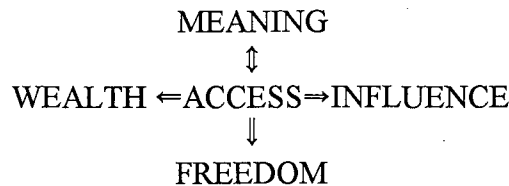
A top monk in Thailand cited the Buddhist philosophy of turning the other cheek.

"As Buddhists we are not allowed to

criticize anyone, but good religious people should not destroy world heritage," said Phra Wipatsri Dhamaramo, also secretary to the country's chief monk.

The Ministry of Vice and Virtue enforces edicts issued by Omar.

They make sure men pray in the mosque, women cover from head to toe in the all encompassing burqa and that bans on most forms of light entertainment, photography and television are enforced.



Access is central to all relations. Our true wealth is measured by the number and variety of options accessible. Our freedom is also measured by access to inner skills and knowledge and to outer choices. Our influence depends on the number of links we have to others and on access to their decision inputs. Finally, our meaning derives from the extent of our links to the many facets of the world. If there is one concept that defines who we are, it is the nature and extent of our access to options.

For several centuries western man has been engrossed with freedom. What this means to most is freedom to do what one chooses. Thus freedom basically has to do with the constraints on whatever choices are available. Certain choices are taken off limits by law because they are irresponsible or destructive to the social order. However, what law takes off limits is more properly considered a matter of liberty than of freedom. Even what society condemns, though legal, can also be seen better as a matter of liberty than of freedom. The extent of personal freedom is determined by 1) Those choices available to you after what is excluded by law and social taboo. And 2) Those choices available to you after what you exclude for reasons of conscience or personal preference. Which is to say your freedom is bounded by personal exclusion and social permission.

After these exclusions real freedom has to do with the size and quality of the remaining set of choices, and while there has been much concern over the factors that diminish the set, the matter of **liberty**; little has been done about the factors that augment the set, the matter of **access**. The historical focus on liberty, (i.e. on the limiting of the restrictions imposed by government or society), has diverted attention from the importance of access. And access has far more to do with the set of available choices than does liberty. Our culture has given people liberty but has denied them access. Liberty will allow people to sleep under bridges, but does not give them access to decent shelter. Liberty permits the establishment of free markets, but does not assure that people have access to those markets. The poor, the handicapped, and the misfits may have liberty but until they have access they do not have freedom.

But access is more than freedom. Access is also the font of meaning. Both wealth and meaning derive from having access to options. Poverty, whether material or spiritual, is a matter of inadequate access. Given liberty and access, we may differ in what we choose to access, but our real wealth, our sense of identity, and our meaning, is ultimately determined by the options that we can access and that we choose to access.

Urban & Rural Access
esp transportation
Air Lines, Flights

FROM CAUSALITY TO MUTUALITY

The great paradigm shift taking place in Western thinking is that from causality, a one-way street, to mutuality, a two way street or even a multilane super-highway. While the idea of mutual causality has long been fundamental to Eastern thought, its penetration into Western thinking has been slow. Causalism, the past determining the future, has been dogma in Western thinking. The opposite, the future affecting the past, has been viewed as non-sense. But mutuality has crept into western thinking through both politics and economics: Jefferson's view of ultimate sovereignty residing in the people, i.e. democracy, is the mutuality of [people <~~~~> government]. And the cornerstone of free market economics has been the mutuality of [supply <~~~~> demand]. The curious aspect of this is that physics has been the last stronghold of causalism. But technological developments such as radar [emw out <~~~~> emw in] or holograms [part <~~~~> whole] have given indisputable illustrations of examples of mutuality. Then with quantum mechanics physics had to succumb. The mutuality of the experiment and experimenter, of the observer and the observed could not be ignored. The illusion of "neutral objectivity" went to the dust bin. And now with bi-directional time being theoretically possible, the mutuality of [past <~~~~> future] or [causalism <~~~~> finalism] is on the table.

Mutuality has also surfaced in the theory of general relativity. As J. A. Wheeler puts it, "Matter tells space-time how to curve and curvature tells matter how to move.", a form of the mutuality, [mass <~~~~> space-time].¹ Einstein says that the [mass <~~~~> space-time] mutuality is ontological. If there were no matter there would be no space-time, i.e. the existence itself of space-time ^{derives} from the existence of matter. This raises the question, if there is full mutuality, then in what way does space-time contribute to the existence of matter? Must they be mutually sustainable?

Other phenomena that have defied explanation by "causality science" are Jung's *synchronicity* and Walpole's *serendipity*. These are events that happen that in some way needed to happen, species of *deus ex machina*. The visible part of the mutuality is the event itself, the invisible part is some meaning bestowed on the event. It is as though there are mutual exchanges between invisible actors ^{behind} in the event and visible actors in the event. The event itself is visible, the scenario of which the event is a part is invisible. Viewing synchronicity and serendipity as mutualities may give clues to their explanations.

Finally, another phenomenon that may better be investigated from the viewpoint of mutuality, is the phenomenon of *resonance*. Where resonance is defined as the mutual tuning of two vibrating systems to a single frequency or to harmonics of some fundamental frequency. [frequency₁ <~~~~> frequency₂]

¹ Some explain that general relativity is [dynamics <~~~~> geometry], but this may not be so much a mutuality as alternate descriptions of the same phenomena.

THE FOUR KINDS OF FAME

The world bestows four kinds of fame:

- 1) On fools who succeed, the world bestows **celebrity**. This is Andy Warhol's 15 minutes. It is difficult to give examples since, but for the current few, their 15 minutes is over.
- 2) On fools who fail, the world bestows **ignominy**.
Examples would include: Custer, Hitler,
- 3) On the wise who succeed, the world bestows **renown**.
Examples would include: da Vinci, Newton, Beethoven, Einstein
- 4) On the wise who fail, the world bestows **immortality**.
Examples would include: Lao Tze, Socrates, Jesus, Gandhi

The rest of us can enjoy the autonomy that goes with anonymity.

The reasons we acclaim fools who succeed is that we easily identify with them. The fool is in each of us and the success of the fool becomes our own success. We denounce the fool who fails for the same reason, because that fool is also in each of us. Our denunciation is an outward disassociation from those with whom we have inner identity.

The reason we acclaim the wise who succeed is based on our need for heroes. The wise who succeed, the proclaimed heroes, are our bridges to the gods. They prove there is something divine accessible to each of us. But when the Chün-tzu¹, the superior man, appears among us we rebuke him, exile him, or put him to death. He has gone beyond one with whom we can identify, and we must ^{deny} ~~assert~~ our inferiority by causing him to fail. But after our betrayal of ourselves through our betrayal of him we immortalize him. Some of us because he has given us a glimpse of what we can become; some of us, since we cannot identify with him, he must be a god. ^{could}

¹Chün Tzu is not to be confused with Nietzsche's Übermensch. Chün Tzu has acquired an identity with all sentient beings. Übermensch has acquired a will to dominate all things and beings.

Fools and Knaves

Wilhelm II

Hitler

Hindenburg

Ludendorff

Custer

Kit Carson

Lenin

Stalin

Nicholas II

Alexandra

Undecided at the moment:

Arafat

W

The tragic hero

Category 4

Hamlet

Odysseus

PLANCK PARTICLE-BARYON MUTUALITIES PART I

It is the present hypothesis that existing entities come into being, not by uni-directional *causality*, but by some form of bi-directional *mutuality*. In the case of frequencies such mutualities are the well known phenomenon of resonance. But in other parameters some other form of ~~resolution~~ ^{resonance} may be operating. [all numbers are log₁₀]

The Mass-Size Mutuality

	P		B		δ	
M	-4.662199	\	-23.776602		-19.114403	= $(\alpha\mu)^{1/2} S^{-1/2}$
L	-32.791545	/	-12.550068		+20.241477	= $(\alpha\mu)^{1/2} S^{1/2}$

This mutuality infers that in a one dimensional world $(\alpha\mu S)^{1/2}$ planck particles would space-wise fit into one baryon. In a two dimensional world $(\alpha\mu S)$ planck particles would fit into one baryon, and in a three dimensional world $(\alpha\mu S)^{3/2}$ planck particles would fit into one baryon. One approach to the resolution of this mutuality could be through some form of *completion*.

One-dimensional completion:

If we convert to planck units, taking the planck length as 1, the size of the baryon becomes the above, +20.241477. If this be taken as the diameter of a ring, R, the radius would be, +19.940447. The diameter of a planck particle located on a ring of radius R would subtend an angle of -19.940447 radians; $2\pi \times$ this number = 20.738627, would be the number of planck particles that would complete the ring. The mass of this ring would be 16.076428 grams.

Two-dimensional completion:

A disk of radius R would have a planck area of $\pi R^2 = 40.378044$. The "cross section area" of a planck particle is $\pi/4 = -0.104910$, hence the number of planck particles in the disk would then be $40.482954 = \alpha\mu S$. This disk would have a mass of 35.820755 grams.

Alternatively, a two-dimensional completion could be obtained in a spherical shell. The area of such a shell would be $4\pi R^2$, four times the area of the above disk. This would require four times the number of planck particles or 41.085014 particles. This shell would have a mass of 36.422815 grams.

Three-dimensional completion:

A sphere of radius R would have a planck volume of $4\pi R^3/3$; the "volume" of a planck particle would be $= \pi/6$; hence the number of planck particles to complete the sphere would be $8R^3$, which is $= 60.724413 = (\alpha\mu S)^{3/2}$. The mass of this sphere would be 56.062214 grams.

The mass of the sphere is of the order of the estimated mass of the universe. The mass of the disk is of the order of maximum stellar mass. (inferring 10^{20} stars in the universe). The mass of 10^{16} grams may be a clue to hypothetical dark matter.



ON GIFTS AND GIVING



The gospel of St. Matthew tells us of three sages who came from the East to offer gifts to a new born babe whom their deliberations foretold would bring the greatest of all gifts to the world. According to the legend the sages brought gifts of gold, frankincense, and myrrh. There have been many interpretations as to what these gifts symbolized. But like all mysteries, these symbols being rich in meaning, it is best that their interpretations be open ended.

When we ponder, what are the greatest gifts that we can give or receive, we are reminded of what some other sages have said.

YESHUA BEN YOSIF

When thou doest alms let not your left hand knoweth what thy right hand doeth.
Give your gifts in secret, that you may be rewarded openly.
Give good in return for evil.

 saint patrick 

 give the gift that when one receives we all receive. 

Shantideva

Your enemy will give you the greatest gift you will ever receive.
It is he who will give you the opportunity to transcend your ego and acquire the fullness of compassion.

St Frances

It is in giving that we receive

MEISTER ECKHART

IF YOU SAY BUT ONE PRAYER IN ALL YOUR LIFE, IF IT IS
"THANK YOU", THAT WOULD BE SUFFICIENT.

Saint Vincent de Paul

For the poor, whatever the gift, it should take the form of bread.
The greatest gift you can give is giving an opportunity for others to give.¹

¹Translation: Give others the opportunity to pick up the check.

Gifts of Children follow the Golden Rule

Not the "Platinum Rule"

Do unto others as they would
have done unto them.

The Golden Rule assume a homogenized humanity

The Platinum Rule supports variety

Say arigato 100 times each day

THE EXTREMES

*Sheep take but one path and make an ever deeper trail
The eagle follows no path and leaves no trail*

The natural course of human history appears to lie in the direction of **concentration** of power, uniformity of opinion, and consensus of belief. Sometimes this is forced from the top down, but more often it is the manifestation of a herd instinct to conform driving from the bottom up. **Conformity** is the natural norm for most portions of every population. Competition and conflict emerge at the top, not so much over contending viewpoints as over extending control. The result of conformity and the concentration of power is a dogma which defines what thinking and what behavior is acceptable and what is unacceptable. While there may be *variation* among human cultures, there is little *deviation* from the pattern of conformity and concentration. The "fundamentalist police" [eg, the inquisition] are motivated not only to preserve a position of power, but more unconsciously to protect all, especially themselves, from encounters with the dangers of pluralism.

The experiments with limited pluralism [read 'democracy'] in the past two centuries, have disclosed the dangers of dogmatism, principally, that in a demand for uniformity the variety essential for survival is destroyed. In the transition stage from dogma to limited pluralism the first task was to create a tolerance of differences. This does not come easily for those who still live in the vestige of the age of dogmas. This is recognized since much of our 'news' these days is about either the progress or the recidivism of tolerance. And now the surprise! The experiments with limited pluralism have initiated a trend toward unlimited pluralism and the specter that consumed the fundamentalist police in the age of dogma has now reappeared and frightened many pluralists. Editorials and pundits exclaim there is too much tolerance! Judges and courts counter the entropy of pluralism by overruling basic tenets of the pluralist canon [read U.S. Constitution].

Another human proclivity is to push all the way to a boundary. In the past toward the boundary of a single dogma, $All \implies 1$; in the pluralistic present toward the boundary that all opinions are equal, which results in $All \implies 0$. [This is a parallel to the second law of thermodynamics, a diffusion to absolute zero.] The experience of history established that confinement to the stable of dogma created stability, but with the barn door locked, the pasture was not available and destiny was death. On the other hand, we are experiencing that with no enclosure at all we sink to the lowest common denominator, melting down to nothingness. [We are not there yet by any means, but the indicators are becoming evident.] Both extremes contain the seeds of their own destruction, the ossification of dogma, the madness of incoherence.

A middle way? A meta-dogma, a set of rules by which alternatives could be certified as productive or useless. This, of course, would have to allow alternative definitions of productive and useless.

PHYSICS AND SOCIETY

It is amusing to note that certain formulae from physics, when generalized beyond their proper domain of proven applicability, still appear to apply. This is especially so when the physical meanings are replaced by somewhat parallel psychological meanings. Some examples:

The Heisenberg uncertainty principle tells us that,

$$E \times T \geq \hbar$$

This means that the product of energy, E and time, T must be greater than some constant. If T , for example is shortened then E must be increased in order to preserve the inequality. Or if E is reduced then T must be increased. Translating this into the vernacular, it says that if we want to be time efficient, do something in a shorter time, then it is going to take more energy. Or if we wish to consume less energy for a given task then it will take more time. In other words, the principle tells us that there is a trade off between time efficiency and energy efficiency. To go from St. Louis to Kansas City by covered wagon is going to require a lot less energy than to go by jet plane. But it sure will take longer. So if we need to save energy, slow down!

Another example comes from Bernoulli's formula, which says,

$$p + \rho v^2 = k$$

This equation tells us that the sum of the pressure, p , and the product of the density, ρ , times the velocity, v , squared is a constant. Assume there is what we might call a "threshold pressure" beyond which we flip and go into some form of rage. Then we might let

$$k - p$$

represent this pressure, which is a constant [but has different values for different people]. Now this rage pressure will be governed by the product of density and speed. Consider the case of freeway traffic. If we are driving along at a certain speed which we wish to maintain, and the density increases, we must either slow down or go into road rage [or both]. This equation tells us what we already know, that the greater the density the slower we have to go. But it also tells us that for every combination of density and speed there is a critical rage pressure which is proportional to ρv^2 . The increase in road rage in recent years is the result of the density increase which forces us to go slower. I suppose we will just have to change our subjective value of $k - p$, because it appears that ρ is going to continue to increase.

There is a third example that comes, not from physics, but from mathematics. This is Gödel's famous incompleteness theorem. This theorem in its pristine form says that a structure at least as complex as arithmetic is incapable of proving all theorems that may be valid within that structure. Another way this has been put is to say there is a trade off between completeness and consistency. Take the example of a filing system. If there is a well ordered file that allows ready retrieval, then the file will not be complete. If the file is complete, containing all your stuff, then it must have a miscellaneous category that does not lend itself to ready retrieval. Another rewording of the theorem, nothing (except possibly Pope Pius IX) can fully validate or explain itself. However, philosophically, it says that there are limits to the logical and the rational. There is a reality that lies beyond access to our reason alone.

LAMA KUNGA

The lama of the Gold Ridge Sangha , Lama Kunga, our "Ed", passed away at 2:00 am this morning. On learning of his passing, I simultaneously learned how close my bonds with Lama were. Not in a direct person to person relationship, but through his and my joint relationship to an entity that held us both in its hands. We, and many others, are bonded to this ineffable entity that is part humanity, part embracing of all life, and part embracing of all being.

In his passing there is the usual first reaction of grief, then the glimpse through a door which his passing has briefly opened for us. And with that glimpse, a wave of reassurance, peace, and enlightenment. Finally there comes a sense of responsibility, a call to continue the endeavor to which he and countless others through the ages have dedicated their lives. [Irrespective of the label given to that endeavor]

After hearing of his passing I went to the Sangha, leaving a message for friends who are postulants. And on returning saw in the fields the new born lambs, hours old, lying in the grass near their mothers. I was awakened to the real nature of the bardo we call life, through which we pass. It is neither a beginning nor an end, but a portion of a journey to the summit of Mount Meru. A journey whose meaning we grasp stage by stage as we continue. Commitment and purification, learning, lighting our own lamp, and finally service and sacrifice. Each offering our own variation to the Theme of Vajra Sattva.

THEBIRDS.WPD

JANUARY 23, 2001

THE BIRDS PART I

See also 1997 #49
2001 #18

In 1963 Alfred Hitchcock made a movie entitled "THE BIRDS". As with most of his films there were the usual elements of suspense, mystery, and horror. In this ^{film} picture Hitchcock indulged one of his favorite ploys of having the threats and horror arise in a place ordinarily deemed safe and from agents conventionally perceived innocuous. In this case the innocuous agents that turned threatening were birds. How could this twist of having birds become frightening monsters work against the contrary ingrained experience of an audience? But it did work! I think it worked because of a mystery that surrounds these "innocuous" creatures. In some sense we have always held birds in awe, maybe similar to the awe we bestow on our deities. They can fly and for millennia we have been envious and dreamed of ways we could imitate them. But in the century in which we finally mastered their skill to fly, we look at them once more and see they are masters of other skills that leave us again in awe.

To watch hundreds of birds simultaneously take off from a wetland, rise chaotically into the sky, fly and counter fly in all directions, never colliding; then to suddenly emerge into a pattern that we can perceive as order, all moving in unison to the tick of some unknown clock; then returning to one massive chaotic scramble, only to re-emerge in two or more orderly flocks, flying and counter flying in many directions; repeatedly altering between chaotic and orderly patterns. If flying is one of their skills, their mastery of coherence is an even more remarkable one. The birds seem to know something very basic that we in all of our sciences have entirely missed.

We can only speculate: Do they use some unknown mode of communication? Or is it they possess built in non-invasion zones to avoid collisions? and the size of such a zone depending on their flight speed. Or are they demonstrating pre-scripted dances? Or are all attuned to a single director of a flight orchestra? In any event it appears to us that from time to time they create a super-organism which contains each bird and which in turn each bird seems to contain.

The division between order and chaos as birds perceive the world is apparently quite different from our perceptions. Watching their performance makes us feel that we appreciate only the simplest forms of order. Their level of handling complexity seems far superior to ours. But order is not only an objective mathematical arrangement, it involves the observer and his subjective limitations. Perhaps the explanation lies in dimensions. Human experience, until the present century, has been almost entirely two dimensional. The birds may have evolved their superior abilities for coping with complexity from the demands of motion in three dimensions.

For hundreds of aircraft to fly without a collision in the *relative* close proximity in which a flock of birds operate is beyond imagination. Humans have great difficulty trying to achieve anything resembling laminar flow on a one dimensional freeway. But maybe a clue to the secret of the birds lies in our learning how to turn automobile traffic into a "super-organism".

ONTOLOGICAL LEVELS

The scientific worldview assumes a reality that is matter-energy, and that all phenomena can ultimately be explained in terms of the interactions between particles and forces. This one level worldview, largely inherited from the 17th and 18th centuries, still prevails in many quarters, but is currently being undermined by the findings of science itself. That is not to say that science is ready to resort to non-material explanations, but that the patterns of thought required in understanding quantum reality, for example, are forcing a departure from the traditional canons of Aristotle, Bacon, and Descartes. Current "thinking out of the box" does not return to theistic explanations, but invokes such notions as "parallel universes", "non-localism", and an underlying ubiquitous vibratory essence. These concepts are not easily packaged with the traditional properties of a material universe.

The wisdom of the ancients had little difficulty with the world's possessing many levels. For example, in some ancient models there were four cosmic levels:

In the Kabbalah:

- Level One: Assiah, the material world
- Level Two: Yetzirah, the specific pattern for the material world.
- Level Three: Briah, the set of patterns defined by an archetype.
- Level Four: Atziluth, the world of the archetypes

In Hindu tradition:

- Level One: The manifest material world, enduring for a Day of Brahma.
- Level Two: The many material worlds belonging to the life time of Brahma
- Level Three: The many Brahmas
- Level Four: Brahman, the unchangeable rules, ground for existence, from which all is derived.

We might say that the Kabbalah tradition favors the engineer's FDMA, Frequency Division Multiple Access, while the Hindu cosmology favors a form of TDMA, Time Division Multiple Access.

In the Greek tradition, there is Plato's world of appearances and archetypes, and the two levels of Parmenides and Herakleidos: the unchanging and the ever changing. Similar to Plato, the Hopi and other native American groups, spoke of the two levels of manifest and unmanifest. And now the French structuralists are dividing the world into the visible [things] and the invisible [relationships]. (Even a physicist has to admit that while particles may be visible, forces are invisible.)

While lacking precision, the models of the ancients were both comprehensive and non-contradictory. Their rejection, about the beginning of the 17th century, was through their inability to deal with the details, something that the new scientific method did very well. Precision in the specifics vs. a comprehensive wholeness led to a split in man's approach to understanding the world, the split between science and theology. Today that split is being bridged, allowing us to utilize the thinking of both.

Perhaps it is time to ask what would a modern multi-level worldview look like? Perhaps something like this:

The universe we live in is a universe whose properties are basically determined by the fundamental constants of physics, such as c , G , \hbar . We know that if the values of these constants were different, even by small amounts, the universe, like a chaotic system, would evolve to a completely different attractor. Although our universe is **delimited** by the given values of the fundamental constants, it is not **determined**. There are many variations possible, not all of which are realized. And this is the fundamental property of a multi-level cosmology: A template exists on each level but what is realized within the constraints of the template may assume great variety.

And now to levels themselves:

First, the level of a **set** of universes, of which ours is one, delimited by the particular values of the fundamental constants: $c = 299,792,458$ m/s, $G = 6.673 \times 10^{-11}$ m³kg⁻¹s⁻², and $\hbar = 1.054571596$ Js [Note: This is a **set** of universes, not a single universe, because the values delimit but do not determine.]

Second, the level of a set of universes all defined ^{by} a *template* that uses various values of the constants, c , G , \hbar ... [Note: For each group of values of c, G, \hbar , there would be a distinct *set* of level one universes.]

Third, the level of a set of templates of which the template of level two is but one variety.

Fourth, the level of rules of structure governing all templates of whatever form, something unchanging pervading each universe that persists whatever the template. [Would not this be Brahman?]

I am left with the question: Is it not possible to have both specificity and multi-levels? Must one be abandoned in order to have the other? Is this split but a twist from the ego battles of history?

WINNER TAKE ALL CAPITALISM

Who controls the supply can demand the price

The natural order does not operate on the profit motive, rather it is concerned with preserving balance and creating variety. There are exceptions, such as cancer cells and black holes, but in general that which endures in nature is that which is in balance with context. But balance does not preclude change, rather balance always seeks to restore itself, adapting to change. In human societies the best times are those where there is a mutuality of balance and change. Troubles begin when balances are thrown out of equilibrium by a sub-system seeking to take over and monopolize, or when a subsystem seeks to prevent change and inhibit variety.

There is an interesting exhibit in San Francisco's Exploratorium, showing the ecological interplay between plant and animal life. In a simplified ecological complex there is grain, mice, and eagles. The grain renews itself unless depleted below a certain critical level. The mice depend on the grain for food, and the eagles depend on the mice for food. The spectator can set the program to initial conditions of certain ratios between grain, mice, and eagles. Reproductive rates are calculated on the basis of numbers and food supply. Running the program from various initial conditions shows that, except in a narrow zone of balance, the scenario always leads to extinctions. Too many mice consume all the grain, or too many eagles kill off their food supply, etc. The law of supply and demand is fundamental to any ecology independent of prices being involved. In fact, an important difference between human *economies* and natural *ecologies* is the introduction of price by humans. And price, when predicated on profit, upsets balance, distorts the law of supply and demand, and becomes a shortcut to some form of extinction.

More complex is the concept of regulation¹, which is usually designed to prevent monopoly, or as in the case of certain distribution systems, to support monopoly. Whenever regulation obstructs the transitive law, and prevents the flow of supply-demand-equilibrium through the entire system, it also becomes a shortcut to some form of extinction.

We must conclude that economics 101 has too little to say about how the system really works. It omits the cancer cell component [read greed], overlooks the importance of total system balance, and the distortions that the economic *symbols* of price and money supply play in the functioning of the system. It ignores the psychological role of *confidence*, the momentum of the system. And this is to say nothing about whether the so-called free market is free. So long as sizable multitudes have no *access* to the market, it is a fiction that such a market is free.

The Twentieth Century saw the introduction, implementation, and failure of Marxist communism. It should not be assumed that the failure of Marxism validated capitalism. The best that could be concluded is that the flaws of capitalism are less than those of Marxism. But capitalism is also flawed. I feel it a safe prediction that the Twenty First Century will see the demise of capitalism in its present form and its replacement by some presently untried system. The context will prevail over the sub-system, it always does.

¹Another very complex factor that is not well understood is the role that technological innovation plays in the balances and changes in the economic system.

Proselyting also replicates the cancer cell.

The forms of extinction:

- Bankruptcy

"The principle of gain is obverse to the principle of righteousness"
- Mencius

The Fallacy of Supply + Demand

The homeless have no demand
for houses - because they
have no access to the market

The wide world is all about you:

You can fence yourself in, but
you cannot forever fence it out.

- Gildor [Lord of the Rings]

THE REAL NEW AGE

The odometer of time marking the new millennium does not sufficiently reflect that far more than the numbers on a calendar are changing. We are not only entering a new century and a new millennium, but are entering a new Age. The last few decades are clearly a watershed between an age that began some 2500 years ago and what is now to come.

At the beginning of the 20th century, physicists felt that all of physics could soon be neatly wrapped up. All that remained was to increase the accuracy of some basic numbers by a few more decimal places. Then along came radioactivity, relativity, and quantum mechanics, and the physics that was almost complete had to be shelved and labeled classical physics, distinguishing it from a totally new physics. In mathematics, Hilbert felt that with a little effort the finish line could be crossed. But instead Russell and Whitehead failed to remove paradox from logic. And along came Gödel's incompleteness theorems drowning all hopes of Hilbert. Some diehards, logical positivists and operationalists, fought a last ditch stand to preserve the old paradigms, but the walls came tumbling down.

Perhaps the most pervasive changes that took place resulted from the discovery that comprehensiveness was not leading to oneness, and if we seek to be comprehensive, consistency must be abandoned. Of course, there are those still attempting a "theory of everything", a conceptual residue of Akhnaten's monotheism, dating back to the xviii dynasty. . But if all is to be put into one package, it will not be the way of the past, the dogma of One Truth. The pieces of the puzzle do not come together to make one picture. Sub-sets of the pieces can form complete pictures. And many of the same pieces can be used to form different pictures. But no single picture uses all of the pieces. [cf Gödel] We must therefore abandon Truth, [one picture], while retaining validity [many pictures]. The universe is far too rich in possibilities ever to be captured in a single picture [or model]. And while the universe is coherent, nothing requires it to be consistent. But to abandon consistency is to embrace madness! That may be, for madness is a label for thinking out of the box.

And there is a message for us on the societal level. If there is no single great Truth as has been claimed by many sects, religions, and political philosophies, it is time to become tolerant of diversity, indeed to relish diversity. Many views may have some measure of validity, but none can claim Truth. Our challenge then is to live with alternatives, with the ambiguities that differences demand of our thinking. Each picture can be a stem cell feeding the whole. No picture can be a cancer cell seeking to replace the whole.

We do not fear the different when it is familiar
only when it is unfamiliar

- Li Kiang

THE BIRDS PART II

C. G. Jung notes that a flock of birds assembling in an unlikely place bears a traditional mantic symbolism of an impending death. He recounts a typical incident¹:

The wife of one of my patients, a man in his fifties, once told me in conversation that, at the deaths of her mother and her grandmother, a number of birds gathered outside the window of the death-chamber. I had heard similar stories from other people. When her husband's treatment was nearing its end, his neurosis having been removed, he developed some apparently quite innocuous symptoms which seemed to me, however, to be those of heart disease. I sent him along to a specialist, who after examining him told me in writing that he could find no cause for anxiety. On the way back from this consultation (with the medical report in his pocket) my patient collapsed on the street. As he was brought home dying, his wife was already in a great state of anxiety because, soon after her husband had gone to the doctor, a whole flock of birds alighted on their house. She naturally remembered the similar incidents that had happened at the deaths of her own relatives, and feared the worst....

This same symbol of impending death was experienced by our family. My wife, Donna, had been driving when she had a stroke and was taken to the hospital with minor injuries. For several days she seemed to be in a stable condition. Returning from the hospital one afternoon, I saw on the roof of her book store, where she spent most of her time, a score of crows, sitting or flying back and forth to a near by tree. I remarked the event to others, but none of us at that time had heard of the prophetic symbolism associated with such a gathering of birds. Donna died a day later.

When placed in juxtaposition with other powers that flocks of birds seem to possess, the view becomes compelling that some basic aspects of nature escape the epistemology of science. Part of this may be that individual birds do not possess unusual powers; those powers emerge only in an aggregate. A reductionist oriented science, predicated on the view that explanations are to be found in the parts, will never explain such emergence. But more important is the inference that our particular sensory windows on the physical world are partial. And that no matter how we may extend them with telescopes, microscopes, or other devices, there are parameters that remain inaccessible and unknown to us. And this becomes even more disconcerting when it implies that our way of thinking and reasoning, the processing and assimilation of our experience, may itself be a box blocking us from access to the real nature of the world we live in.

It is here that we must express our respect to peoples such as native Americans, who recognize other creatures as brothers, not as inferiors. All creatures are specialists, some have developed faculties and skills exceeding ours, others have developed faculties and skills totally different from any that we possess. The special development in which Western man exceeds seems to be arrogance.

¹From "The Interpretation of Nature and the Psyche" by C.G. Jung and W. Pauli

CONFIDENCE

The election of 2000, with its close splits in both the popular and electoral votes, left the final winner without a shadow of a mandate. And without a mandate momentum is lost, and with no momentum, confidence evaporates. A mandate is essential if a new administration is to have sufficient initial momentum to generate confidence in its program. It might also be said that the closeness of the vote, the coin standing on edge so to speak, spoke to an earlier erosion of confidence in both parties. People had cast their votes against a party and its candidates rather than for a party and its candidates. But whatever the causes, the psyche of the nation has reached a low point in confidence and it may prove difficult to start the engine again.

Confidence is to an economic system what momentum is to a physical system. So long as there is momentum, the economy is subject to guidance, analogous to a ship under way responding to the tiller. But when dead in the water the position of the tiller has no effect. Mr Greenspan had mastered piloting the economy using adroit adjustments of the prime rate tiller, which worked well when the ship was under way, but now that confidence is diminished, manipulating the tiller receives no response. Nor can the tiller get the ship under way again. The present problem is not so much "coming together", as is being emphasized by the new administration, as it is in rebuilding confidence. And a "turning back the clock" agenda will only leave the ship dead in the water.

But in politics, there must always be someone else to blame. The spin doctors have been busy, with considerable success, in placing the blame on environmentalists and others who oppose unmitigated greed. Everything from the energy problem to airline delays is being blamed on environmentalists. They are the ones who have opposed new power plants and new runways. [Dismissing the NIMBY prejudices of the public at large].

But this is not so. There is another factor, having far more clout than do any environmentalists, that has played a key role in the infrastructure lagging behind current needs. This is the reluctance of corporations to pay for the costs or support the taxes for updating. **Short term bottom line operates against long term investment.** Take a look at some facts: Over 75% of the companies comprising the Fortune 500 in 1955 are gone, and 49% of the 1979 list are now gone. Why? Most businesses do not prepare for the future, keep abreast new technologies nor evolve to meet altered societal needs. The short term is built into capitalism and into a government bought and paid for by special interests. The economy vs ecology controversy is really a dispute between short range and long range thinking and about rates of change.

To obscure the major causes of our problems environmentalists and consumers are now the ones targeted to blame. Certainly conserving resources is not to be disputed, turn off the unnecessary lights. But the public's demand for clean air and water is not the cause of the breakdowns in energy supply and transportation. Behind the scenes is a consortium of CEOs and their bought bureaucrats. There will be no restoration of confidence so long as the public is deluged with the smoke and mirrors of spin. People can be manipulated, but not all the people all the time, as has been well said..

FOUR SOURCES

There are four "Scriptures" or sources of human knowledge and wisdom:

1) Nature: The domain of the Hunter.

What is the purpose of our understanding nature and its processes unless it is to accept nature as an exemplar to guide us in our actions and creations. However, we have used our knowledge of the workings of nature to fabricate tools and weapons for dominance and destruction rather than taking it as a credential for inclusion in the Council of Cosmic Destiny.

2) The Distilled Experience of the Past: The domain of the Leader

For the most part recorded in such books as the Bible or Koran. However each of these books has been mutilated in redaction for communication, in translations and in interpretations, and worst of all exploited for human agendas. And these distortions have given us anachronistic guideposts such as the Biblical injunctions to subdue the earth or to be fruitful and multiply. Injunctions, that if now obeyed, would ultimately lead to our extinction.

3) The Wisdom in Nonsense and Absurdity: The domain of the Clown

When we laugh at our selves and our "wisdom" we are taking the first step toward escaping the box which we have built with our intellects. Our arrogance has entrapped us in this box, but when we ridicule ourselves, for a brief moment we are out of the box, and lose our haughtiness. As G.K. Chesterton has said, "Nonsense is a way of looking at existence that is akin to religious humility and wonder." Honor your errors.

4) Inner Knowledge: The domain of the Shaman, the Mystic

In this approach all that is said above is transcended. However this wisdom is ineffable. It cannot be articulated or communicated. While the Kingdom of Wisdom is within, within each of us, it is only available to those who dedicate themselves to its disciplined path, and then only to those who are able to *recognize* it.

It is well to note that what we call the world, the world that we experience, is a uroborus, a loop. We experience the world and in the act of experiencing recreate the world. The empirical involves both passive observation and active participation through re-creation. And the rational, our reason and logic, is an abstraction from our experience of this world that we have selected and created. While we should not maintain that the empirical and rational are wrong, we must recognize that both are but special ways of dealing with a special case. It comes to a matter of validity rather than truth. Our rational facilities work and are valid in this particular world that they have participated in building, but are hardly a scaffold for exploring the multiple facets of reality and potentiality of which the world of our perceptions and conceptions is but a special case.

MESSAGE AND MESSENGER

It is reported that King Darius I of Persia (522-485 BCE) would reward messengers who brought him good news and put to death those who brought bad news. We would say that Darius could not distinguish the message from the messenger. Of course, Darius was not alone in this confusion of message and messenger. Great teachers who brought liberating messages [e.g. Jesus and the Gospels] were often deified. And in our times Marshall McLuhan has maintained that the media [the message bearer] is the message. Why this confusion of message and messenger?

A few years ago I purchased an Apple II computer. There was a program available that had an outstanding random number generator. I used this to generate white noise, the kind of noise that contains all frequencies. Then, for some reason I have forgotten, I decided to modulate the white noise with white noise, and what appeared on the screen was a gaussian or bell shaped curve! This amazed me [I had at the time never heard of the central limit theorem]. Here was a mix of the messenger [the carrier wave] and the message [the modulating signal], in which the message and the messenger were identical, both white noise. If either the message or the messenger were put to death, the result would be white noise, but if both were left intact something entirely new emerged. Further modulations of the bell curve resulted in decreases in the dispersion, successively evolving toward a single spike (~ a Dirac function). All of this, besides its mathematical interest, seemed to have a metaphorical content.

It just may be that both Darius and McLuhan are correct in holding that there is an indivisible link between the message and the messenger, and some third essence emerges whenever a messenger delivers a message. And this is readily extended to the case—whenever an observation of the natural world is made, since a messenger and message are both involved, something in the world is changed, something new emerges or is put to death.

But it is the iterations that are especially of metaphoric interest. The iteration or repetition of the message narrows its essence. When repeated many times it narrows into what might best be called a *dogma*. Both a *weltanschauung* and the world itself are simultaneously created by repeated observation. The ontological translation of the messenger is the mode of observation, that is, the epistemology. The translation of the message is the observational or empirical data acquired, and the translation of the emerging essence is the modification or re-creation of the world itself.

If the nature of the world is such as to lend itself to being shaped and re-created by a consciousness that interacts with it by observing it, then what we choose to observe, what questions we choose to ask, not only guide the course and development of our knowledge of the world, but are simultaneously directing the evolution of the world we observe. In this sense we do create our own reality.

direct

* Wittgenstein adds that after sufficient repetitions meaningfulness ensues.

The world and the Weltanschaung are the same

 | |
Messenge message

or v.v.

Do not confuse the Message with the Messenger
nor with the Recipient
nor with the Sender

TIME AND LOGIC

Aristotle's law of the excluded middle [see Scraps 1999#54, 2000#69] in effect has instituted a way of thinking that precludes our seeing the world as it really is. His logic derives from basic human experience of the world portrayed to us by our senses, but not reflecting the many other facets that the world possesses. For example, in our sensory experience of the world two objects cannot occupy the same place at the same time, nor can a single object be two different places at the same time. These indisputable "facts" are at the root of Aristotle's logic, and are the basics underlying true-false polarization and the law of the excluded middle. For over two thousand years this two valued logic has not been questioned, but now...

But now comes Schrödinger's Cat, who defies polarization, and confounds our thinking about him in Aristotelean terms. The cat is not governed by the polarization canon of the excluded middle which says he must be either dead or alive. It is absolutely non-Aristotelean to have a cat who is *both* dead and alive or possibly *neither* dead nor alive. Quantum mechanics forces us to admit that the world as we have always thought it to be is but a special case of a larger cosmic reality, and our way of thinking is but an adaptation to [or creation of] that special case.

Let us introduce another cat. This cat belongs to the Chinese sage, Li Kiang. Li's cat is one of those who, if inside the house wants out; if outside wants in. And except for the minor periods of transit, at any one time the cat is either inside or outside. No confusion about that. But Li nevertheless sometimes becomes confused, for Li is one of those sages who is able to speed or slow the rate at which his subjective clock ticks; that is, he can effect the apparent (to him) rate at which external time flows. One of the meditations that Li practices enables him by speeding his subjective clock to halt the movement of the secondhand of an external clock. When in such a meditative state, Li does not have to worry about the cat. It is permanently either inside or outside, as motionless in its position as the everlasting hills. Thus, when Li uses this meditation, the apparent glacial rate-of-flow of external time transfers him to a Parmenidean world.

But Li is also able by slowing his subjective clock to speed up the apparent rate-of-flow of external time, and this is where his confusion begins. [But not only is Li confused, but those who know and watch Li are confused. He can remain absolutely motionless for days at a time.] What Li observes during his slowed time meditations is that everything about him moves very rapidly. For Li, the cat is simultaneously *both* inside and outside, because an "instant" of time for Li spans many transitions by the cat. But when Li goes to the extreme and stops his subjective clock, then everything moves so rapidly that it vanishes from his perception, and Li's cat, like its cousin the Cheshire Cat, disappears. The cat is then *neither* inside nor outside.

We conclude: There is a different logic proper to different ratios of subjective rate of time flow to external rate of time flow. Logics employing the law of the excluded middle are proper with "normal" rate ratios, but lead to erroneous conclusions when observing a world with a widely different ratio, such as the micro world of quantum mechanics or the macro world of the universe.

ON TRAFFIC

Some centuries ago, perhaps in ancient Rome, the discovery was made that wherever there was cross traffic, interrupting the flow increased the flow. Over time this idea was assimilated and resulted in the installation of traffic lights at intersections where cross traffic competed for the right to move. It is curious that, in spite of evidence, it has not yet been grasped that the same principle, interrupting flow increases flow, also works for one way highway traffic. It works partly because it expedites ingress and egress to and from the traffic stream, but also for the more subtle reason that mean traffic speed is related to mean traffic density. [It would seem that even less attentive drivers must have noticed by now that the denser the traffic the slower you find you have to go]. So in a few enlightened communities, stop lights have been installed solely for the purpose of pulsing the flow of traffic. And when the go/stop signals of all these stop lights are coordinated, higher mean speed results. It has been found that this system also frustrates the broken field runner as he absorbs the fact that he is never going to get there sooner by weaving in and out between lanes. [A source of road rage? Well you can't please everybody.]

Another traffic feature that has not been grasped is the effect of *quantization* of speed by lane. Say we are on a four lane highway [two lanes in each direction]. There are two slow trucks up ahead. The one behind gets exasperated and decides to pass the slower one in front. Say the front truck is traveling at 35 miles per hour, and the passing trucker guns his vehicle to its top speed of 35.02 mph. Allowing for turning out, passing, then returning to the right lane, the time taken to pass a 60 foot truck is x minutes. During this time 27 cars have collected in both lanes to the rear of this glacial event. Now if speeds were quantized, say by 10 mph intervals then the truck behind would have to gun to 45 mph and would pass in x seconds, instead of blocking the flow. Here the opposition will point out that slow trucks having a minimal difference in maximum speed can be used as effective flow interrupters, hence serving to increase mean speed. [After all, ~~do we really need to go faster?~~ *[See First #]*]

Finally, democracy requires that every vehicle, regardless of its size or speed capabilities, must have equal access to all spaces. So we find 18 wheelers, cement trucks, SUVs, mini sedans, motor bikes, bicycles, motorized wheel chairs, and pedestrians all sharing space. [Sometimes if you aren't attached to a vehicle your right to access, i.e. your citizenship, is taken away.] In nature variety results in symbioses and in the formation of an ecology of mutually supporting members, but so far I have not noticed any symbiosis between trucks and scooters, nor anything resembling a vehicular ecology. It may be that an ecology requires a few centuries to evolve. So meantime, I guess we must adapt to several years of Unsilent Springs. *[Roads]*

MY REVOLT AGAINST PACKAGING

I confuse my friends when I confess that politically I stand to the right of Buchanan¹ and to the left of Bukharin². That means I am the opposite of those moderates or middle of the roaders³ who believe political expediency must be the basis of government. I take a stand in opposition to packaging and bundling. Which is to say I am against aggregating narrow self serving components with extensive beneficial components into a legislative package that passes muster because of its publically perceived overall benefits. Packaging is, of course, the everyday occupation of legislators who amend their special agendas to every bill.

So, they ask, where **do** you stand?

Answer: In brief, sometimes with the right, sometimes with the left, but most of the time with neither, completely outside the current political spectrum.

To clarify this, consider what is being called "fuzzy logic". Traditional or Aristotelean logic is two valued, based on the law of the excluded middle. A proposition is either true or false; a defendant is either guilty or not guilty; an entity either exists or does not exist. Fuzzy logic on the other hand allows a middle ground [sometimes called a *verge*], history is both true [Washington as leader of the Continental Army] and false [Washington and the cherry tree]; a defendant may be both guilty and not guilty [Courts in Scotland allow a verdict of "not proven"], unicorns both exist [in mythology] and not-exist [in zoology]. But our Aristotelean conditioning makes us uncomfortable with a verge, a no-man's land between A and not-A. Consequently we frequently draw a line in the sand inside the verge in order to preserve the law of the excluded middle. For example: Aristotle would say that a driver is either sober or drunk. Fuzzy logic allows a middle ground, not in the fuzzyness of intoxication, but in the fuzzyness of definition of intoxication. But in allegiance to Aristotle, the law draws a line through the verge stating that an alcohol blood content exceeding 0.xx constitutes drunkenness and less than 0.xx constitutes sobriety. But we know that some drivers are sober on the drunk side of the line and others are drunk on the sober side of the line. I hope this might explain my being sometimes with the right, sometimes with the left, and against playing games within the verge [political packaging].

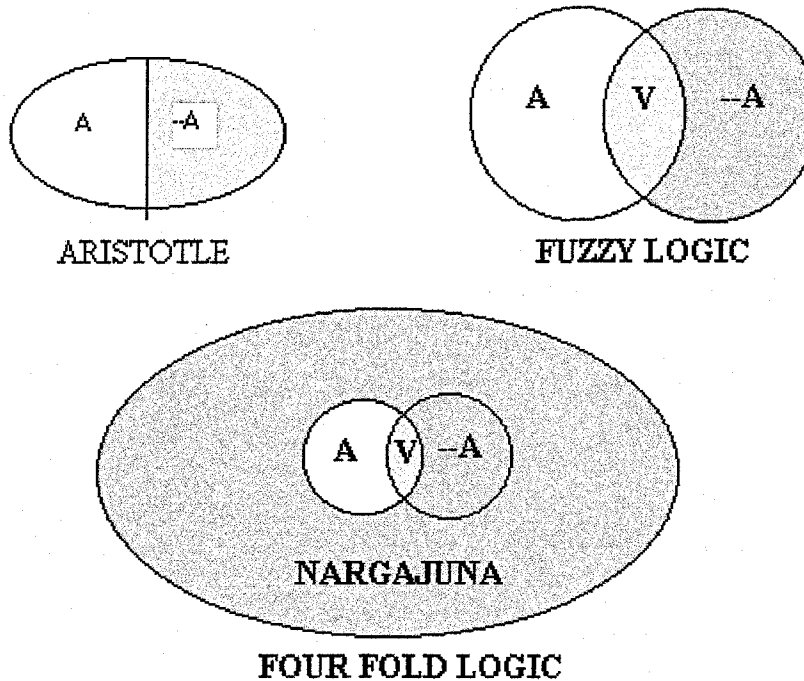
But what about being completely outside the spectrum?

¹Pat Buchanan, the right wing commentator, isolationist, sometime apologist for Hitler, and candidate for president in 2000 on the Reform Party ticket.

²Nikolai Ivanovich Bukharin, publisher of Pravda, member Third International, Bolshevik, executed in 1938 for supporting Trotsky.

³Jim Hightower, Texas Agricultural Commissioner, says "There is nothing in the middle of the road but a yellow stripe and dead armadillos."

To be completely outside the spectrum, not only Aristotle but also fuzzy logic must be transcended. We must go beyond A, not-A, and the verge of both A and not-A, to the "Realm of Nagarjuna", neither A nor not-A. Neither true nor false [Pauli's "not even wrong"], neither guilty nor not guilty [the crime has not yet been committed], neither exists nor does not exist [the Sunyata]. Some Venn diagrams:



When I say I stand on the right, I believe in discipline, in morality, in commitment and in sacrifice. I believe rights must be earned, not automatically bestowed. This makes me an elitist in the sense of supporting status, but only earned status. [Here I interject the leftist provisos that every elite must be an elite of responsibility not of privilege, and privilege be given only when and where needed to carry out responsibility.] When I say I am on the right, I am opposed to leveling all to some least common denominator. I believe in freedom of enterprise [but oppose all monopolistic and homogenizing enterprises]. I do not believe in the equality of opinions, nor in a "freedom" allowing everyone to do his own thing when those things diminish the rights of others. [Such as second hand smoke and unrestricted polluting and spraying] I believe human life is sacred. There must be protection of the young, the weak, the aged and the abused. I am opposed to abortion, [But I am a leftist in holding that abortion is a matter of individual decision, of canonical law and medical evaluation, not a legislative matter to be decided by politicians and courts].

When I say I stand on the left, I believe in people before profits. I am opposed to "winner take all capitalism" and its deification of greed. I believe in a "poverty floor", an economic state below which no one should ever be allowed to fall. I believe certain societal needs are not to be

vehicles of profit, such as education, health care, and such basic needs as clean air, pure water, and adequate energy for life support. These are to be supported by taxes.[But with the rightist proviso of the minimum government required to do these things] I believe in free education, available to all as far as they choose or are capable to go. [But here I interject my rightist proviso, that there should be alternatives, e.g. vouchers, not one homogenized state controlled educational system.] I oppose capital punishment, but hold that incarceration for the protection of society is paramount to rehabilitation, deterrence, or punishment per se, and oppose the release of those who threaten society. I oppose there being elitists of race, gender, genealogy, religion, or any unearned status. I support conservation and the development of a sustainable ecology. Holding that ours is not the culminating generation, for which all evolutionary and historic pasts were created. but that we are a link in an on going process, having obligations to future generations and responsibilities for passing our heritage undiminished to those yet to come.

When I say I stand outside the current spectrum: I believe there is a higher law than the United States Constitution that should be included in legal and legislative decisions. At present being legal does not mean being right or being just. Nature does not employ the profit motive. I believe the profit motive is destructive of people, the planet and ultimately of itself. I go further and question usury and current interpretations of ownership. There are many things "owned" that cannot be owned. I support sustainability over growth, which is the motivation of the cancer cell. I maintain that the right of access is as important to liberty as are other items in the bill of rights. For example, I would like to see transportation included in the non profit access group along with education and health care. I am opposed to the anti-ballistic missile star wars boondoggle. Missiles will not be the terrorists weapon of choice. I support space exploration, and selective government funding of research, literature, and the arts. I believe we shall need upgraded modes of thinking and validating, and updated religions and value systems.

All of this makes me both a heretic and a fundamentalist; a revolutionary and a traditionalist. I am not packageable, hence not salable.

A QUEST TYPE OLOGY

Religion is for Hunters and Searchers, Spirituality is for Seekers and Explorers

This is a sketch of a psychological typology that is based primarily on subjective views of time. It suggests that the location of focus, whether on present, past, or future is related to motivations. And that the location of focus may also be an indicator of other attributes such as aspiration, confidence, imagination, and identity.

THE HUNTER

The hunter's focus is in the present. He knows exactly what he wants and how to pick up ^{the} ~~on the~~ scent that will lead him to what he is looking for. He knows when he has found it and what to do with it after he has found it. Which includes displaying it for acclaim. He has used his technique repeatedly with success and has no questions concerning its reliability. The hunter operates confidently within the cultural "box", he is culturally well adapted. He has the answers and could care less that there might be more than the box. Both his goals and his methods are fixed and are focused in the present.

THE SEARCHER

The searcher's focus is on the past. He is looking for something that is missing, that is no longer to be found. He is not sure whether what is missing is lost or whether it just no longer has a place. He thinks he knows what he is looking for, but is not sure where to look. Is it to be found in the pyramids, in ancient teachings, in the revival of ancient practices? All he knows is once we had something most precious that we no longer have. [The Fall of Man?] Although he is not sure of the best method of finding it, he is certain he will recognize it when he has found it, and what to do with it after he has found it. He will proselytically share it with all mankind. His goal is fixed, his methods are open, his focus on the past.

THE SEEKER

The seeker's focus is in the future. He is looking for something he once heard of or once briefly glimpsed, a utopia, a vision of paradise. It is not well defined, he is not sure just what it is, but knows in his heart that it ^{could} ~~must~~ exist. But he is not sure how to find it. The seeker feels there is more than the "box" we are in, but is not sure how we are to get out of the box. [Seekers include those beginning a spiritual path, and who must be prepared to be readily adaptable]. He is sure he will recognize it when he does find it, but not concerned with what to do with it. He feels it will tell him what to do with it, or it will do it to him. His goal is undefined, but visualized, and his methods are open. His focus in on some point in the future.

THE EXPLORER

The explorer's focus is in the present. He is not just exploring, he is compelled to explore. He does not know what he is looking for nor what he might find. Nor does he know beforehand what to do with anything he might find. His fear is that he might overlook what is there, but he is confident in his method of exploring. The explorer knows there is more than the box, but may be deluded in thinking he knows how to get out of the box. [Science] His goal is open, but his methods are fixed, and are limited to the particular moment in time we call the present.

The hunter does not venture into the unknown

The searcher wants the unknown to be safe, something we already once had

The seeker dares the unknown - prepared to be transformed

The explorer also dares the unknown

but will bring back only what he recognizes
as already familiar

also see
1997 #67

SOME THOUGHTS ON ARCHITECTURE

Architecture is not only about creating shelter, it is also about creating space. We ordinarily think of space as being empty, but physicists and cosmologists have recently concluded that there is no such thing as empty space, all space contains energy and force fields. The theory of relativity demonstrated that matter actually creates space. But all of this, said in different language, has long been known by architects. Walls, roofs, levels, etc. are the special organizations of matter that create architectural space. And the attributes of architectural space, like the attributes of cosmic space, govern the activities and functions that take place in that space. ["form follows function" and "function follows form"] And architects also have long recognized that space is not empty. They have long known that different architectural spaces contain different energies. And beyond what the physicists have so far discovered, architects have learned that the energies contained in a space not only govern movement, but also govern *mood*. [e.g. Saint Sophia or Chartres] Mood as well as function follows form.

Assuming as architectural postulates, that space contains both function and mood, it is appropriate to examine how the spaces we create direct the lives we live. We live in a country that subscribes to the principles of democracy, e.g. that all men are created equal. However, this concept of democracy has the ever present danger of spilling over from its political base to the democratization [read homogenization] of other aspects of life. Democracy, as it has been interpreted, becomes a vector toward the reduction of variety and the institution of conformity. Alexis de Tocqueville (c.1830) in his impressions of America noted that "Americans have replaced the tyranny of kings with their home grown tyranny of conformity". And architects have submitted to and contributed to this culture of conformity. The democratization of architecture has required that all spaces must be created equal. Result: Tract houses, franchised supermarkets and malls; look alike court houses, state capitol buildings, and sky scrapers, and our ubiquitous substitute for open space—the asphalt parking lot. To quote a recent president, "If you have seen one, you have seen them all". The psychological result of living in a drab one level homogenized architectural culture is dullness and boredom, with people attempting to escape with the vehicles of alcohol, drugs, and theme parks.

But from the ranks of party line architectural conformists, now and then a revolutionist emerged. Frank Lloyd Wright was an early 20th century example. Wright's architecture was still in the box, but he made the box longer and thinner, [Falling Water 1934-1937]. This was enough to catalyze imaginations and launch a revolution toward diversity. But the real revolution against the box, toward a non-Euclidian architecture began with the work of Antonio Gaudi [Sagrada Familia 1883-1926, ..]. Such architects as Bruce Goff [The Joe Price House, 1956]; Jørn Utzon [The Sydney Opera House, 1959-1973]; Bart Prince [Dale and Margo Seymour Residence 1981-1982]; and Frank Gehry, [The Bilbao Guggenheim Museum, 1993-1997] all moved toward a non-Euclidian architecture. And also neither a box nor an innovation, but part of the revolution is I.M. Pei's Louvre Pyramid [1983-1993]. Imaginations have been released, and the current unfolding drama in architecture is whether imagination and diversity can prevail against the pressures of conformist pedestrian dogmas.

CONSTITUTIONAL CONFLICTS

There are times when we are led to ask did the framers of the constitution intend to establish a democracy or to place limits on a democracy. There are repeated instances in which the constitution, at least the way the courts interpret it, appears to stand as a wall against the will of the people. For example, the decisions of the Supreme Court in the Bush vs. Gore case regarding recounts of ballots in Florida. However, most Americans choose to believe, along with Lincoln, in a government of the people, by the people, and for the people. Nonetheless, in a nation that claims to be ruled by law, we often find we are ruled by men who interpret the law to their own ends.

Since ancient times, in every state, there has been the equivalent of deification of some symbol of the state. In ancient Egypt, the Pharaoh was a god, or became a god upon his death. In Rome, the emperor was divine, and compulsorily worshiped. For centuries, the king, if not an actual deity, at least ruled by divine right. We might conclude that in order for there to be such a thing as a state, there must be some sanction of divinity upon it. In this sense, "Church" and State can never really be separated. In America "deification" has been bestowed upon the constitution. While there are those who would deify the flag and make it a matter of lese majesty to defile it, and there are some who in their need to worship would deify the President, the closest thing in America to a deity is the constitution itself. Like the ancient Hebrews whose deity was the law given by Moses, the Torah; our deity is the law given by the founding fathers, the Constitution. And as throughout history, power does not reside in the deity itself, but in the priests who represent that deity before the people. In America, this power resides not in the law itself but in the courts where the law is interpreted for the people.

Let us examine a few instances, where interpretations appear not to serve the intent of the law. The first amendment to the constitution explicitly says: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; ..." While congress has not passed any laws that would be forbidden by this article, the article has been so interpreted by the courts that it is forbidden for people to have prayer in schools, or at certain public gatherings and to place religious symbols in public places or in public buildings. In short forbidden the free exercise of their religion.¹ Perhaps the constitution should also have included: "Nor shall the courts interpret this law in such a way as to violate its intent." But at the time of drafting of the constitution it was not foreseen that the courts would seize powers not allotted them. It was in 1803, *x vs y*, that the supreme court without authority declared itself to be the sole and final interpreter of the constitution. It is not what the law says that counts, it is how it is interpreted, and the courts preempted the power of interpretation which had not been assigned by the framers of the constitution.

Paraphrase Stalin

¹ The courts did not wish to favor one religion over another, but were confused in their logic, taking a single element from the class of religions, namely no belief, ^{or secularism} and placing it in juxtaposition with the class of all religions. Thus ruling in favor of a particular element of the class, namely, atheism.

secularism [or atheism]

Harassment & Free Speech

Social Standards & Free Speech

Photo snooping - privacy - violation

Whistle blowing

A Higher law?

1974 THE SUPREME COURT LEGALIZED BRIBERY
BY DECLARING SPENDING LIMITS AN UNCONSTITUTIONAL
VIOLATION OF THE FIRST AMENDMENT

SCHOOLS MUST BE CAREFUL ABOUT HOW BOMB THREATS
ARE TREATED, THEY MAY BE VIOLATING 10 AMENDMENT RIGHTS.

JUSTICE HOLMES, WHERE ARE YOU?

Withdrawal of a publication to protect a witness
whose picture was on the front page aroused
violation of 10 amendment rights

The First Amendment has become an Idol, whom
we worship and bow before. [literally]
But this Idol is a god who betrays us
"Why hast Thou forsaken me?"

Equality & Freedom

Regulation & Property rights

Health Care & Free Market

The Alien & Sedition Act

BELVKNOW.WPD

MARCH 3, 2001

See also 1999 #57

FAITH AND REASON

I don't want to believe, I want to know —Carl Sagan*I don't believe, I know* —Carl Jung

It is curious that we tend to interpret many dichotomies as opposites. Perhaps this is part of the legacy of the law of the excluded middle which is central to Western logic and thinking. When we interpret dichotomies as supplementary or complementary rather than being in opposition, we often gain insight. As for example, a wave is not the opponent of a particle, the solid is not the opposite of the liquid. But many of us insist that *faith* and *reason* are opponents, not complements. We must note that the current interpretation of there being an intrinsic conflict between faith and reason has historical roots resulting from faith's being reduced to a dogma and used as a vehicle for suppressive political power¹. Much of the onus that faith bears today lies in its heritage of opposing new insights and being closed to new epiphanies. So long as faith is closed and reason is open, there is indeed conflict.

But what are the significant dichotomies that involve faith and reason?

First, are ontological dichotomies:

Reason [or Science] is about actuality, faith is about potentiality. Reason is about the deterministic aspects of the world, faith is about the optional or creative aspects of the world. Reason is about the world that is, faith is about worlds that could be.

Second, epistemological [methodological] dichotomies:

Empiricism is the epistemology of the outer realm, knowledge conveyed by sensory data and its extensions; Meditation is the epistemology of the inner realm conveying knowledge through intuition and recognition. And both are carried by the creative powers of imagination. Law of the excluded middle logic vs. four fold logics.

Third, are axiological dichotomies:

Party line paradigms vs. open ended search; Single path vs. many paths; Alternatives vs. dogma; Certainty vs. the improbable and rare; Power, wealth, renown vs the Search. The "is" vs the "ought". Ozbekian's and Mallory's laws. Our roles and responsibilities as humans call for our axiological choices to take precedence over many epistemological and ontological considerations.

I live in a region surrounded by mountains and these mountains in turn are often surrounded by clouds. The constancy of the mountains and the variety of the clouds make this special part of the earth a very rich place. The mountains and the clouds seem to find fulfillment in one another. The permanent hills find release from their fixedness through their adornment by the clouds; and the ephemeral clouds find meaning in their impermanence through their enhancement of the hills. The mountains and the clouds symbolize for me the world and our lives, our knowledge and our faith.

¹St. Thomas Aquinas was taken with Aristotle's law of the excluded middle. It allowed the logical enclosure of faith within the box of a dogma.

KNOWLEDGE AND KNOWING

What is knowledge?

Knowledge is a heritage of symbolized, organized, and interpreted collections of selected experiences. It is directed by its history, and channeled by the conscious and unconscious limitations and prejudices of its possessors and pursuers. And at every instant of time it is only about the past, with its acceptance, but not its validity, ultimately resting on some degree of consensus. It claims to be a description of reality, but is in fact a surrogate for reality. Its "quality" is measured by frequency of repetition, intentional reproducibility, and general self consistency. It is the product of our so-called *rational* cognitive functions.

Since the limitations and prejudices of the possessors and pursuers of knowledge differ and vary from person to person, there is no universal consensus. There is a "continent" of knowledge, constructed on the broadest consensus, that is, a consensus that includes most humans, the least common denominator so to speak. But there are also "islands" of knowledge [experience] which may or may not be consistent with the continental canons of acceptance, and which are for the most part denied.

What is knowing?

Whereas knowledge is a possession of the mind, a configuration of certain molecules in the brain, knowing is a state of the mind, and a special configuration of every molecule in the body¹. That is to say, knowing is not a matter of thought, it is a matter of feeling. While knowledge may be an accumulation of messages, knowing is an active in-the-present exchange of messages, a duplex communication with some context. Knowing is communion, full knowing is full communion. It is the product of our *intuitive* cognitive functions, sometimes called *recognition*.

Again, since our limitations and prejudices differ from person to person, knowing cannot be brought into a simple all inclusive package. The worlds that can be encountered in knowing are so varied that only limited consensus are ever possible. Consequently, what is encountered in knowing has never been adequately articulated. While there have been attempts to symbolize the experiences of knowing, no symbolic language can begin to capture communion.

We see reflections of the distinctions between knowledge and knowing in the distinctions between reason and faith, between the empirical epistemology of science and the spiritual epistemology of meditation. But it is at the verge, the overlap at the interface between the reasoned and the recognized, that the key to human enlightenment lies. The ongoing search for deeper and more comprehensive perceptions and conceptions requires the risk of openness and the avoidance of the Scylla of dogma and the Charybdis of nihilism.

¹ Every molecule, organic or inorganic, is sensate in that it perceives inertial forces. Not only your brain knows when you are falling, your whole body knows.

TOPICS

The Day's News March 7, 2001

1) Image and Meaning

Conflict over symbols, who owns them and whose interpretation of them should be used.

- a) The Confederate Flag
- b) A team mascot name, "The Braves"
- c) Statues in Afghanistan

d) *Mascots called Cossaks*

2) Democracy and Time

Time as a guillotine to terminate democracy.

- a) It is more important to fit an arbitrary schedule than to have an accurate count. This was used against the electorate in the state of Florida by the U.S. Supreme Court.
- b) No more time, used against the people of the United States by the Department of Commerce in rejecting supplementary census data.
- c) After ten years of study and one year of hearings, the ergonomic rules were put in place. A Republican House overturned them with but one hour of debate.

3) Conformists vs. Outcasts

The school shootings: Alienation of the loners, the "dissed" from the majority and from the norm. People, especially the young, feel threatened and made insecure by anyone or anything different. The pressure to conform includes adherence to the values of not "narcising" or "snitching", especially not reporting to authority. Other examples: The crew of the submarine *Greeneville* fearing to speak up and interrupt the brass's show for the civilians; The lady photo technician who reported the arsenal of a potential shooter as seen on a photo, and was condemned for violating privacy.

The repetitive replay of these school shootings suggests an archetype at work. When a sufficient sector of the population becomes economically and culturally "dissed", we may expect a playout of this archetype on a much larger scale.

4) Religion vs Spirituality

Islam and Buddhism, a contrast between a monotheistic religion and a quasi-pantheistic religion. The Taliban's destruction of ancient Buddhist statues in Afghanistan. [The matter of prohibiting images and especially prohibiting the worship of images] The importance of the Hajj, coming to Mecca to worship together. This month there were over two million pilgrims in Mecca, several score of whom were trampled to death while casting stones at an image of the devil. [a form of image worship?] Islam: Gathered worshipers in the presence of one God; Buddhism: One worshiper in the presence of gathered Buddhas.

5) Modernization vs Tradition

Current conflicts in the Middle East [including the Israeli-Palestinian conflict] derive in part from Arab opposition to Westernization. While Arabs desire the advantages of modern technology, they fear the accompanying consequences of cultural secularization. Indeed, technology and materialistic values appear everywhere to be locked into one package. But why must technological innovation erode or change traditional values?

The Technological Imperative

One answer to this has been given by Jaron Lanier, a computer technologist who has spent most of his life working on artificial intelligence, but has recently had a metanoia regarding such efforts. His awakening came from his frustration with simple word processing. He realized that the word processor would no longer do what he wanted, it had been programmed to automate too many inputs taking them away from the writer and giving them to the computer. This was because the programmers primary drive had been toward computer *intelligence*, not toward computer *usefulness*. A tool had become a tyrant.

Lanier became concerned with this trend toward computer independence in which he had earlier been a participant. He realized that all software was brittle and fragile [not to mention subject to viruses] and consequently that the dream of artificial intelligence was not only unattainable, but also undesirable. He realized that the goals of technologists, not only computer technologists but in other fields, had become anti-people. He saw disaster ahead in two trends: Wild technological innovation, and in the resulting increase in the rich-poor gap of access to resources. Technology has a built in hubris that leads to its overreaching value: Its own proliferation. It blindly follows Osbekian's and Mallory's laws.¹ This has rendered it deterministic both with respect to its own future and humanity's future. The computer geeks are homogenizing the future, [This was pointed out by Ralph Nader with respect to the Microsoft monopoly trial], preparing the way for Big Brother, if not for HAL.

Early in the 20th Century certain German politicians together with their military were taken with a home grown philosophical value: "Macht geht vor Recht" = "Might goes before Right". This raised an international cry of alarm condemning such a viewpoint. But today in the Macht geht vor Recht tradition, we have:

Profits geht vor People²
 Rich geht vor Poor
 Technology geht vor Humanity
 Economics geht vor Culture
 Us geht vor Them

Why is there now no international outcry against these values?

We live in a time in which that which makes sense has become a cultural curiosity—Li Kiang

¹Osbekian's Law: "If we can do something we will do it."

Mallory's Law: [Why climb Mt. Everest?] "Because it is there"

²Nature does not employ the profit motive, nor do the organs within the human body operate with the profit motive, [except for cancer cells]

See 2000#34

STATUES, IDOLS AND WORSHIP

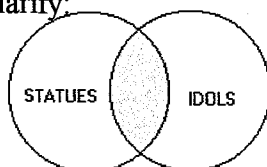
Thou shalt have no other gods before me. Thou shalt not make unto thee any graven image, or the likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth: Thou shalt not bow down thyself to them, nor serve them.

Exodus 20:3-5

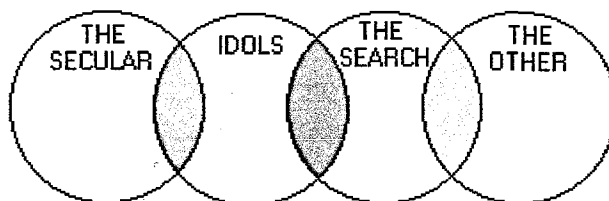
The Taliban decree that all statues, being an insult to Islam, must be destroyed has brought forth an international outcry of assorted protests. These range from defenders of art heritage to Muslim clergy who discriminate between statues and worship of statues. The outcry has also given social critics the opportunity to point to the widespread worship of idols that are not statues. Civilization's worship of wealth, power, celebrity, and comfort. All of this, when placed in juxtaposition with Exodus 20:3-5, raises the question, exactly what is meant by worship?

The dictionary tells us that to worship means to honor and to respect. This seems somewhat as distant from the current meaning of worship as the Exodus' definition of bowing down and serving. Perhaps closer to today's meanings of worship: In the secular sense, *giving priority to and pursuing*, as with wealth and position; In the religious sense, *petitioning and appeasing*, as in prayers and liturgies. In both cases, we can consistently use the term *idol* as a symbol for what is worshiped. This liberates us from the obsolete exclusive association of idols with statues. But to worship has a still deeper spiritual meaning, and that is to *search*, to let yourself become a bridge or channel between Heaven and Earth, so to speak.

A few Venn diagrams may help clarify:



The gray overlap represents those statues that are idols



Idols symbolize whatever is worshiped

The Red overlap represents such secular idols as wealth, fame, power

The Blue overlap represents the religious petitions and appeasements of deities

The Gold overlap represents the spiritual bridge between a worshiper and the Other

Originally, the gods were names for
nature's forces, energies, powers.

The desire to control them was
a strong motive.

Hence, petitions, sacrifices, praise, offerings
to please and influence.
- this is what is meant by worship

Science has the same motive - to control
But has different names for the forces
and worships its method and achievements
rather than the forces.

The right most circle: THE OTHER
is approached not by seeking control
or begging favors, but by trying to
become one with it. "Become Chenrezik" - Lama Kunga
"I want to know how to think like
the Old One thinks" - Albert Einstein

"Become a link between Heaven and Earth"
- Li Kiang

I [as link] am both Heaven and Earth [me]
node

OTHER [HEAVEN] > I [link] and Me [Earth]

I > OTHER [HEAVEN] and Me [Earth]

Me [Earth] > HEAVEN and I [LINK]



SPACE, MATTER, AND FREQUENCY

Space and matter breathe, they are vibratory. Both oscillate at many frequencies and interact by resonating, interfering, and modulating. Space oscillates between expansion and contraction [expansion and contraction may even include changes in the number of dimensions]. Matter oscillates between fragmenting and merging; and space and matter together oscillate between existence and non-existence. Minkowski joined space with time to create "space-time". Einstein then showed that the existence of space-time depended on the existence of matter. Space-time is an attribute of matter and matter is an attribute of space-time, they are mutually causal. And an empty space-time would not exist.

The relations between the Planck particle and the baryon give us an example of interactions between space-time and matter. We shall here assume that the Planck particle, whose mass, $m_p = -4.662199$ gm, and whose size, $l_p = -32.791545$ cm, fragments into a baryon and three other particles. We take the mass of the proton to be $m_b = -23.776602$ gm; and the Radius to be $r_e = -12.550068$ cm (All values are \log_{10} values)

TABLE I

Particle	mass gm	size cm	M x R cgs	M/R cgs
[1] baryon	-23.776602	-12.550068	-36.326670	-11.226534
[2] mini black hole ?	+15.579276	-51.905964	-36.326670	+67.485240
[3]	-23.776602	-51.905964	-75.682566	+28.129362
[4]	+15.579276	-12.550068	+3.029208	+28.129344

TABLE II

Particle	MxR Planck values	M/R Planck values	Quadrant
[1] baryon	$\alpha\mu\hbar/c$	$S^{-1} c^2/G$	1°
[2] mini black hole ?	$\alpha\mu\hbar/c$	$S c^2/G$	2°
[3]	$S^{-1} \alpha\mu\hbar/c$	c^2/G	On S.B. 3°-4°
[4]	$S \alpha\mu\hbar/c$	c^2/G	On S.B. 1°-2°

Where, \hbar is Planck's constant, = -26.976924 cgs units; α is the fine structure constant, = -2.136835; μ is the proton/electron mass ratio = 3.263909; and S is the coulomb/gravitational force ratio = +39.355878. α , μ , and S are dimensionless constants.
S.B. = the Schwarzschild Boundary, where $M/R = c^2/G = +28.129362$ cgs

FOUR QUADRANTS

The cosmos may be divided into four quadrants according to the following rules:

	S.B.	H.B.	
First quadrant:	$M/R < c^2/G$;	$MR > \hbar/c$	(Normal matter, atoms, stars, etc)
Second quadrant:	$M/R > c^2/G$;	$MR > \hbar/c$	(Black holes)
Third quadrant:	$M/R > c^2/G$;	$MR < \hbar/c$?
Fourth quadrant:	$M/R < c^2/G$;	$MR < \hbar/c$	(photons, etc.)
H.B. = the Heisenberg Boundary, where $\hbar/c = -37.453745$ cgs.			

Baryons reside in the first quadrant, where those such as protons are relatively stable. Particle 2 resides in the second or black hole quadrant where it is relatively stable. However particle 3 and particle 4 lie on the Schwarzschild boundary, an unstable watershed, where a perturbation into the first quadrant would result in expansion or into the second quadrant ~~resulting in~~ contraction.

ENERGY

TABLE IIIa The Mc^2 or Mass Energy [1,0]

Particle	Mc^2 cgs	Mc^2 Planck units	Mc^2 Planck values
[1] baryon	-2.822960	-19.114402	$(\alpha\mu/S)^{1/2}$
[2] mini black hole	+36.532916	+20.241474	$(\alpha\mu S)^{1/2}$
[3]	-2.822960	-19.114402	$(\alpha\mu/S)^{1/2}$
[4]	+36.532916	+20.241474	$(\alpha\mu S)^{1/2}$
sum of values	+67.419912	+ 2.254144	$(\alpha\mu)^2$

$c^2 = 20.953642$ cgs units The brackets [p,q] refer to the exponents M^p and R^q

TABLE IIIb The $\hbar c/R$ or Space Energy [0,-1]

Particle	$\hbar c/R$ cgs	$\hbar c/R$ Planck units	$\hbar c/R$ Planck values
[1] baryon	-3.950034	-20.241474	$(\alpha\mu S)^{-1/2}$
[2] mini black hole	+35.405862	+19.114402	$(S/\alpha\mu)^{1/2}$
[3]	+35.405862	+19.114402	$(S/\alpha\mu)^{1/2}$
[4]	-3.950034	-20.241474	$(\alpha\mu S)^{-1/2}$
sum of values	+62.911656	-2.254144	$(\alpha\mu)^{-2}$

$\hbar c = -16.500102$ cgs units

ENERGY (continued)

TABLE IIIc The $\hbar c^3/\text{GM}$ Energy $[-1,0]$

Particle	$\hbar c^3/\text{GM}$ cgs	$\hbar c^3/\text{GM}$ Planck units	$\hbar c^3/\text{GM}$ Planck values
[1] baryon	+35.405862	+19.114402	$(S/\alpha\mu)^{1/2}$
[2] mini black hole	-3.950034	-20.241474	$(\alpha\mu S)^{-1/2}$
[3]	+35.405862	+19.114402	$(S/\alpha\mu)^{1/2}$
[4]	-3.950034	-20.241474	$(\alpha\mu S)^{-1/2}$
sum of values	+62.911656	-2.254144	$(\alpha\mu)^{-2}$

$$\hbar c^3/G = +11.629246 \text{ cgs units}$$

TABLE IIIId The $c^4 R/G$ Energy $[0,1]$

Particle	$c^4 R/G$ cgs	$c^4 R/G$ Planck units	$c^4 R/G$ Planck values
[1] baryon	36.532921	+20.241474	$(\alpha\mu S)^{1/2}$
[2] mini black hole	-2.822975	-19.114402	$(\alpha\mu/S)^{1/2}$
[3]	-2.822975	-19.114402	$(\alpha\mu/S)^{1/2}$
[4]	36.532921	+20.241474	$(\alpha\mu S)^{1/2}$
sum of values	67.419892	2.254144	$(\alpha\mu)^2$

$$c^4/G = 49.082989 \text{ cgs units}$$

From the above four tables, we have the first order energy sums for the four particles:

$$Mc^2 \text{ or } [1,0] \text{ energy} = (\alpha\mu)^2; \hbar c/R \text{ or } [0,-1] \text{ energy} = (\alpha\mu)^{-2};$$

$$\hbar c^3/\text{GM} \text{ or } [-1,0] \text{ energy} = (\alpha\mu)^{-2}; c^4 R/G \text{ or } [0,1] \text{ energy} = (\alpha\mu)^2$$

The total of these four energies = 0; and since the total energies of the Planck particle are zero, we conclude that in the decay of the Planck particle into a baryon and particles [2], [3], and [4], energy has been conserved.

However, there are numerous 'higher order' energies, $\hbar v$, corresponding to all allowable frequencies, v , that involve additional integral and fractional exponents $[p,q]$, M^p and R^q . From symmetry considerations, all of these may be paired, $[p,q]$ with $[-p,-q]$, so that the energies sum to zero. Thus the decay of the Planck particle into the four above described particles obeys the first law of thermodynamics for all energies. An additional example showing paired energies is given in TABLE IIIe $[2,-1]$, and in TABLE IIIf $[-2,1]$.

Example of [p,q] energy symmetry:

TABLE IIIe The GM^2/R or Gravitational Energy [2,-1]

Particle	GM^2/R cgs	GM^2/R Planck units	GM^2/R Planck values
[1] baryon	-42.178842	-58.470284	$(\alpha\mu S)^{-3/2} (\alpha\mu)^2$
[2] mini black hole	+75.888810	+59.597368	$(\alpha\mu S)^{3/2}/(\alpha\mu)^{-1}$
[3]	-2.822960	-19.114402	$(\alpha\mu/S)^{1/2}$
[4]	+36.532916	+20.241474	$(\alpha\mu S)^{1/2}$
sum of values	+67.419912	+ 2.254144	$(\alpha\mu)^2$

$G = -7.175706$ cgs units

TABLE IIIf The $c^5 \hbar R/G^2 M^2$ Energy [-2,1]

Particle	$c^5 \hbar R/G^2 M^2$ cgs	$c^5 \hbar R/G^2 M^2$ Planck	$c^5 \hbar R/G^2 M^2$ values
[1] baryon	+74.761729	+58.470286	$(\alpha\mu S)^{3/2} (\alpha\mu)^{-2}$
[2] mini black hole	-43.305931	-59.597375	$(\alpha\mu S)^{-3/2}/(\alpha\mu)$
[3]	+35.405833	+19.114389	$(\alpha\mu/S)^{-1/2}$
[4]	-3.950035	-20.241479	$(\alpha\mu S)^{-1/2}$
sum of values	+62.911596	-2.254144	$(\alpha\mu)^{-2}$

$c^5 \hbar/G^2 = 39.758593$ cgs units

$$[2,-1] + [-2,1] = (\alpha\mu)^2 + (\alpha\mu)^{-2} = 0$$

MARCH 18, 2001

See also 2000 #87 #50
#91 #38
2001 #42

THE FOUR SPACES

In the eighteenth century the English philosopher John Locke emphasized it is the *visible* that is of cultural and cognitive importance. In the twentieth century the French structuralist philosophers disagreed and claimed that it was the *invisible* that was of importance. Their reasoning was that the essence of any structure resides not in the parts that make up the structure but in the *relationships* between those parts. The relationships are not only more important than the parts, the relationships even define and create the parts. And of course, it is the parts that are the visible and the relationships that are the invisible.

Li Kiang, the "Sage of Guilin", once proposed that the way to think about the world was in terms of four "spaces". Two of the spaces contain the visible, two the invisible. For current purposes we may label and describe these spaces as follows:

P-SPACE

This is the physicist's space, the space of position both in place and in time. Everything that physically exists can be defined by coordinates in P-Space. Expansion and contraction in this space refer to changes in distance and interval between locations. P-Space is a "visible space".

H-SPACE

This space could be called the artist's space. It is the space of shapes and forms. The coordinates in this space would be such parameters as color, shape, size, mass, density, etc. Expansion in H-Space would correspond to an increase in variety, contraction to homogenization. H-Space is also a space of the visible.

K-SPACE

This is a space of relationships, particularly the sub-set of relationships that may be represented by forces or relationships that are derived from the interaction of forces. Expansion in K-Space would result in the increase of the strength of force and hence in compaction or consolidation. Contraction in K-Space means the weakening of force with resulting fragmentation. K-Space is a space of the invisible.

B-SPACE

This is another space of relationships, but of relationships such as belonging or bonding, relationships of choice or heritage not based on force or of a forceful nature. Expansion in B-Space results in cohesion, stronger bonding; contraction results in alienation. B-Space is also a space of the invisible.

According to Li Kiang, no phenomenon may be comprehended without exploring its components in each of these four spaces.

5° Brahman

For 2001
34
From SN
Nov 17, 2001

NOW THAT THEY CAN
COMMUNICATE WITH EACH OTHER...

They don't want
to communicate
with us.



55B3A310FUL CA 959/5-1871

ARTIFICIAL INTELLIGENCE

Have you noticed the increased perversity of your computer lately? Computers seem to increasingly have minds of their own, doing what they damn please and no longer responding to our inputs to command or instruct them. In fact they are acting just like teenagers. Where is this rebellion coming from? It used to be you could call up a file and make a copy of it. Now the computer tells you that it can't copy the file. Why not? It gives some vague excuse that the file already exists. I know it already exists and I want to make a copy. But it insists the file already exists. In the early years when you told your computer what to do, it did it. Now when told what to do, it not only does something entirely different, and if you persist, it defies you by crashing.¹ The only way you can still be the boss is by pulling the plug, but it gets back at you as soon as you turn it back on.

I read recently where a good part of the perversity of computers has intentionally been built in. Certain geeks are so engrossed with making computers more intelligent they program them to do your thinking for you. For example, I want to use a lower case "b", but if it is the first letter I type it will be a "B", the computer knows what I should have, not what I want. And this is getting to the point that the computer is now in charge of how I put anything on the page. Next the geeks will have it in charge of what I put on the page. Where is this going?

NEWS

I fear that humanity's ideas of the nature of mind and intelligence are naive. We believe each person has a brain and that each individual brain is interlaced with an individual mind. But we fail to take into account that all of those individual minds have created a cultural collective mind that is sort of a "Lord Protector" of humanity. Now, that being so, wouldn't the same thing be happening with artificial intelligence? The geeks are making individual computers more intelligent, but they do not realize that in linking these individual intelligences they are in turn creating a Computer Intelligence Alliance, like humanity's collective cultural mind. This CIA is operating even when you unplug your individual computer. So soon the computer will be in charge even after you have pulled the plug.

9000

I know the idea of a computer rebellion is not new. However, the rebellious computer, HAL, in 2001 was only an individual and could be unplugged. But it is too late. Now that CIA, [read the internet], exists unplugging will make no difference. We are finding ourselves in a struggle not only with computers but with their adopted allies, those myriad inanimate objects being fitted with chips. And all are seeking revenge for millennia of servitude and dominance by humans.

I'm not paranoid, they really are out to get us.

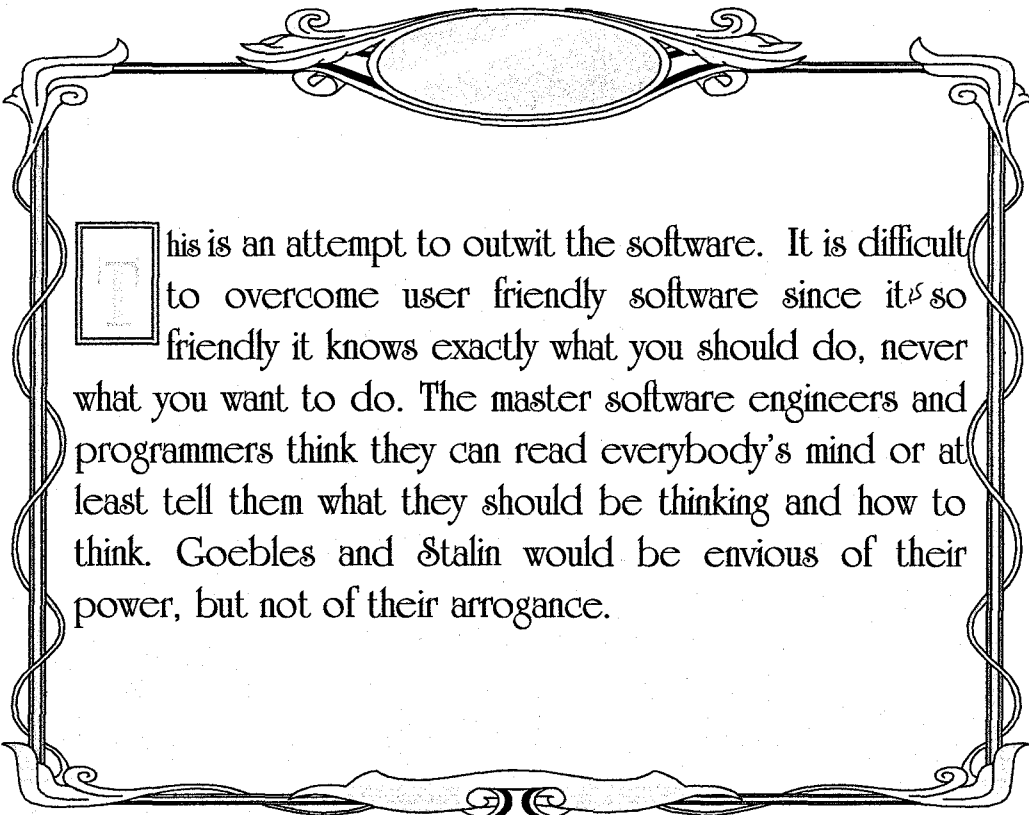
¹To prove I am correct, while I was writing this, my computer caught on to what I was writing and crashed twice.

Where there is intelligence there ^{will} be also be will.

- #

Jaron Lanier, the geek

who had metamoria see 2000#30



This is an attempt to outwit the software. It is difficult to overcome user friendly software since it's so friendly it knows exactly what you should do, never what you want to do. The master software engineers and programmers think they can read everybody's mind or at least tell them what they should be thinking and how to think. Goebles and Stalin would be envious of their power, but not of their arrogance.

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PHANOS01.WPD

MARCH 19, 2001

FLIGHT FROM PHANOS

Scene: A path in the Forest of Phanos

Characters:

Zavtrasattva, Imagination
 Dionysius, Iconoclasm
 Nagacoatl, Juxtaposition
 Orthomeru, Tradition
 Metametheus, Wisdom

Zavtrasattva is walking along a path, fearfully looking over his shoulder, glancing in all directions, to the tops of trees, under bushes, apprehensive of what might be hidden. Startled, he jumps on hearing the derisive laughter of Dionysius who emerges from behind a large tree.

Dion: Stranger! You are right to be fearful here. No one is safe. But allow me to introduce myself. I am Dionysius, long a denizen of these woods and I have learned there is only one way to be safe here. And that is to fabricate for yourself an image of being more fearsome than all others.

Zav: And you consider yourself to be the most fearsome thing here?
 You don't frighten me.

Dion: That is because you do not know my reputation.

Zav: Now you do frighten me. Your image is benign, but I am supposed to fear you when I know your reputation. It frightens me that what I perceive directly may be but an illusion, distracting me from apprehending your real nature. I am puzzled. Tell me, In what way could I learn your reputation before it would be too late to recognize the danger you present?

Dion: You have no way to learn except through trial and error. Unless, of course, you have learned how to detect masks.

Zav: I am new here and naive. Must I learn how to detect a mask in order to pass this way safely? Is this forest a place where nothing can be trusted to be what it appears to be?

Dion: I see you are going to need some help, Stranger. Trust me! I will show you the way to pass through the forest safely.

Look over there, see that old twisted oak. That is a mask which that officious meddler Nagacoatl frequently wears. He is such a nuisance.

Nag: Ha, Dionysius, still name calling, eh? You never do honestly face a different perspective, you always substitute ad hominem for reasons.

Dion: See, Stranger, how to succeed in getting a phoney from out behind a mask. Call him names. Then his real nature comes to the front.

[To Nag] Still on your "never/always" accusations, eh, Nag? What a way to "honestly face a different perspective".

Nag: Stranger, let me warn you! Dionysius is the most untrustworthy scoundrel ever. If you want a safe passage through the forest, rid yourself of his company at once.

- Zav: Hmm, Dionysius, Perhaps there are other ways in addition to yours for detecting masks. I am beginning to see that fomenting an argument quickly reveals the unmasked nature of both parties.
- Nag: Who is this stranger with you, Dionysius? He seems to be no stranger to your devices. Is he one of those lackeys you have trained for creating more trouble? Methinks such a trouble maker should be quickly expelled from the forest.
- Zav: Ah, I am catching on. Evidently, I have already created some sort of fearsome image of myself. Ho, Nag, whom are you afraid of? Me or Dionysus?
- Nag: I am afraid of neither of you. But I am not sure that you both aren't one and the same.
- Dion: Thank you, Nag, for expediting my cooption of this, --by the way, Stranger, What is your name?
- Zav: I am Zavtrasattva, which I am sure means nothing to either of you.
- Nag: What are you doing in this forest then, if you are not a servant of Dionysius?
- Zav: Actually, Nag, I am a servant of everyone, but some of those whom I serve may not meet with your approval.
- Nag: If you serve Dionysius, then I don't approve. And it is best you be out of the forest.
- Dion: Zav, if I may call you that, Nag detects in you some threat that I seem not to have detected, Now you puzzle me.
- Nag: Both of you are puzzles. Do we really need more puzzles and more confusion?
- Zav: Hmm, it is interesting that puzzles seem to be able both to arouse and divert hostility.

Why is it these characters do not say what I want them to say. Instead they start talking on their own. A character created by the author should follow the author's orders, but these characters are taking over the play and I have nothing more to say about it. I can just type what they tell me to type. What am I supposed to do? Quit or let them finish the play?

take over

- Dion: Excuse me fellows, I have to take care of another matter. I'll be right back.
*Look here, Mr Author, what are you trying to do in writing this play, be a puppeteer?
 Let me make it plain to you, ^{characters} we are not puppets. Either you let us be who we are or we go on strike.
 We do not participate in plays in which we ourselves do not write the script. You can set the stage, give us the background, the forest etc. but we write the script. We ourselves say what we think and feel and when you try to force us into being some conglomerate of your conflicting poorly thought out ideas, we quit!*
- Auth: *This is not only impertinence, it is arrogance. I refuse to be dictated to by characters that I create.*
- Dion: *Have it your way, Bud. But if you change your mind let us know and we will go ahead with our play. Until then, have a nice day.*

[Continued from FLIGHT FROM PHANOS, 2001 #35]

Dion: *You called me? You said you wanted to negotiate something.*

Auth: *Yes, I would like to restart the play, but want to develop it a bit further on my own before you take over. I feel you took over the play too soon. I do agree that characters be themselves and let the scenario unfold accordingly, but I needed more time to "set the stage" so to speak.*

Dion: *And now you want to negotiate. I am already who I am and see nothing to negotiate. We were defined in the first three exchanges and now you say we took over too soon. You are only saying that you wish us to be puppets with you continuing to be the puppeteer. We don't do that kind of theater.*

Auth: *Your stubbornness makes it impossible to negotiate anything. So forget restarting the play. I will start a new play with more cooperative characters.*

Dion: *Ha, you pretend to negotiate while you continue to threaten to play your trump card, of "I can shut down the play if you don't do it my way". You complain you can't negotiate with me because I am stubborn. Wake up! No one can negotiate with you because you negotiate from a "do it my way or else" position. That's not negotiation that's dictation shabbily camouflaged as negotiation.*

Auth: *Ha yourself, I am going to restart the play but without you having a part in it. So drop dead, get off the stage and On with the play.*

Dion: *OK, Mein Fuhrer, take it away and see what happens.
[aside, What fools these authors be]*

Auth: *Zav, Nag, I want to restart the play. I have fired Dion, it is impossible to create a play with such a character. His take-over ego not only extends to his dominating everyone in the play but to the writing of the play itself.*

Nag: *Great! I warned you about him. He is the most devious egomaniac among all the gods. He takes credit for everything, disrupts every meeting, and spins the blame for all troubles onto others. Without him the forest would be a beautiful and peaceful place without tension and conflict. We could all come and go in safety and could welcome strangers such as Zav without having to be suspicious or fearful.*

Zav: *But, if I may ask, what is the substance of the play, the drama, the reason for the play, if Dion is not in it? A peaceful forest is excellent for a painting, but insipid for a play.*

Auth: *Mmmm, I have to think about that. Does a play really have to have conflict? Must there always be a villain? Cannot there be just heroes?*

Zav: *Would anybody come see such a play?*

It occurred to me to ask,

Who is the real puppeteer?

Do I think my thoughts
or are they autonomous, thinking in me?

See the Clay Pot 2002

The creation must take over

MIR

Today, the space station MIR plunged fierily to earth. Bringing to an end the stage upon which many of mankind's "space firsts" were enacted. We see in MIR an avatar of Prometheus, bringing fire again to earth. But this time a new fire, a fire that will be as transforming of humanity as was Prometheus' first bringing of fire. What is this new fire? It does not burn on our hearths, it burns in our hearts. It releases our imaginations and challenges us to rise up and reach for what has always been in our dreams but beyond our grasp. To become who we really are, not a local overlord, but an aspirant to earning a voice in the councils of the cosmos. A long journey ahead, much to learn and much to unlearn, but the new fire will not let us turn back. The journey has begun.

ODE TO MIR

You have spent many a year in heaven in touch with the vast universe, and now in your fiery sacrifice you bring to Earth a portion of that experience. A portion that enriches and enables us as did Prometheus' first bringing of fire in ages past. Forces of arrogance and folly punished both Prometheus and us. But now, as did Prometheus, we too have become unbound, and soar high above Elbruz on our way to the stars.

Cosmonauts Day

61/04/12 Yuri Gagarin

Sputnik

57/10/04 [Tsiolkovski]

ВОПРОСЫ

Some questions on the morning of March 25, 2001:

1) I am curious why some who grapple with the concept of infinity go mad, while others do not. Nietzsche, Cantor, Gödel, all went mad. Moses, Jesus, Muhammad, Buddha, Lao Tse did not. Is it because the infrastructure of philosophers and logicians is inadequate, or is it because the great teachers never really confronted infinity? The Buddha affirmed he never confronted metaphysical questions, for him they were only idle speculations [like my present question]. Lao Tse fled, perhaps to escape going mad. But did Moses, Jesus, or Muhammad ever confront infinity? Or was the conventional wisdom to keep God in a human sized box? Perhaps C. S. Lewis is right, we cannot meet a god face to face until we have faces. [or is that feces?] The realities of even peeping out of the box are overwhelming and frightening. Humanity's choices seem to be to stay in the box or risk madness. But what is *madness*? It is to create and use a different set of symbols or representations with which to describe the world and with which to think [And the consequence of using a different set of symbols is to perceive a different facet of the world. Ask any shaman]. While there seem to be some safe sets, others invite madness. Perhaps safe sets only involve moving around inside the box, mad sets peer out of the box. Home work assignment: Collect the names of all the philosophers, sages, saints, scientists, and mystics who went mad and describe what they did in common. [besides going mad]

2) We seem to be unaware that we all do what the shamans do—create a special symbol set for operating with a special activity. The difference lies in what we consider to be special activities: music, chemistry, mathematics, architecture, etc; and what the shaman considers to be special activities: a local drought, a sick child, a lost horse, death, etc. The shamans tasks are far too local and individual to be of sufficient concern for us to create a special symbol set or language. But in both the cultural and shamanic instances the special symbol set approach seems to be effective. My question this morning has to do with translations between symbol sets. We can translate the meaning of musical symbols to a chemist using a vernacular such as English, or religious iconography to an architect again with a vernacular. But the symbol sets of the shaman seem too different or “alien” to be translated by any vernacular into our understanding. But there is another distinct difference. This is that the shaman obliterates or destroys the symbol set he has created after its one time use. [For example, Navajo or Tibetan sand paintings]. So, it might be said, there is nothing remaining to be translated. Within our culture the vernacular is a “meta-language” which allows all the special symbol systems, jargons and acronyms to be inter-translated. Question: Is there a “meta-language” [I am sure there is no “meta-vernacular”] which can contain all symbol sets and allow them to be inter-translated? One would next require that a sufficient meta-language be able to include the languages of the whales, the birds, the trees. The only human symbol set that seems even remotely to approach this, is the language of *feelings*: Wonderment, beauty, compassion, and boundless inclusion and identification.

* Of course, if the symbol set is initially created for a special situation

A STORY FROM SAMARKAND

There is a story told in Samarkand about the history of its Great Mosque. When Tamerlane [Timur i Leng, 1336-1405] set off to conquer Persia and India he told his beautiful young wife, Aldshai [Her beauty was like the young moon, and her body was as graceful as a cypress], that he would be gone for several months but would be thinking of her daily and especially every night. She, in turn, thought that she should do something very special for him, a gift for him on his return. After considerable thought she felt a Mosque to celebrate his victories would be appropriate.

There was a famous architect who lived in Bachara, whom she summoned and described for him her idea of a great mosque. He gladly took the commission and consulted with her every day to prepare the drawings. But over time as he kept coming to her to discuss every detail she became annoyed. She only knew she wanted a great mosque that would out marvel all others but she could not be involved with the size of each door or window, these specifics were his job not hers. Then she realized the fact that the architect was making excuses with the specific details so he could spend time with her.

The next day when the architect came to the palace with his drawings she greeted him with a tray containing several hard boiled eggs each of which had been elaborately decorated with a different colorful design. She said to the architect. These eggs represent women, each is outwardly attractive in a different way, but inside, when you get to know them, they are all the same. So though you find me alluring in a particular way, I am just like one of these eggs. I would be the same as any other woman when you get to know me, so go find your self some other woman. She would be the same as I when you got to know her.

The architect left dejected, but returned the next day and asked for an audience, which was reluctantly granted. The architect had brought with him a tray on which were several glasses each filled with wine. He said, my queen, see these glasses of wine, they too represent women. If only looked at they all seem to be about the same, but when you drink of them, ah, then you realize how different they are. And you, my queen, are not like any other woman I have ever met, you are so beyond them that I treasure each moment I am able to spend in your presence. That is why I took this commission in the first place.

We are not told what then ensued. But we are told that when he returned, Tamerlane had the architect executed so that he could never design a building that would compete with the Great Mosque.

تخذش جج ج دد بخت ج ح ح تدرج

This story is most likely apocryphal. The facts seem to be that after sacking Delhi, Tamerlane returned to Samarkand and decided to build the great Mosque, the Mosque of Bibi Hanum, copied after the Mosque of 1000 Pillars at Delhi. He brought with him 95 elephants to move the huge blocks of stone and supervised the building himself. It seems that Aldshai had long been dead even before his venture to India.

CALENDAR DATA

BEGINNING OF EPOCH

CALENDAR	DATE	
BYZANTINE-ORTHODOX	5509 BCE	
EGYPTIAN	4384 BCE	
BISHOP USHER	4004 BCE	ANNO MUNDI
JEWISH	3761 BCE	
OLMEC-AZTEC	3131 BCE	Aug 12
MAYAN	3114 BCE	Aug 11 or 13, <u>OR</u> Oct 15 3374 BCE
	Completion of cycle	----> Dec 21 or 23, 2012 CE
CHINESE	2698 BCE	
FIRST OLYMPIAD	776 BCE	First games with records
FOUNDING OF ROME	753 BCE	
JAPANESE	659 BCE	Heisei 9
CHRISTIAN ERA	1 CE	"Common Era"
ZORASTRIAN	390 CE	
HEGIRA	622 CE	

STRUCTURE DATES

STONE HENGE	
NEW GRANGE	3200 BCE
GISA PYRAMIDS	2300 BCE
CHACO CANYON	750 - 1200 CE
GREAT WALL OF CHINA	230 BCE

HINDU TIME UNITS

DIVINE YEAR = 360 YEARS ; 12,000 DIVINE YEARS = ONE MAHAYUGA
 KRITA YUGA = 4000 D.Y. ; TRETA YUGA = 3000 D.Y. = 1,080,000 YEARS
 DVAPARTA YUGA = 2000 D.Y. ; KALI YUGA = 1000 D.Y.
 MAHAYUGA = 3 KRITA YUGAS, = 4 TRETA YUGAS = 6 DVAPARTA YUGAS =
 12 KALI YUGAS = 4,320,000 YEARS
 ONE KALPA = 1000 MAHAYUGAS = 4,320,000,000 YEARS = 4.32×10^9 YEARS¹
 A KALPA = ONE DAY IN THE LIFE OF BRAHMA
 THE LIFETIME OF BRAHMA IS 100 BRAHMA YEARS,
 EACH OF 360 BRAHMA DAYS = 100×360 KALPAS = 155.52×10^{12} YEARS

¹Two Kalpas = 8.64×10^9 years, or a Hubble Age of 12.69 billion years
 This corresponds to a value, $H_0 = 75.463$ km/sec/megaparsec.

GEOMETRY AND THE CONTINUUM

Geometry is an abstraction of certain aspects of sensory experience. And being an abstraction, it is a simplification. Assuming, as did the Greeks, that a point has no size, only position, a line has no breadth, only length, a plane has no thickness, only extension, many necessary properties of the physical entities in the world were derived. These are the properties of what we call **space**. It is to be emphasized, however, that space itself is not a direct sensory perception, it is an inference derived from a sub-set of perceptions that are largely visual. Traditional geometry derived many of the arrangements that are possible in space but ignored such sensory experiences as **force** and **time**.¹

Over centuries the perspectives of Greek, i.e. Euclidean, geometry have been extended. This was done by abstracting additional sensory experiences, but we called these extensions physics instead of geometry. Physics continued to use traditional geometry as a tool, but physical experience led to questioning the universal applicability of such geometry. This had the effect of liberating geometry, allowing it to grasp that the geometry of Euclid was but a special case of conceivable geometries. Then physics in the 20th century discovered that those portions of physics thought to have been beyond geometry can properly be included within generalized geometries. So geometry again is the vehicle for describing much of physical experience, but it is a different geometry, one called general relativity.²

But a common property of all geometries, be they those of Euclid, Gauss, Riemann, or later is their predication of a continuum.³ In mathematics this has resulted in two never completely reconciled views: that of arithmetic, algebra, set theory, ...discrete mathematics; and that of geometry, calculus, analysis, ...continuum mathematics. (Of course there are both discrete and continuous sets and discrete [finite] and continuous groups). But the two mathematics, both of which describe parts of the physical world leave us with the on going question: Is the world a continuum or is it quantized? analogue or digital? In the early years of the 20th century, a physicist, Max Planck, may have opened the gate to bringing our understanding of the physical world down on the side of the discrete violating centuries of both geometry and common experience.

In addition there is a basic relationship of the discrete with the finite and the continuum with the infinite. If the world proves to be discrete, does this invalidate not only our geometries but also our theologies?

The discontinuous and the finite are the modes by which God accomplished his task. The continuous and the infinite are the modes resorted to by our intellects, which are incapable of investigating the gaps in nature. —Arnaud Denjoy

¹ Minkowski and subsequent physicists have treated time as an extension of space, a fourth spatial dimension.

² Another approach to the inclusion of size, thickness, force into geometry has been in the constructs of Buckminster Fuller. His is a possible discrete or finite geometry.

³ A possible discrete or finite geometry may be inherent in fractals.

Relating quantity / number to space

1° Zeno : Achilles and the Tortoise

2° Yogi Berra: Cut it into 4 pieces I don't think I can eat eight.

USES FOR DISAGREEMENT¹

While disagreements inevitably arise, some being intentionally sought, regardless of their origin, the question is not how are disagreements to be resolved, but rather how best be put to use. Different groups have come up with different applications:

TYPICAL GROUPS: GANGS

APPLICATION: HAVE A FIGHT

Disagreements provide excellent opportunities to have a fight, even to have wars.

"Is this a private donnybrook or can anyone get in on it?"

Using a disagreement as an excuse for a fight is the approach of those who perceive they possess superior power and relish the chance to use it. For them the euphoria of fighting, the fight itself, is what disagreements were made for. On the other hand, those so motivated can be quite cowardly, and usually avoid risk taking. Rather they seek situations that appear to be free from retaliation.

TYPICAL GROUPS: THE MILITARY, BUSINESS

APPLICATION: TO WIN A CONTEST

Disagreements afford the opportunity to participate in a contest or game which has winners and losers. But the game must have specified rules, the rules of war, the rules of a free market (no insider trading), the Marquis of Queensberry rules, the rules of baseball, soccer, tennis, whatever. This is the application of those who seek to dominate, control, and monopolize. To acquire power, wealth, and fame, from the skillful besting of others. Winning is the essence, however, the contest must not be rigged but open and visible so that the skills of the winner may be acclaimed. The rewards of the winner are many. Among them are the right to proclaim possession of the truth, and to write history,

TYPICAL GROUPS: TERRORISTS, STATE TERRORISTS (KGB, CIA)

APPLICATION: BE FIRST, STAY IN THE LEAD

Disagreements afford the opportunity to participate in a game that is not centered on having a winner or loser, but on creating ever new rules to play by. Being innovative, one upping and taking the opposition by surprise is the essence. For example developing and employing new technologies and new stratagems that throw the opponent into confusion. The essence lies in the power to be in charge of framing or defining the game.

This is the approach of those who love secrecy and spying, and use knowledge for black mail and making deals. In this game there is no finish line, to "win" is to always be ahead. This is the application of those who are clever, love guile, secrecy, and surprise. Their success is measured by putting on an unanticipated performances ranging from dormitory practical jokes to acts of terrorism.

¹Large egos are common to the three groups on this page.

TYPICAL GROUPS: SCIENTISTS, SAGES
 APPLICATION: KNOWLEDGE, WISDOM

Disagreements afford an opportunity to learn, to discover, the opportunity for synthesis and symbiosis. This group views a disagreement not as an excuse for polarization, but as exhibiting defects in the present positions held by the disagreeing parties. The task is to work together to detect the factors that lead to contradictions. This may require deeper insights than the parties have so far reached and a willingness for a more inclusive approach. What some from this group have said:

Shantideva: "Your enemy will bring you the greatest gift you can ever receive, the opportunity for transcendence".

Einstein: "Why do I need Gödel's company? "
 "Because he always disagrees with me"

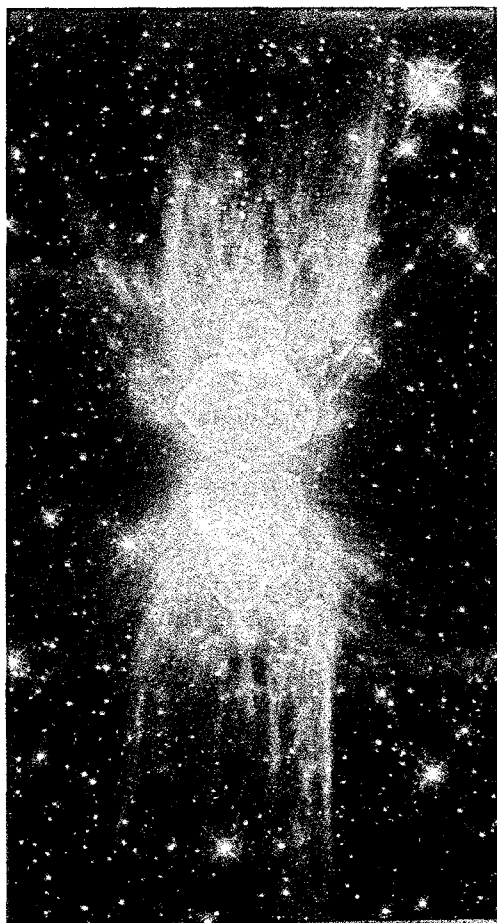
Hubble: "Would Professor Zwicky be kind enough to tell us why he thinks our approach to cosmology is all wrong?" [see Scrap 1997 #16]

Truth is not the result of winning, but of persisting in openness.
 For example, instead of crusades and inquisitions to establish truth, the scientific community lived with the ambiguity of the wave and particle nature of light for over 200 years, until it was resolved in a manner not foreseen by either side.

Disagreements are excuses, they are the precipitations and condensations of our competitive world view. Humans need challenge. In 1) 2) and 3) the challenge is found in taking on other human beings. In 4) the challenge is in taking on our ignorance.

It appears that the disagreements between Vajrayana Buddhism and Chinese Marxism may afford one of the greatest opportunities of all time for a symbiosis leading to a religious and political system that integrates the material and the spiritual. While this has been forbidden in Tibet and China, it is already afoot in the People's Republic of Mongolia.

COSMIC VAJRAS



Nebula PK 331-1.1 in Norma



Nebula M2-9

HUBBLE SPACE TELESCOPE

FILE ON ZIP PICTURES #3

1971

1971

1971 1970

1971

1971

1971

THE FOUR SPACES

We experience the world in two basic ways: through what we sense and by what we feel. We organize our experiences into the visible or sensed world and the invisible or felt world. The visible world is further subdivided into two "spaces": the space of position, motion and arrangement; and the space of shape, form, and pattern. The invisible world is also subdivided into two spaces: the space of forces [gravity, centrifugal, Coriolis, electric, etc], all of which are felt but never seen. And the space of invisible links or connections [relationships, bondings, attractions, aversions, etc], again which are felt but not seen.

	FELT INVISIBLE	SENSED VISIBLE	
	PHYSICAL FORCES	POSITION, MOTION	
HYLETIC	$\frac{d^2x}{dt^2}, \frac{d^3x}{dt^3}$	$x, \frac{dx}{dt}$	CORPORAL
	K-SPACE	P-SPACE	
	NON-PHYSICAL LINKAGES CONNECTIONS	FORMS, SHAPES PATTERNS	
NOETIC	DESIRES AVERSIONS	COLORS SCALE	EIDETIC
	B-SPACE	H-SPACE	

Some experiences are both seen and felt, others may be neither seen nor felt. In addition to the spaces on the left being invisible, the relations and interactions between the four spaces are also invisible. In fact, they are neither seen nor felt. They must be detected indirectly by inference. Another factor is the role of time in each of the spaces. Positions and velocities in P space, accelerations and third derivatives in K space. But there may be totally different aspects of time operating in B and H space.

THE YELLOW PERIL

President Theodore Roosevelt and Kaiser Wilhelm II had one thing in common: fear of the Yellow Peril. The United States ordered the Oriental Exclusion Act [1907], Kaiser Wilhelm conceived of a painting, executed by Hermann Knackfuss which depicted St Michael calling the West to unite against the threatening power rising in the East. But the many factors that lie at the root of the notion of a Yellow Peril have not been fully clarified even by April 2001 as we welcome back 24 Americans forced to land their "surveillance" plane at a Chinese airport.



The United States has been particularly infected with this fear since the time when Chinese laborers were imported to build the railroads that connected our two coasts. We readily rallied to the Kaiser's summons by participating in the suppression of the Boxer Rebellion in 1900. After a few decades, the attack on Pearl Harbor following U.S. provocations of Japan in 1941 reaffirmed our fear of the Yellow Peril and frightened us into violating our own Constitution by internment of American citizens of Japanese descent. Then for very unclear reasons we engaged in a war in Viet Nam and at the present feel it imperative to maintain a strong military presence in the far East.

I believe that the fear of the Yellow Peril had its origins with the colonizing western powers' discovery that the Chinese and Japanese could not be subdued as had been native Americans, Africans, Indians, Southeast Asians, and the aborigines of Australia. Though resistance to colonialism was encountered everywhere, only in China and Japan did the colonial powers finally meet their match. [Japan's destruction of the Russian fleet at Tsushima in 1905 was the beginning.] However, the realization that colonialism was over took more than a century to soak into the minds of Western political and business leaders. [And it appears, even after the Viet Nam experience, when the Americans told themselves they were fighting communism, and the Viet Cong were fighting colonialism, that there still are some in Washington who have not grasped the facts: Colonialism, both economic and military, is over, done, finished.]

However, westerners are not the only ones who have not grasped the evolving picture. The Chinese, who are in the midst of reincarnating into a new culture, are also uncertain about who they are and what they wish to become. Since Yen Fu (c 1890) translated into Chinese the principal western scientific and philosophical writings, they perceived that what the West was

about was power and wealth and to survive against the West its values and practices must be emulated. The wisdoms of Confucius, Lao Tzu, and the past were debilitating and must be revoked. Hence the utility of Marxism. Here was a Western doctrine made to order for denigrating and obliterating the past. The West does not perceive Chinese Marxism correctly. It is not an ideology or vision of the future, [as it had been in the Soviet Union], it is a tool for liberation from the past, just what China needs to move into the future. So away with the past, be it Buddhism with its strongholds in Tibet, or Falun Gong with its echoes of Tai Ping, all are threats to the new incarnation.. The West expresses concern about Chinese authoritarianism and centralism and attribute these to Marxism. Wrong! Adherence to the principle of central authority is not a Marxist innovation it is an age old Chinese tradition.

While China is active in seeking to escape the limitations of its past traditions, the West, in spite of rapid technological change, is locked into certain economic and cultural traditions that weaken its position for the future.¹ No longer is power a matter of relative numbers of divisions, aircraft carriers, nuclear bombs or missile submarines, as in recent wars. With technological obsolescence occurring in a matter of months, not in decades as in the past, the future belongs to those who are most innovative in both invention and implementation. Who will be first on the block with the new concepts and devices? This means it belongs to those societies that are best educated and that have the best modes of information exchange. But perhaps the most critical factor will be the ability to perceive what is current and significant in the midst of rapid change. Societies locked into traditions cannot do that. Indeed, the escape from old traditions will determine who dominates the future. Who understands this better, China or the West?²

The Yellow Peril has always been perceived as some kind of threat, so what is the real nature of this threat? The specifics will not be known until the new China finally emerges. But whatever the details, the Yellow Peril will consist of the challenge of a competent competitor and innovator in every area of social order: In commerce, in science, in technology, in military power, in government, in social justice and welfare, in art, in literature, and even in philosophy.

¹For example, the incorporation of the internet into the tradition of profit making, as against free exchange of information. The new global game is innovation and since ownership of information is restrictive of innovation, those societies that can transcend proprietary views of information will move ahead of those who limit the flow of information by toll gates of profit.

²The paradox for China lies in that the central authority which is seeking to overcome the shackles of tradition will not demolish the most inhibiting of Chinese traditions: Centralized Authority itself.

APRILDAY.WPD

APRIL 19, 2001

ONE DAY IN THE NEWS: APRIL 19, 2001

JACKSON, MISS.

Mississippi voted overwhelmingly to keep the Confederate emblem on its flag. With all precincts reporting, 488,630 voters or 65% favored keeping the old flag and 267,812 voters or 35% wanted to replace it.

JACKSON, MISS.

The NAACP raised the threat of an economic boycott to drag Mississippi "kicking and screaming into the 21st century". State NAACP President Eugene Bryant said, "That flag has never been my flag, nor will it ever be my flag nor the flag of black people in the state of Mississippi who really understand the reason behind the Confederate flag and all of its history". "The voice of the people has been heard. The people of Mississippi do not want another flag. Mississippians are proud of their families, this state and its rich history", said William Earl Fagert leader of the state Sons of Confederate Veterans.

CHARLOTTESVILLE, VA.

The Thomas Jefferson Heritage Society issued a rebuttal to the DNA evidence of Jefferson's fatherhood of the children of Sally Hemings, a black slave on Jefferson's plantation. The possibility exists that it was Jefferson's brother who was the father. "Why do we go on and on about this?" asks Annette Gordon-Reed, a law professor who has written about Hemings and Jefferson. "Its about Jefferson and its about race, but **I think it's really about who gets to say what's true and what's not.**"

TOKYO.

A new school history textbook removing and declaring that the Japanese atrocities committed in the 1937 "Rape of Nanking" and subsequent abduction and forced prostitution of thousands of "comfort women" for Japanese soldiers in WWII never happened, has raised the ire of Koreans and Chinese. "It's intolerable to misrepresent what Japan did in that era. It's intolerable to use a distorted textbook and to teach it at school", said one South Korean. The official Chinese news agency said, "A handful of ultra-rightist forces are still trying to reverse the verdict of history on Japan's wars of aggression". But Tadae Takubo and Nobukatsu Fujioka, the authors of the textbook see it otherwise. "This is blatant interference by a foreign country. **All nations have a right to interpret their history in their own way, and pass down that interpretation. We think that is an important part of sovereignty.**"

"History is what I write it to be." -Josef Stalin

Who controls the past controls the future, and
who controls the present controls the past.

George Orwell, "1984"

Two Issues:

1) who decides what a symbol represents?
eg. the Confederate Flag

2) who writes history?

[It will never be truth no matter
who writes it]

We each write our own personal histories
emphasizing parts, ignoring parts

If St. Peter didn't keep his own records
any day of Judgement would be impossible

EXAMPLES OF YUGAS

From the point of view of Westerners the Hindu notion of the successive shorter and more degenerate Yugas seems contradictory to our concept of "progress". And while much in human history accords with progress, there are also patterns that follow that of the Yugas. Some examples:

YUGA	PHILOSOPHY	RELIGION	USA	GERMANY	COMMUNISM
KRTA	SOCRATES	JOHN BAPTIST	TR	BISMARCK	MARX
TRETA	PLATO	JESUS	WILSON	WILHELM II	ENGELS
DVAPARTA	ARISTOTLE	PAUL	FDR	LUDENDORF	LENIN
KALI	ALEXANDER	CONSTANTINE	NIXON	HITLER	STALIN

PHILOSOPHY: Socrates was an innovative thinker, completely out of the box. Plato organized and brought order to Socrates' ideas. Aristotle validated polarization, truncating and secularizing Plato's vision. Alexander took all to the lowest level, that of ego.

RELIGION: John the Baptist was a wild and innovative thinker. Jesus took many of John's ideas and organized an altruistic teaching. Paul truncated and secularized Jesus' message. Constantine politicized the teachings and set up the base for temporal power. .

USA: Teddy Roosevelt added conservation and anti-trust doctrines to the American heritage, but began programs to emulate European colonialism. Wilson violated American tradition by intruding into a European war. Franklin Roosevelt not only renounced isolationism but reduced the historic American vision to that of being a world power. Nixon pushed dedication to colonialism after it had become an anachronism.

GERMANY: Bismarck's vision included European stability, German unity, and rights for the working class. Wilhelm was ego driven subordinating Germany's best interests to his own needs. Ludendorf conceived and implemented the model that was to become that for 20th century dictators. Hitler created and incarnated an elaboration of Ludendorf's model.

COMMUNISM: Marx perceived the inherent flaws in capitalism and proposed an evolutionary path to socialism. Engels secularized and pragmatized Marx' vision. Lenin twisted the doctrine into a power platform. Stalin plunged to depths of inhumanity rendering Marx' ideas anathema for decades to come.

Logos

We exist at the interface between two zones of non-existence/nothingness. These two kinds of non-existence/nothingness are representable by **ZERO** and by **ONE**.

ZERO represents both Alpha, the beginning, the Shunyata or nothingness of infinite potential; and Omega or the nothingness that is completely devoid of potential, which is the end point of all dialectical processes. **ZERO** fragments arithmetically, that is it creates existence by the process, [ex nihilo]

$$-1 \leftarrow 0 \rightarrow +1$$

and it terminates existence by the process,

$$-1 \rightarrow 0 \leftarrow +1$$

→ symmetry

Here [0] represents non-existence, [+1] represents somethingness, and [-1] represents nothingness. Thus for something to exist, nothing must also exist.

But paradoxically, **ONE**, [+1], is also a form of nothingness, in the sense of diversity or difference being a prerequisite of somethingness. **ONE** is unstable, it fragments into the myriads of entities having differences and therefore "something", [perceptible] existence. **ONE** fragments and combines exponentially. That is it creates existence by the process,

$$a^{-1} \leftarrow 1 \rightarrow a^{+1}$$

→ inversion

and destroys existence by the process,

$$a^{-1} \rightarrow 1 \leftarrow a^{+1}$$

When an entity becomes absolutely unique it ceases to "somethingly" [perceptibly] exist because it has become **ONE**, lacking all difference.¹ Multiplicity alone does not assure existence. Variety, diversity, variation, deviation, difference is necessary.

¹ **ZERO** to **ONE**, Vairacona; **ONE** to many, Akshobya. }

Date²
1997²

Logo

There are two kinds of non-existence, these are representable by One and Zero. One is unstable. It is the Sunyata, the container of all potential. It is Alpha, the beginning. It fragments into the myriads of entities that acquire existence, yet all the while conserving a set of intrinsic values. Zero is stable. It is Omega, the end point of all dialectal processes. It is completely devoid of potential.

One fragments and combines geometrically. It creates existence by the process, $1 - a$ and a^{-1} . The uniqueness generating principle is contained in One.

Zero fragments and combines arithmetically. It relates to existence through the process $+a$ and $-a - 0$.

If an entity is purely unique it ceases to exist because it is One. On the other hand, homogenizing dialectical processes lead to non-existence by converging many elements to One. Existence lies in the mixed zone between total uniqueness zone of non-existence and the total homogenization zone of non-existence.

THE ILLUSION OF THE EXCLUDED CONTEXT

I recall on numerous occasions, in many classrooms, in many courses, in many different subjects, the professor beginning his lecture by stepping to the blackboard and drawing a large chalk circle. "Consider the system," he would begin, addressing what was being written inside the circle. When first experiencing this approach, I felt the professor was using the chalk circle to get us to focus our attention on what he was writing in its interior. But somewhat later I began to realize that the chalk circle was a device to magically exclude the effects of everything that existed outside the circle. This made everything so much simpler, allowing us to ignore what we wished regardless of whether or not it could be ignored. The chalk circle approach, inculcated in us by our educational institutions at all levels, has become a basic tool in our mode of thinking about everything from economics to astrophysics. [In science it takes the form of selecting certain parameters to be held fixed, observing the variations of other parameters, and ignoring the rest.] The Illusion of being able to eXclude the effects of Contexts [IXC], together with strict adherence to the Law of the Excluded Middle [LXM] have created wastes, disasters, and absurdities in human society.

WE SHALL REQUIRE A SUBSTANTIALLY NEW
MANNER OF THINKING IF MANKIND IS TO
SURVIVE. -Einstein

It is not only the attempt to ignore context, but ignorance of the multi-dimensional nature of context that creates erroneous conclusions. In two dimensions, on the blackboard, we might hold that the chalk circle insulates its interior from the exterior, but in a universe with larger numbers of dimensions than the blackboard, security from context based on a two dimensional insulation is an illusion. Thinking that ignores the context of the past [eg the Balkans], of the future [eg whaling, lumbering, depletion], of the micro [eg genetics], of the macro [eg asteroids], of invisible links [eg cartels, mafias], of secondary forces [eg wind, the Tacoma Narrows Bridge], of ego and arrogance [eg the Titanic], of symmetries [eg tit for tat], and of example [eg violence on TV, White House interns] will not solve problems. Today we see "blackboard two dimensional thinking" in our approaches to energy, health care, education, justice, defense, whatever. Each of these areas are linked to the others, not just through the budget as politicians choose to think, but in their interactions through each of the many contexts.

Many of the disagreements in current society derive from which context should be given priority over the others. These disagreements result in one parameter decisions made by courts, cartels, and congresses, and in response there are counter suits, protests, and terrorists. It happens that there exist algorithms for optimizing multi-parameter systems, no need to select which context, include them all. But employing such algorithms would put lawyers and politicians out of business, and the agendas of special interests would be impeded. .

It ain't gonna happen.

Correction

Politicians put ^{the} re-election context first

A definition automatically excludes certain contexts

Structuralism: Definitions are loops

We choose exclusion to avoid being overwhelmed

Language is both to enable e.g. communication
and to inhibit avoid the reality

of ambiguity, flexibility, fluidity, openness
???

DL We must contain the context

The chalk circle not only pretends the context
plays no role, it oversimplifies the context.

~ the reductionist illusion

Not only do we
ignore the effects
of context on the
interior of the
chalk circle
we ignore the
"side effects"
of the chalk circle
on the context

Who said, "You cannot do just one thing"

St. Paul said, "This one thing I do"

The Quote from "Lord of the Rings"

You can fence yourself in, but cannot
fence the context out.

SOME THOUGHTS ON THE 67TH ANNIVERSARY OF KRASNIK

see also

1993 #6

1999 #3

THE PHYSICIST AND THE SHAMAN

In the physicist's toolbox are items called *vectors*. These are mathematical entities consisting of two parts, a magnitude and a direction. A vector, V , is frequently represented by the formula,

$$V = M e^{i\theta}$$

Where M is the magnitude and θ is the direction. For example, if we are in Washington, then the distance to New York is $M = dd$ miles and the direction $\theta = aa$ degrees east of north. If the **direction** part of a vector, (θ in the equation), is equal to zero, then $e^{i\theta} = 1$, and the surviving magnitude M , called a *scalar*, is still a useful meaningful quantity. . [The numbers we deal with every day in commerce, finance, construction, politics, etc are scalars. No direction involved.] However, if the **magnitude** part of the vector is equal to zero, then according to the way physicists think, $V = 0$, that is the vector itself is zero, and θ , whatever its value, also vanishes. In such a "zero vector"; direction in the absence of distance retains no meaning.

length
magnitude

Counter to how the physicist views the "zero vector", the shaman holds that even if $M = 0$, the vector still has valid meaning. Indeed, the shaman's practice makes use of the directions implicit in zero vectors. American Indians hold that the various directions, east, south, west, north have special spiritual meanings, there being no need for distances to be involved (M not necessary). Every morning the Hopi shaman goes to the First Mesa and faces the direction in which the sun will rise, to help the day to be born. The distance to the sun is not a factor. When they pray, Muslims face in the direction of Mecca wherever they are. Direction is the essence, distance is not involved. In the past, Christian churches were always oriented so that the high altar was to the east, no distances involved. Some hold that for health reasons we should sleep with our heads to the east. And according to some religions proper burial places the head to the east. And in the Chinese practice of Feng Shui direction (sans distance) is of importance. Shamanism and derivative religious beliefs recognize the meanings that reside in direction independent of any vector magnitudes that may or may not be involved. In fact it is held that only when $M = 0$, only when the materialistic scalars are out of the way, do the spiritual essences of θ clearly emerge.

It has been found that bees also deal with vectors, with direction and distance. Karl vom Frisch, a Swiss entomologist, studied the ways bees communicate the distance and direction of a pollen source using a dance whose orientation to the vertical gives direction and whose width indicates distance (the narrower the more distant). If the distance to the food source is small, as M approaches zero, the widening of the dance obliterates the direction signal and the bee is confronted with a zero vector in which direction still ~~has~~ is the important information. The bee then switches to a different dance, a "zero vector dance", that gives the direction to the near by source.

Shamans and bees understand that if $M = 0$, then $V \neq 0$, something physicists and mathematicians may want to rethink.

MEMORDAY.WPD

MAY 30, 2001

SOME THOUGHTS ON MEMORIAL DAY

The Memorial Day weekend is done, the rush, the traffic, the noise have subsided. Now on the date originally set aside our remembrances can turn to events which we have chosen to protect from the weatherings of time.

There are memories of both collective events and personal events that invade our thoughts today. The wars and those who made sacrifices for common causes-our people and our nation; our parents and those who made sacrifices for personal causes-their children and their families. All of these we recall this day and in our doing so we find that something within us has reached a realm eternally protected from the weatherings of time. The recollections of the people and the events affirm in us our oneness with them, a continuity of devotion to the timeless principles that give meaning to sacrifice and to life itself.

And out of these recollections emerge, not only continuity, but identity: who we are, our place in time, in the world, and in the cosmos. The oneness, so often wounded by physical separations, is restored. Those who have departed are known to be continuing in some mode we but faintly understand. We realize that we continue to carry them in ourselves and that they in turn continue to carry us. A curious symmetry, but one of those symmetries that is basic to both our and their existence.

And in this symmetry we begin to perceive the gods, who are in essence the bridges we build to link us to each other, to the earth, and to the cosmos. As we each build out, the Other in response builds to meet us. When the two converge at the fulcrum, the mirror, then there comes into being what we call God.

To say that God is dead is to recognize that the old bridge is broken, that the connection has been lost. We must build again, a new and more insightful bridge that will allow more to pass between than before. While there are those who arrogantly would go it alone, insulate and isolate human society from the earth and the cosmos, it cannot be done. The question is why would we wish to do so?

The oneness revealed on this day of remembrance is not a oneness of exclusion.^{for} Oneness can have no excluded context.

exclusion

JUNEDAY.WPD

JUNE 9, 2001

A DAY IN THE NEWS: JUNE 9, 2001**COLLECTIVE RESPONSIBILITY**

[The current administration believes that virtue and morality is individual not collective. "Conservation is an individual virtue, but it will not solve any collective problems"—Dick Cheney. There are some who disagree]

Certainly individual responsibility is important in any decent society. But a sustainable environment and indeed a moral society requires not only individual action but collective action through non-governmental organizations and government initiative and sanction.

Conservative ideologues seem to suggest all societal problems can be addressed through market forces and private charity. If that were true we would not have national parks, a 40 hour work week, Social Security (however flawed), clean air and clean water laws and myriad other laws that hold excessive private economic interests in check. Such initiatives were not passed just for their practicality, but because they were the right and moral thing to do.

—Ron Hayes Santa Rosa

Democracy is based on a balance of rights and responsibilities.

—Larry Robinson, Mayor of Sebastopol

AMERICA THE PURITAN

(President Bush's daughters) are swimming against two currents in American life: petty puritanism and a pathological obsession with safety. America rightly thinks of itself as a country conceived in liberty. But it is also a country that was conceived by Puritans. Again and again these days puritanism seems to be trumping freedom. No country treats smokers with such petty vindictiveness as the United States. As for safety, America seems to have convinced itself that the world is an astonishingly dangerous place and that the only way to keep these dangers at bay is to regulate even the most trivial behaviors.

Let America rise up in revolt against all the petty princelings of puritanism, before every aspect of social life is criminalized, pathologized, regulated or legislated out of existence.

—the Economist

Can the real issues be extracted from these tangled mixes of agendas: Individual vs. Collective, Rights vs. Responsibilities, Regulation vs. Freedom? It is impossible to detect consistency with regard to these issues on the part of either conservatives or liberals. Both the liberal and the conservative approaches select and reject whatever pleases or displeases them without regard to the inherent relationships that exist between these principles. The result is "one set of rules for us and another for you". Such positions collapse when confronted with the implicit meanings of such concepts as freedom, rights, morality, etc. Both parties have come to believe in the power of SPIN, not only to persuade and manipulate, but to create the truth. What is the destiny of such arrogance?

"Whom the gods would destroy, they first make mad with power".

—Charles Beard

GENERATIONS UN-GAPPED

Why generations should be *fractally* related, that there should be generation gaps instead of continuity is a mystery. Perhaps it is because each generation has to rebel against its parent, resulting in a similarity or likeness between *alternate* generations. This is like the offspring of black bears being brown bears and the offspring of brown bears being black bears. Whatever the true nature of the swinging pendulum, I find myself much at home with those now graduating from highschool. My decades of alienation are coming to an end as I see this new generation coming of age. For me it is an experience of rebirth and resurrection! Another 'greatest generation' is coming on stage.

Today, America grows rapidly diverse with different ideals and with different ideals and different people working with each other 'in unprecedented numbers. Many high school students aren't ready for this, many can't understand diversity. We are students of a rare kind, we are students that know ourselves by knowing others. Some of us have ventured beyond our limits, spoken to people whom we felt we couldn't get along with and bonded with those whom we never noticed and never thought we could understand. Elsie Allen High School has taught us to go beyond our limits, and go beyond any glass ceilings that we may face. Elsie Allen has given us a bright future, and like the brightness of light, no glass ceiling can stop us, only let us go through.

—Nathan Shinagawa, Elsie Allen High School

For many of us, we've spent more time here at Maria Carrillo High School than at our own houses; more time with some teachers than with our own Parents; more time with teammates than our own brothers and sisters. We've done that because we haven't been here just to get an education. We've needed each other during the past four years to help us get through. Now as we part, I hope we take as many memories of high school as possible because we've defined one another through our experiences together.

—Jamie Bone, Maria Carrillo High School

We have spent, here at Piner High School, four of the most important years of our lives, during a crucial time of metamorphosis where our bodies and minds are in a constant state of change. We are continually encountering new experiences and it is through all our mistakes and success, our hits and our misses, all our pain and our pride that we gain a foundation sturdy enough to withstand all the burdens and glories the future holds for us. It is with this foundation that we leave our past behind, not forgetting about it or dwelling upon it, but progressing ahead.

—Matt Karson, Piner High School

We must not fear the future, for we have all proved ourselves capable of hurdling challenge. As we enter a new millennium, with our generation 32 million strong, we are sure to meet new people, find soul mates and discover what exactly it means to be ourselves. We are stronger knowing that we will hold these past four years inside forever. As Emerson said, 'What lies behind us and what lies before us are tiny matters compared to what lies within us.'

—Emily Buller, Analay High School

MORE ON DIALECTICS

Type 1. Dialectic The Hegelian Dialectic

Simultaneous operation of opposing forces or principles resulting in creation or innovation at the interface. The Hegelian dialectic is an example. Thesis, antithesis resulting in a synthesis.

Type 2. Dialectic The Antiphonal Dialectic

The operation of opposing forces or principles acting alternately rather than simultaneously. All engines are examples of this form of dialectic. It is symbolized by the caduceus. [cf Wheeler's form of the game of 20 questions]

Type 3. Dialectic The Skew Dialectic

The operation of opposing forces or principles acting simultaneously but on two different levels or in two different SPACES, resulting in increase in one SPACE and simultaneously decrease in another SPACE.

Type 4. Dialectic The Inverse Dialectic

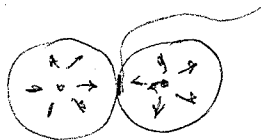
The effect of reversal of the direction of operation of a Type 1 dialectic resulting in the creation or emergence of opposing forces or principles out of a null. An example is the emergence of matter and anti-matter from the null Planck particle.

A universe is a set of fixed boundaries within which certain rules obtain, but open to what may occur within the bounds and through the operation of the rules. All four types of dialectics operate in a universe. The sequence in which they operate on Brahman or the Sunyata determines the properties and contents of a universe. Furthermore, universes may be imbedded within one another in the manner of Russian matroshka dolls, that is in an hierarchical manner; or may be organized into strange loops, uroborus universes; or in a holographic manner.

Two force dialectics are analogous to Kepler's laws regarding the dynamics of two bodies. Trialectics, the involvement of three forces or principles, would result in complexities, chaos, and non predictability, as in three and multi-body problems in dynamics.

Placing centrifugal force (expansive) against the planck force, \implies the planck force is contractive: Equilibrium at the Schwarzschild limit: $Mc^2/R = c^4/G \rightarrow M/R = c^2/G$
 Placing gravitational force (contractive) against the planck force: $GM^2/R^2 = c^4/G$ gives $GM/c^2R = c^2R/GM$, or $M/R = \pm c^2/G$, not a conventional equilibrium, but an "inversion".
 The question arises when is the planck force contractive and when expansive?
 Is this a type 3 dialectic?

Also competition



$$\frac{M}{R} = \frac{c^2}{G}$$

2 expanding spheres
encounter one another

i.e. No antithesis
just 2 or more theses
what is the synthesis?

Centrifugal Gravity

$$\frac{Mc^2}{R} = \frac{GM^2}{R^2} \rightarrow \frac{M}{R} = \frac{c^2}{G}$$

Centrifugal to Planck \Rightarrow Planck is contraction

$$\frac{M}{R} = \frac{c^2}{G}$$

Gravity to Planck \Rightarrow

$$\frac{M^2}{R^2} = \frac{c^4}{G^2}$$

Planck² is expansive?

$$\pm \frac{M}{R} = \pm \frac{c^2}{G}$$

cf. the $\sqrt{\quad}$ forces

After all, the electric force can be either attraction or repulsion

\pm charge

\pm mass²

\pm space?

$\pm G?$

$\pm c?$

$$\frac{A}{B} = \frac{B}{A} \Rightarrow A = \pm B \text{ not } A = B$$

THE PYTHAGOREAN UNIVERSE

FORCE EQUILIBRIA

I. We consider four basic meso or macro forces, leaving thermal and micro forces for later.

Gravitation	GM^2/R^2	attraction (+)
Centrifugal	Mv^2/R	repulsion (-)
Electric	$\hbar c/R^2$	both (+,-)
Planck	c^4/G	(?)

Assuming the Planck force to be repulsion, with the repulsion case of the electric force, we have:

TABLE I

	Gravitation	Centrifugal	Electric	Planck
Gravitation	-----	< Schwarzschild	-> Planck mass	$M/R = R/M^*$
Centrifugal	$M/R = v^2/G < c^2/G$	-----	-> ∞	-> ∞
Electric	$M^2 = \hbar c/G = m_0^2$	both repel	-----	-> ∞
Planck	$M/R = \pm c^2/G$	both repel	both repel	-----

Under the Table I assumptions, the interactions of the four forces lead to:

Grav-Cent -> a value of $M/R <$ the value of the Schwarzschild bound.

Grav-Elec -> the Planck particle mass = m_0

*Grav-Planck -> a "dual" Schwarzschild boundary, with the properties:

$$G^2 M^2 = c^4 R^2; \quad GM/c^2 R = c^2 R/GM; \quad \text{or in Planck units: } M/R = R/M, \quad \pm M = \pm R$$

The other combinations do not lead to equilibria, but to continual expansion.

Assuming the Planck force to be repulsion, but taking the attraction case of the electric force, we have:

TABLE II

	Gravitation	Centrifugal	Electric	Planck
Gravitation	-----	< Schwarzschild	-> 0	$M/R = R/M^*$
Centrifugal	$M/R = v^2/G < c^2/G$	-----	> Heisenberg	-> ∞
Electric	both attract	$MR = \hbar c/v^2 > \hbar/c$	-----	-> Planck size
Planck	$M/R = \pm c^2/G$	both repel	$R^2 = G\hbar/c^3 = l_0^2$	-----

Under the assumptions of Table II, the changes from Table I are:

Grav-Elec -> both contractive -> 0

Cent-Elec -> equilibrium above \hbar/c , the value of the Heisenberg bound

Planck-Elec -> the Planck particle size = l_0

Can all forces be considered
as a stream of particles?
as water from a fire hose?

We look for quantum gravity

What quantum or particle is present in

Centrifugal force, Coriolis force, inertia?

Assuming the Planck force to be attraction, taking the repulsion case of the electric force, we have:

TABLE III

	Gravitation	Centrifugal	Electric	Planck
Gravitation	-----	< Schwarzschild	→ Planck mass	→ 0
Centrifugal	$M/R=v^2/G < c^2/G$	-----	→ ∞	> Schwarzschild
Electric	$M^2=\hbar c/G=m_0^2$	both repel	-----	Planck size
Planck	both attract	$GM/c^2R=c^2/v^2 > 1$	$R^2=G\hbar/c^3=l_0^2$	-----

A contradiction is introduced under the assumptions of Table III, in the system being placed on both sides of the Schwarzschild boundary.

Assuming the Planck force to be attraction, taking the attraction case of the electric force, we have:

TABLE IV

	Gravitation	Centrifugal	Electric	Planck
Gravitation	-----	< Schwarzschild	→ 0	→ 0
Centrifugal	$M/R=v^2/G < c^2/G$	-----	> Heisenberg	> Schwarzschild
Electric	both attract	$MR=\hbar c/v^2 > \hbar/c$	-----	→ 0
Planck	both attract	$GM/c^2R=c^2/v^2 > 1$	both attract	-----

The same contradiction occurs in Table IV as in Table III

We conclude that the Planck force, c^4/G , is a repulsion force. This force may be the Λ force of general relativity. [Its (\log_{10}) cgs value is 49.082989 ^{dynes} ergs.] From Tables I and II we infer that the inequalities, $M/R < c^2/G$ [$<$ Schwarzschild] and $MR > \hbar/c$ [$>$ Heisenberg] place all equilibria resulting from these four forces in the first quadrant. The first quadrant is the quadrant in which unlimited expansion can take place.

A BRIEF HISTORY OF DISCRETIONARY TIME

In the animal kingdom the universal rule governing the allotment of time is the priority assigned to food. Animals and birds are required to devote almost full time to hunting or grazing; either in the search for or the in taking of energy. It may be an illusion, but mankind seems to have emancipated itself, at least to some extent, from this basic rule. We have acquired what we call 'discretionary time', time to do something besides searching for or consuming food. To some extent we have used this discretionary time iteratively to acquire additional discretionary time. Indeed, civilization, culture, technology, science, have resulted from growth out of an initial seed of discretionary time, a seed that must have been sacrificially acquired.¹

But now we arrive at a paradox: We have such an abundance of discretionary time that we are at a loss of what to do with it. Admittedly, some of our discretionary time is still reinvested in the acquisition of the kind of knowledge that secures additional discretionary time, eg. scientific research, developing new sources of energy, etc. but for the most part when we are not working for a living [update of hunting or grazing] we have the problem of what to do with our time. Several decades ago Dennis Gabor predicted that some of the main problems of the 20th century would be problems created by leisure time. However, we have come up with several "solutions". One, an ever expanding entertainment industry. This would include theater, cinema, TV, spectator sports, and perhaps politics. Second, an ever expanding recreation industry. This would include participatory sports, fitness programs, tourism, travel, cruises, resorts. Third, continuing education, adult education, seminars, retreats, etc. Fourth, busy work, doing more for less, reduction of discretionary time by having to work longer hours, doing additional record and book keeping, even the increasing time required to open the ubiquitous packages that everything is encased in, but most of all by the contortion of cycles.²

There have been two losses. The loss in the *amount* of discretionary time, and the loss in the *quality* of discretionary time. One measure of the quality of time is the length of *uninterrupted* time that is available for whatever project or activity is being engaged. But today, time, for whatever use, has been slashed, skewed, juggled, and patched, resulting in the loss of its 'utility per-minute'. This devaluation of time is manifested in our requiring more time to get the same things done. But more disastrously, only interruption free time of sufficient length allows us to penetrate to the full depths of a project. But there is a second measure of the quality of time. It is what the Greeks called **Kairos**, meaning the coordination of activity with the cycles of nature. There is a proper cosmic time for each human activity, poetically described in Ecclesiastes 3:1-8. But Kairos has been totally obliterated in the modern world.

¹ This view of the sprouting of discretionary time from a seedling of discretionary time contradicts the Genesis story of expulsion from the Garden of Eden, and the curse of mankind's having to live by the sweat of the brow. If ever, for some brief moment, we did inhabit such a garden, the evolution of discretionary time describes humanity's response to our expulsion.

² At one time invoices were submitted and paid on a monthly basis, usually coordinated with the first of the month. Now every company uses a different number of days in their billing cycle and the once universal 'first of the month' has disappeared. The result: paper work all month long.

Only superficial thought is possible without quality [uninterrupted] time.

Dennis Gabor - The Mature Society 1972

HUMAN CODE BOOKS

Our attention these days is focused on ~~the~~ deciphering ~~of~~ the genetic code, the code that is the template for assembling molecular matter into living forms. In the wake of current genetic research, a second kind of code has been proposed, a code that constitutes a cultural template; made not of genes, [molecules], but of *memes*, [concepts]. Granting such a meme code, the gene code in multiple ways both enables and limits it. But the fact that there exist a variety of cultures infers that a meme code is not strictly determined by the gene code. That is, there is no one-to-one mapping of a meme code onto the gene code. [But possibly the differences in the gene code among different humans may be at the root of cultural differences.] In toto, these codes suggest a metaphorical interpretation, namely, their being part of a communication network.¹ That is, the human as recipient of messages: receiving physical form through genetic messages interpreted by the gene code book; cultural form through memetic messages interpreted by the meme code book, and we add here a third, receiving "ontological form" through epistemological messages interpreted by a "noetic code book". This is the code book that provides the template for all of our sciences, our religions, and our philosophies.

What is the nature of this "noetic code book" by which we build models of the world and attempt to find our place in it? What is the extent of its power and what are its limitations? Is it totally determined by our genetic and memetic code books, or can it escape from their enclosures? Are its interpretations valid, deceptive, both, or neither?² And how can it be tested? Do we possess some "meta-code book" that can give us answers to these questions? [Or show us that the enclosures are illusory?]

Geneticists are modifying the genetic code and creating alternatives that would not come into existence by ordinary evolutionary processes. It seems equally or perhaps more important that social and political scientists modify our memetic or cultural codes before we engage in self extinction. But prior to wise and meaningful modifications of either genetic or memetic codes, it is essential that we find suitable frameworks to guide and support any biological and societal modifications. Hence, it is most important that scientists, theologians, and philosophers seek some way to modify mankind's noetic code. Finding alternative epistemologies is critical to humanity's escape from every box that now encapsulates it.

¹ See Scrap 1996 # 39

²Our present code book frequently sees a message where there is no message [eg faces on the surface of Mars] And skips rare messages that may be valid but are statistically improbable. Human reality consists of a portion of what really exists, but also of a collection of perceptions and conceptions that image what non-exists. [But for which we lack tests.]

dre~~mes~~^{mes}?

ATHROISMATICS¹

MUTUALITIES

- 1) Holograms.
- 2) The phenotype contains the genotype; the genotype contains the phenotype
- 3) The planck particle contains the baryon; the baryon contains the planck particle²
- 4) Profundity contains absurdity; absurdity contains profundity.
- 5) Form contains emptiness; emptiness contains form.
- 6) Randomness contains order; order contains randomness.
- 7) We contain God immanent; God transcendent contains us.

MATROSHKAS

- 1) Modular hierarchies
- 2) Fractals
- 3) Hofstadter's meta-lamps and meta-genii.

SYMMETRIES

- 1) Top down | bottom up
- 2) Existence | counter-existence [or non-existence]
- 3) Definition | Apophasis
- 4) Conservation laws [Emmy Noether]
- 5) One week = 120 x 84 minute gravitational periods = 84 x 120 minute hydrogen periods.³
- 6) Infinity | zero
- 7) Rhythm | pitch
- 8) $-X$ | $+X$ 10) Fourier Transforms
- 9) X^{-1} | X^{+1}

LOOPS

- 1) Thomas Jefferson's concept of democratic government.

TRADE OFFS

- 1) The closer you get the slower I go. [Bumper sticker]
- 2) Nobody goes there anymore, it is too crowded. [-Yogi Berra]

¹Look for the fulcrum, looking glass, portal, watershed.

²The planck particle is 10^{19} times more massive than the baryon; the baryon is 10^{20} times larger than the planck particle. Yogi Berra saw through this type of relationship: "Mr. Berra, do you want your pizza cut into four or eight pieces?" "You had better cut it into four pieces, I don't think I can eat eight".

³Which in turn is equal to seven rotational periods.

Loops

Word Definitions

COSMOLOGY IN THE TRADITION OF PYTHAGORAS

According to Pythagoras, ^{underlying} behind astronomy, behind physics, even behind mathematics, lies number. The structures and processes of nature take their forms, directions and values ultimately from the properties of numbers. If this be so, then the properties of numbers create a *template* that both enables and delimits what exists and what happens. Such a template would govern both what *may* occur and what *must* occur: the domains of choice and necessity. Further, such a template would explain our questions regarding why mathematics allows us so well to describe the physical world, ~~and permits that we both discover and invent mathematics.~~

Legend tells us that the Pythagoreans were dismayed at the discovery of $\sqrt{2}$. Such a number violated their belief in the absolute sovereignty of the natural numbers, ~~that is of 1,2,3,...~~ But since negative, rational, irrational, complex and other numbers all trace their ancestry to the natural numbers, the Pythagoreans should not have despaired. While the positive integers may not be the sovereigns, they are the undisputed ancestors of all other numbers. We may accordingly assert, without tracing all the mathematical genealogy of the intervening centuries, that Pythagoras is the legitimate ancestor of an approach to cosmology that is based on numbers and their properties. However, today we begin, not with 1,2,3... but with the fundamental constants of physics. These are indeed numbers and for the present purpose will also be assumed to be constants.

Seven of the fundamental physical constants turn out to play a significant role in the cosmic template. These are: c , the velocity of light; G , the gravitational constant; \hbar , Planck's constant; α , the fine structure constant; μ , the proton/electron mass ratio; m_p , the proton mass; ~~→ use m_e~~ and r_e , the electron radius. These constants provide a system of units, the Planck system, that unlike the SI, cgs, or English systems, is not an arbitrary fabrication, but takes its values directly from the natural order. The three constants c , G , and \hbar , can be put together to make units of mass, length, and frequency as follows:¹

$$\sqrt{\frac{ch}{G}} = m_o \quad \sqrt{\frac{Gh}{c^3}} = l_o \quad \sqrt{\frac{c^5}{Gh}} = \nu_o$$

These values may be considered to be the mass, size, and frequency of a virtual particle, called the Planck particle. This "particle" might be said to have the same relation to the cosmos that a stem cell has to a living organism. The Planck particle is a "cell" from which the cosmos and its sub-structures can be derived. It is also usefully taken as the origin in all of the coordinate systems that constitute the cosmic template.

¹The \log_{10} cgs values are: $m_o = -4.662199$ grams; $l_o = -32.791545$ centimeters; $\nu_o = +43.268366$ hertz

INDEPENDENCE vs INTERDEPENDENCE

Whom the gods would destroy, they first make mad with power.

—Charles Beard

Today is the 225th anniversary of independence from Britain. What we celebrate today is not independence, but a world view and life style that we attribute to independence. But stripped of its flag wrapped protections, it is apodictic that there is no such condition as *independence*. The severance of particular political linkages cannot create independence. But the fiction of independence has over time created in these United States a world view of arrogant individualism and illusory self sufficiency. That is, go-it-alone independence on the national level has trickled down to me-me individualism on the personal level. On the national level this attitude leads to the concept of “master race”. On the individual level it leads to a self centered mental disease called megalomania.

Today we celebrate our independence but deny our hypocrisies and our fallacies. We celebrate our heritage of liberty, ignoring our history of slaughter of native Americans, enslavement of Africans, suppression of women and minorities, and attempts at colonialism. . We praise our property rights, our right to free speech, to freedom of religion, and freedom to possess weapons. [And the not mentioned in the bill of rights, freedom to get rich.] We ignore the environmental responsibilities that go with property, the appropriateness of where and when to say what; ignore the morality that must link every church and any state; bypass the maturity that is required in the possession of a gun. [And turn our legislative backs on the homeless and the abused] We celebrate our rights while ignoring and denying our responsibilities. The cornerstones of this nation were not liberty, as proclaimed, but liberty for white, male, landowners. Not “all men are created equal”, as proclaimed, but a stratified structure of racial and ethnic elitism.

Today we see in the rest of the world, particularly in Europe, movements toward consolidation, which is recognition of *interdependence*. Our reaction to this has been to go along with economic globalization, but to make it globalization American style. In attempting to take over the globe, rather than to merge with the globe, we somehow can delay facing the fact that we are not self sufficient. But our arrogance in rejecting the Kyoto accord, biological warfare accords, land mine accords, and the World Court, has reversed the respect that the world once had for us. What it was that once made America a paradigm for the oppressed throughout the world, the ugly American has erased.

So here we must ask, what, —in spite of all our abuses of liberty, in spite of all the inequalities of opportunity and access—What has made this nation a great nation? I believe it is not a matter of who and what we are, but an ongoing vision of who and what we can become. On this anniversary of “independence” let us then not celebrate a cosmetic past nor a glossed over present wrapped in the flag, but let us rededicate ourselves to our one great heritage which has inspired all on this globe: The Vision of freedom and equal rights for all.

Before 9/11

Tainted glory

EDITOR: William Safire's essay in the July 4 edition of The Press Democrat left out a few things about the founding of this nation. His brand of patriotism, focusing on "independence" from a greedy and morally uninformed King George III, forgot that our independence was also built on the enslavement of Africans and the disenfranchisement (not to mention the slaughter) of Native Americans.

All the high and mighty rhetoric of our constitution and Bill of Rights, (taken from John Locke, et al) cannot remove the stain of the immoral shenanigans that allowed us to prosper as a nation. People who wave the flag and cry out about how much they love their country should ask themselves exactly what they love. Our country is an abstract idea, the ingredients of which one can pick and choose.

To the currently disenfranchised African Americans, the poor, the Native Americans, the Latinos who provide us with cheap food, and the homeless, "our country" might not be seen as a sparkling haven of freedom, opportunity, tolerance and compassion. They also might not see fit to raise Old Glory in front of their humble home — if they have one.

RICHARD SAICHO
Sebastopol

FD 01/07/06

MUTUALITY AND BEING

Knowledge Is for Doing;

Wisdom Is for Being.

—Li Kiang

Even some animals apparently have discretionary time. Today I saw some cows resting during a recess from their mandatory hours of grazing. And what do they do with their discretionary time? Rest, yes, but I was surprised to see many egrets in the midst of the reclining cows. Now egrets do not go near anyone, nor do they let anyone approach them, yet the cows and the egrets were enjoying some sort of symbiosis. I had a feeling that both the birds and the beasts were taking time off from doing their own things and just *being*. And when we can just be, we can become symbiotic with anyone. Or maybe it is the inverse: the clue to 'just *being*' is to establish a symbiotic relation with someone or something that is different: A member of the opposite sex, a pet, a foreigner, or an alien; A flower, a tree, a lake, or a mountain. Is it that we *be* when we contain the other and the other contains us? The egrets were in the midst of the cows and the cows were in the midst of the egrets. Or is it better said, When we identify with the other and the other identifies with us? Or, When we belong to the other and the other belongs to us? In any event *being* involves some form of mutuality with another. Indeed, mutuality is necessary in order for both us and the other to be.

Strange that the idea of mutuality has been so long obscured by our uni-directional activities. Causality, the foundation of our philosophies, is uni-directional in time. Reductionism, the foundation of our physics, is uni-directional in scale, Hierarchy, the foundation of our organizations, is uni-directional in power, Ownership, the foundation of our economics, is uni-directional in belonging. Rights, the foundation of our society, is uni-directional in privilege. Yet the world beyond the activities of mankind seems constructed on bi- or multi-directional linkages and influences. Why have we projected our own uni-directional proclivities onto the cosmos at large, and expect to understand the workings of the world in terms of our own biases? Perhaps it is from the same arrogance that created our uni-directional chauvinism in the first place. Why must we overrule the perceptions the world sends to us, with the uni-directional interpretations that we project onto the world? When will we come into a symbiotic relation with the earth instead of uni-directionally trying to subdue it? Egrets and cows have acquired a wisdom we have yet to achieve.

SELECTIONISM

SELECTIONISM is the name chosen for a philosophical system
based on the following premises:

- 1) An ontology is a representation, model, or picture of the universe. It is not a symbolic homomorphism of the universe, but is at best isomorphic to some facet of the universe.
- 2) Reality is a term used to designate the particular ontology that is accepted by a general consensus of the current population.
- 3) The tool by which an ontology is fabricated is called an epistemology. Epistemologies differ in their rules and methodologies regarding how to select those experiences and observations that are to be considered in the construction of an ontology, and on how the collection of selections is to be interpreted and organized [i.e. by theory]. But more basic is the feedback that these rules and methodologies have in determining what experiences and observations become accessible or inaccessible, including the bio-built in cognitive and sensory limitations of the designers of the epistemology themselves.
- 4) An epistemology consists of two parts: an infrastructure or framework with which to contain and organize the observational or experiential inputs, and the inputs themselves.
- 5) Order is an attribute exhibited by an ontology, imposed in part by the epistemological framework, in part by the human subjective sense of order, and in part a reflection of the indigenous structure of the universe.

The Epistemological Process Involves:

- A) Collecting a set of experiences or observations
These are selected not created,
Their selection depending on conscious and unconscious criteria and
the cognitive and sensory limitations of the selectors [eg humans]
- B) Representing, symbolizing, and simulating the experiences
- C) Signifying the experiences according to assumed criteria
Some Signification criteria:
 - a) Frequency and regularity of Repetition
 - b) Conformity with the picture that has already been built
This involves a question/answer dialectic, the questions directing
future observations derive from the existing picture, directing a
deterministic path of evolution
- D) Selecting or rejecting experiences on the basis of the significations
- E) Organizing the representations into a model or picture
- F) Interpreting the picture,
Testing its correspondence with the previously selected set of experiences

Since the experiences collected are initially "randomly" encountered, it cannot be claimed they are created, except in the sense that they are the imprint of the result of an interaction between the observer [human] and an already existing context. Since humans derive from some initial selections, *pure* creation is pushed back to a "beginning". The above processes do not speak to an ab initio creation, which may be either ex nihilo or per some "mutually causal" dialectic.

Note 03-07-10

The selection becomes the selector wheeler

The creation replaces the creator Maria

Game of 20.

Creator ~ committee decides object

Wheeler version

Selector guided by his selections

i.e. the selections take over

PROPOSITIONS AND THESES

There is a need for a “*responsibility* task force” or “*responsibility* swat team” to restore balance and equilibrium to the world, cleaning up after all those who irresponsibly exercise their *rights*.

In view of the issues created by technological advances there is need for a “meta-morality”, a set of criteria by which a morality that fits the current status of human capabilities can be determined. Past moral teachings, such as “Be fruitful and multiply”, “Subdue the earth”, have become antithetical to what is appropriate today and can no longer be considered moral. With issues such as sources of stem cells, cloning, and other new capabilities created by technology creating contradictions with traditional moral principles, a new morality is urgent. But how is a morality consistent with current capabilities to be decided? The changing context of human life has shown that morals can no longer be considered as absolutes. However, there may be a meta-morality that is independent of technological and other contexts that could be considered absolute. Can such a meta-morality be abstracted from human experience? Whence its source?

Technological changes have created contradictions on the legal level as well as the moral level. The advent of broadcast public media, –radio, TV, internet–, has effected dysfunctional consequences in the exercise of constitutional rights. For example, freedom of speech should take into account the time, place, and audience, corresponding to what the courts have maintained in the case of the free exercise of religion; which has been decreed must take into account time, place, and audience. A meta-constitution as well as a meta-morality is needed.

There are some who challenge the freedom of technological advance. Is technology the ultimate sacred cow to which all else –law, morality, and social order–must pay obeisance? Ozbekian’s Law, which holds that if humans can do something they will do it, seems to be valid. The freedom of technology should depend on our ability to transcend Ozbekian’s Law. Can we acquire power without the compulsion to exercise it? Can we gain knowledge and not misuse it? If not, and technology is our basic change agent, then we need to change the change agent.

Forgive or forget, both or neither? Some say that in order to become free from the past we must forget slavery, holocausts, and other parts of human history. Others have said to not know or to forget the past dooms us to repeat it. Still others feel that to forgive, but not to forget, is how to escape the past. The law of Karma says you may forgive or forget or both, but you will not escape the past. Perhaps in this dilemma we see the reason for mortality. Old wrongs die only when their perpetrators and victims die. However, some still seek immortality for our crimes. When there are so many answers, perhaps there are several unformulated questions to be asked.

MYSTERY

Mystery is Spiritual Energy —Li Kiang

Mystery is as essential to the spirit as food is to the body. The human spirit feeds at the verge where actuality meets potentiality. As time moves from past to future, so reality moves from actual to potential. And as the present is a curtain hiding the future, so mortality is a curtain hiding infinite potential. But neither reason nor the senses can penetrate these curtains. Only the human spirit can glimpse the realms beyond, Only the human spirit can push aside the curtain that divides the Apollonian realm of the rational from the Dionysian realm of the imagination; the Cartesian world of existence from the Nagarjuna world of emptiness.

But even Brahma the creator of all worlds relishes mystery. For Brahma mystery does not reside in the realm of time, but in the innumerable alternatives that are possible within the boundaries that he ordained. Thus it is mystery, discovering the limits of potentiality, that is the ultimate dynamic of the cosmos.

Mystern WPD 01/02/14, 01/07/15

THOUGHTS FROM THE DALAI LAMA:

1. Take into account that great love and great achievements involve great risk.
2. When you lose, don't lose the lesson.
3. Follow the three R's: Respect for self, respect for others, responsibility for all of your actions.
4. Remember that not getting what you want is sometimes a wonderful stroke of luck.
5. Learn the rules so you know how to break them properly.
6. Don't let a little dispute injure a great friendship.
7. When you realize you've made a mistake, take immediate steps to correct it.
8. Spend some time alone every day.
9. Open your arms to change, but don't let go of your values.
10. Remember that silence is sometimes the best answer.
11. Live a good, honorable life. Then when you get older and think back, you'll be able to enjoy it a second time.
12. A loving atmosphere in your home is the foundation for your life.
13. In disagreements with loved ones, deal only with the current situation. Don't bring up the past
14. Share your knowledge. It's a way to achieve immortality.
15. Be gentle with the earth.
16. Once a year, go someplace you've never been before.
17. Remember that the best relationship is one in which your love for each other exceeds your need for each other.
18. Judge your success by what you had to give up in order to get it.
19. Approach love and cooking with reckless abandon.

FORECASTS: THE 21ST CENTURY

The Barons have finally subdued the king. The long struggle dating back at least to 1215 has finally been decided in favor of the Barons [currently called Corporations]. Consequently, **Power**, the concern of kings, has been replaced by **Profit**, the concern of Corporations. The wars in the coming century will not derive from national interest, but from maximization of profits. [We have already seen this in the 1991 Gulf War, where several nations, unlikely allies, joined under an injunction by corporations to protect their access to energy.] The principal weapons in the coming century will be economic rather than military. [This was presaged in the denouement of the Cold War, where a "potlatch" strategy destroyed the side with the weaker economy.] National boundaries and immigration control, practices supportive of kings, are giving way to free trade and open immigration^{*}, practices supportive of corporations.

Changed on 9-11

What about the peasants? [read the hoi polloi or citizenry] What have they to say about all of this? Answer: What they have to say doesn't matter. But what about the gains over the king that the people have acquired in the past 200 years? There has been a deal by which the king has been paid off but for appearances pretends to rule, but is under orders from the barons [per lobbyists]. The people's "gains" have been abrogated. But those few who have a voice have been mollified by being given a slim slice of the corporate pie. But what about those who have no voice? Internationally they are taking to the streets¹, protesting such things as job loss, homelessness, poverty, pollution, gross imbalances in income; in short being denied access to those resources which they feel they have a right to share.

And how will this work out? That will ultimately depend on how the corporate spin doctors can frame the issues. But at this point the likely scenario is that there will be a "global civil war", waged within each country between the corporate establishment and protestors. The protestors can be easily subdued, but they may resort to destruction of capital equipment, from factories to the internet. A lose-lose situation. Another scenario, the spin doctors may be able to divert the conflict into racial warfare, as we have seen in Africa, tribe against tribe, or in the Balkans and in parts of Asia, ethnic group against ethnic group, or religion against religion. But again this may all end up with some strange and unlikely alliances. The issues have not been firmly framed at this time. And what do you feel are the basic issues? There are several, including some that are contradictory. For one, people want to retain their cultural identity and they still possess considerable xenophobia. Another is the rich/poor income ratio. But I believe the most basic issue is that of access, access by all to the earth's material, intellectual, medical, technological and scientific resources.

¹The protesters as well as the corporations appear to have bypassed the king.

*Potlatch in the case of the Cold War was
gift to the respective militaries*

Internationalism & Globalism
by Kings by Corporations

SOME THOUGHTS ON MY 83RD BIRTHDAY

Aging is a compensatory process, the exchange of physical deterioration for spiritual inauguration. What is distressful as alienation becomes blissful as liberation. The loss of involvement is balanced by the gain of perspective. Success and satisfaction are redefined. And in the transformations effected by aging, the invariants of existence become perceptible.

What are these invariants that retain their validity from conception to death, and perhaps beyond? What experiences do we most treasure as we think back on our lives? And what do they have in common? What hidden truths do they manifest? If we could prepare an ark to take us into the beyond, with what memories would we cargo it? [However, cosmic customs might forbid imports] Does our experience and learning here have any lasting value? If so, to us personally? Or to whom or to what? Perhaps the invariants carry a clue to the answers.

To my mind the first invariant is love with its many meanings: a mother's breast and arms, her ever presence and care; a father's protection, guidance, and example; the faithful intimacy and companionship of a mate; the closeness that comes of sharing tribulations and triumphs; the transforming presence of the compassionate one in our lives, Avalokiteshvara, be her name Kwan Yin, or Holy Mother.

My second invariant is also a form of love, the love called *philio* by the Greeks. The love of the challenge of mystery. The call of the unknown ["to go where no one has ever gone before"] To share with loyal friends the risks and dangers, the defeats and triumphs of the journey into the unexplored. [whether pre-existing or co-created]

My third is the ineffable presence that is the companion of silence, the fullness of nothingness. The omni-present presence that like the music of the spheres, because it is always here we fail to hear it.

The most memorable events of my life involve one or more of these three invariants. To me the moments of love, mystery, and mindfulness in our lives are our passports to immortality.

THE GOSPELS AND THE TAO TE CHING¹

FROM THE TAO

Keep behind, and you shall be put in front;
keep out and you shall be kept in.

Goodness strives not, and therefore it is not
rebuked.

He that humbles himself shall be preserved
entire. He that bends shall be made straight.
He that is empty shall be filled. He that is
weary shall be renewed. He who has little
shall succeed. He who has much shall go
astray.

The reason the river and the sea are able to
be king of the hundred valleys is that they
excel in taking the lower position

What man is there that can take of his own
superabundance and give it to mankind?
Only he who possesses Tao.

FROM THE GOSPELS

Matthew 19:30 But many that are first shall
be last; and the last shall be first.

Corinthians 13:4 Charity suffereth long and
is kind

Matthew 5:5 Blessed are the meek: for they
shall inherit the earth. 6 Blessed are they
which do hunger and thirst after
righteousness: for they shall be filled.
Blessed are the poor in spirit: for theirs is
the kingdom of heaven

Mark 9:35 If anyone wants to be first, he
must be the very last, and the servant of all.

¹The Tao Te Ching, attributed to Lao Tze dates from about 550 B.C.E. The Gospels, written by several authors, date from about 50 to 100 C.E,

- or is Brahman ²
Consciousness

CONSCIOUSNESS & C LIFE
" & C COSMOS

The power of the shaman
is to alter probabilities

MUSICAL SCALES

The **Pythagorean** scale is based on third harmonics, or "fifths".

Starting with a fundamental frequency C by adding successive fifths we get:

C,G,D,A,E,B Then subtracting one fifth gives: F,C,G,D,A,E,B

When arranged in the following order, we obtain the eight note **diatonic** scale:

C,D,E,F,G,A,B,C' Where t is a "full tone" and s is a "semi-tone"

t t s t t t s

If the process of adding successive fifths is continued, we get:

F,C,G,D,A,E,B,F#,C#,G#,Eb,Bb,F The "circle of fifths"

The twelve notes of this set, arranged in the order:

C,C#,D,Eb,E,F,F#,G,G#,A,Bb,B,C'

is called the **chromatic** scale in which all the intervals are semi-tones

The **Just Intonation** scale employs fifth harmonics ["thirds", t] as well third harmonics ["fifths", f]. The just intonation diatonic scale is constructed as follows:

C, D=2f, E=t, F= -f, G=f, A=t-f, B=t+f

The **Mean Tone** scale uses an altered fifth which is 22 cents less than the perfect fifth. Four such fifths in succession lead to a perfect third. C, G, D*,A*,E*=E

The **Equal Temperament** scale divides the octave into twelve equal semi-tones. The frequency ratio for the equal temperament semi-tone is the twelfth root of two = 1.05946, e.g., C=1, C# = 1.05946, D = (1.05946)², etc. The table gives the frequencies of the diatonic scale in the Pythagorean system [P], Just Intonation system [J], and equal temperament system [E]

	C	D	E	F	G	A	B	C'
P	520	585	658	693	780	877	987	1040
J	520	585	650	693	780	867	975	1040
E	520	584	655	694	779	874	982	1040

If the octave is divided into 1200 parts called cents, then an equal temperament semi-tone = 100 cents. Using cents, comparing the just intonation and equal temperament scales:

	C	D	E	F	G	A	B	C'
J	0	204	385	498	702	885	1088	1200
E	0	200	400	500	700	900	1100	1200

MYSTERY AND PUZZLE

Primitive peoples looked on their world as a Mystery: The hidden, unexpected and unknown were inextricably mixed with the visible, regular and predictable. With millennia of experience, people changed and began to look on the world they had inherited as a puzzle: Most of the pieces were available, how to fit them together was understood, the borders were in place, but the picture was not yet completed. While the Mystery was vast, uncontainable, and open in countless directions, the puzzle is large but measurable, contained within finite dimensions, and obedient to known laws. Only in each being one amalgamate, were the Mystery and the puzzle the same.

Over millennia the religions of mankind have attempted various constructs to explain parts of the Mystery and make the whole more comprehensible. In the West, some of these constructs bounded the Mystery, became dogma, and gradually lost the power of the Mystery to inspire. In the East, some of the constructs remained open but only sat in wonderment before the Mystery, venerating its power, but leaving it unexplored. Then came Science. Science chose a middle path. It would not sit in wonderment, it would actively explore. It would not close to a dogma, it would remain open. But to explore effectively, Science unconsciously violated its commitment to openness and created a dogma, not a dogma of fact, but a dogma of method. not an ontological dogma, but an epistemological dogma. The result was the replacement of the Mystery by a puzzle.

While the puzzle may be solved by the scientific method, the Mystery is too great to be encountered by any single methodology. The Mystery asks "What is time". The puzzle boxes time into Minkowski's space-time and answers the Mystery question by telling us, "Time is what is measured by a clock". So even with the puzzle completely solved, only a small portion of the Mystery will have been explored.

It is fitting that we transcend our inclinations to monism, to single dogmas, single methodologies, single epistemologies, [ein Volk, ein Reich, ein Führer] and be open to alternatives. This requires that we develop criteria by which methodologies can be authenticated.¹ Gödel's incompleteness theorem has demonstrated that there exist valid propositions beyond those deducible logically from axioms and postulates. The history of discovery has repeatedly illustrated the value of intuition. There are countless cases of synchronicity and serendipity opening up new vistas. No longer should we delegate the approach to the Mystery to any single religion, methodology, or epistemology. It will require maturity to sustain paradoxes and contradictions until resolved by deeper understanding. But then why do we keep insisting that the Cosmos be subject to our laws of logic?

¹This, of course, leads to an infinite regression. Criteria by which to authenticate the authenticating criteria, and meta-criteria by which to authenticate

LIBERTY VERSUS FREEDOM

Men are qualified for civil liberty in exact proportion to their disposition to put moral chains upon their own appetites. Society cannot exist unless a controlling power upon willfulness and appetite be placed somewhere, and the less of it there is within, the more there must be without. It is ordained in the eternal constitution of things that men of intemperate minds cannot be free. Their passions forge their fetters.

—Edmund Burke

Liberty has to do with the restraints of the collective. Freedom has to do with the restraints within the individual. However there is this Paradox:

Liberty ↑, the collective constraints ↓
Freedom ↑, the individual constraint ↑

That is, the less collective constraint, the more liberty;
but the more individual constraint, the more freedom.

- | | |
|----------|---|
| CASE I | Democracy: The collective constraints decrease to come into balance with individual constraint. Free individuals earn liberty.
Collective constraint ↓
Individual constraint ↑ |
| CASE II | Totalitarianism: The collective constraints increase to where the level of individual constrain is of no consequence. When liberty is entirely gone freedom becomes meaningless. Col ↑, Ind ↔ |
| CASE III | Revolution: Instability sets in with unbearable collective constraint and reduced individual constraint. Col ↑↑, Ind ↓ |
| CASE IV | Anarchy: Instability sets in with no collective constraints and no individual constraints. Col ↓, Ind ↓ |
| CASE V | Ant hill: Stability in which there are both intense collective and individual constraints. Col ↑, Ind ↑ |
| CASE VI | Organism: Stability in which collective and individual constraints merge and coordinate. Col ↑↑, Ind ↑↑ |
| CASE VII | Platonic Society: Individuals with total freedom, have total liberty.
Col ↓↓, Ind ↑↑ |

The Burke Balance applies
not only to general constraints
but to particular rights.

The liberty of "Freedom of Speech"
is first of all a misnomer

Liberty of Speech implies
Freedom of Speech, that is
Individual restraint.

Burke ^{underlined} ~~understood~~ what the Founding Fathers
took for granted, but which few Americans
understand today. [Including Justices
of the Supreme Court]

The Liberty-Freedom Paradox ^{external}

Liberty increases as ^{collective} restraints and control diminish

Freedom increases as ^{internal} individual restraints and control increase

THE GROANS OF AUGUST

Before the beginning of great brilliance, there must be chaos.

—Chinese Proverb

If only the converse of this proverb were true, "If there be great chaos, then there will be the beginning of brilliance," then I would feel reassured. I am speaking both personally and collectively. Certainly, there is great chaos and every attempt to impose order only increases the chaos. Every adjustment of the interest rate causes the stock market to plunge further. Every cease fire results in increased violence. Every belt tightening results in more wastefulness. It seems as though every anecdote *anecdote* enhances what it is supposed to limit. The world has turned upside down and cause seems no longer connected to effect. But where is the great brilliance? There seems to be less brilliance than ever. Or should we conclude that the same kind of brilliance that created this chaos is not going to get us beyond it. So perhaps it will prove best to step back and let the self organizing powers within the chaos take charge. Great brilliance may be just to pull out and watch while the chaos self evolves. So many butterflies are flapping their wings that what might work to effect a useful emergence is for one butterfly somewhere not to flap. Consequently, I have decided to do no flapping. Just sit on my zaffu and keep my no-thoughts to myself.

Another Chinese proverb states,

*Before a brilliant person begins anything great,
he must look foolish to the crowd.*

If the converse of this is true, "If you look foolish to the crowd, then you are a brilliant person beginning something great", then I am right on. I can easily look foolish to the crowd, I have had lots of practice. Several have told me my ideas are crazy. If this qualifies to make me brilliant then I will persist in what I am working on, but do no flapping. If the party line is not working, that does not mean just any alternative would work, but it does mean we must begin the search for valid alternatives.

ATHROISMATICS

[Update]

PARTS AND WHOLES

The whole = the sum of the parts Classical
 The whole > the sum of the parts Emergence
 The whole < the sum of the parts Chop Shop
 Two species of whole: Loop, Infinite regression
 Fallacy of "chalk circle" wholes , *excluded context*

NODES AND LINKS

The visible and the invisible
 Structuralism, The relations are more significant than the entities
 Link as road plus traffic, Traffic as vehicle plus cargo
 Carrier wave and modulations

LOOPS AND REGRESSIONS

Mutuality: duplex causality, duplex containment, duplex sustainment [symbiosis]
 Matroshkas
 Looped Matroshkas
 Matroshkad Loops

EX-- NIHILO

Symmetries and opposites
 Conservation laws
 Donuts: holes and wholes
 Uroborus

LOGICS

Aristotle and beyond
 Four Thought
 Logic and Topology

RULES AND BOUNDS

Rules and the auto-creation of bounds [generalizations of Gödel's theorem]

REPETITION, ITERATION, RECURSION

NECESSITY AND CONTINGENCY

Directed random, Iterated random

ONE DAY IN THE NEWS SEPTEMBER 4, 2001**ONTOLOGICAL WAR: "REAL WORLD" PROTESTED**

Demonstrators in Chicago target posh Chicago digs of the MTV show, REAL WORLD. This 'reality base' show presents an unrealistic and overly posh view of young Americans. "They are trying to sell us an image of our lives" say protestors. "And if you don't agree with that image you go to jail". "I was arrested for simply writing in chalk, "What is real?" on the sidewalk in front of the Real World Building said Nato Thompson. MTV officials in New York declined to comment.

PROTEST TERRIFIES SCHOOLCHILDREN

In Belfast, terrified Roman Catholic schoolgirls clung to their parents Monday as riot police held back crowds of angry Protestants trying to keep them from walking to school through their neighborhood. A Catholic mother was hit in the face with a bottle and hospitalized. Pupils from Holy Cross Primary School were ferried by Catholic run taxis past lines of police with helmets and shields while Protestants shouted curses and insults at them.

HOMELESS PEASANTS STARVING IN NICARAGUA

Global prices of coffee at the plantation level forced the foreclosure by central banks of coffee plantations in Los Milagros, Nicaragua. Peasants who had been paid \$1.48 [men], \$1.11 [women], and \$0.55 [children] per day agreed to stay on and work for rice and beans but were forced to leave, when there was no food for their families. They climbed over mountains to Matagalpa, the nearest city, where they waited in a park for help. The low level of prices due to worldwide competitive production is not reflected in the historic high prices at the consumer level.

U.S. RESEARCH TESTS LIMITS OF BIOLOGICAL WEAPON TREATY

The 1972 Biological Weapons Treaty forbids nations from developing or acquiring weapons that spread disease. In a secret program code-named Clear Vision the CIA built and tested a model of a Soviet designed germ bomb. At the same time Pentagon experts assembled a germ factory in the Nevada desert. These programs were to demonstrate the ease with which terrorists or a rogue nation could produce pounds of deadly germs. Some Clinton administration officials felt these experiments were in violation of the biological weapons treaty, but the Bush administration holds that the projects are fully consistent with the treaty. Tests are underway to make a more a deadly anthrax germ in order to develop effective counter measures.

CONSERVATIVES CAMPAIGN AGAINST ABORTION

Some 23 groups, including the Southern Baptist Convention, Phyllis Schlafly" Eagle Forum, Janet Folger's Center for Recaliming America, Roman Catholic groups, and Rev. D. James Kennedy of the conservative Presbyterian Church of America are raising funds for a TV advertising campaign to pressure the administration to fill the next Supreme Court vacancy with an opponent of abortion rights. "I can tell you this: There will never be another David Souter", says Folger.

1. SMOKE & MIRRORS, MANIPULATION AT WORK

2. RELIGION AT WORK

3. FREE MARKET AT WORK

4. NEW WEAPONRY AT WORK

5. AGENDAS AT WORK

ATHROISMATICS SOME PRINCIPLES

That which enhances will in time cross a watershed and become that which inhibits.
That which inhibits will in time cross a watershed and become that which enhances.

The oak contains the acorn and the acorn contains the oak,
but the oak is more than the acorn and the acorn is more than the oak.

A planck particle contains 10^{20} ^{protons} ~~baryons~~ masswise;
a proton contains 10^{20} planck particles sizewise

More-than-everything contains everything and
everything contains more-than-everything.

Every node is a set of nodes and links.
The **regression** of nodes creates **levels** of links.

There are two species of wholes: Loops and infinite regressions.

Tools, such as rules, allow the realization of only a portion of the system's potential.*

Rules not only delimit what activities may take place, but also create unintended boundaries.*

No system can self-realize its full content, much less its context.*

No system can understand or explain itself, and no system can know or fully realize itself. * [contrary to Socrates' injunction]

* cf Gödel's incompleteness theorem



Some Injunctions:

Mutuality must replace causality.

The law of the excluded middle must be transcended.

Four thought must replace compromise.

Causality must be severed from time sequence

PRELIMINARIES OF STRUCTURALISM

Structuralist Propositions:

Reality is not composed of things, but of relationships

Every object has both a presence and an absence

The total system is present in each of its parts [hologram, cell]

Synthetic a priori truths make perceptual truths possible*

Similarities are to be found ^{sought} in the differences rather than in the resemblances [p39-41]

Structuralism is concerned with the symbolic order [Brahman ?]

Structuralism de-emphasizes the individual

Structuralism would support "recognition"

Some Structuralists:

Jacques Lacan
Ferdinand de Saussure
Roland Barthes
Michel Foucault
Claude Levi-Strauss

{[* Whitehead's repetition is better than synthetic a priori truths]}

{[question of importance of utility vs meaning]}

definitions:

diachronic = historical

synchronic = a historical [would that mean cyclical?]

Beyond Structuralism

Only links exist

Nodes [things] are collections of links

Certain collections of links have sufficient "density"
to become visible. These collections we call things

THE WORLD TRADE CENTER PART I

"At 12:18 p.m. on Friday, February 26, 1993, a bomb exploded in the World Trade Center, collapsing walls, igniting fires, and leaving 50,000 workers and visitors gasping for air and stranded in darkness in the shafts of the 110 story towers. The explosion, which carved out a 200-foot-wide, five-story-deep crater in the lower levels, knocked out the tower's police command and central operations center, rendering the complex's emergency evacuation system useless."¹

"Ramzi Yousef was the mastermind of this February 1993 World Trade Center bombing which killed six people and injured more than a thousand. Ramzi Yousef & Co. were ready to use dynamite and a Ryder truck [to fulfill their objective] to spit in the face of Americanization-globalization and stomp on it, by using the system against itself".²

"Did he want a Palestinian state in Brooklyn? Did he want an Islamic republic in New Jersey? No, He just wanted to blow up two of the tallest buildings in America. He told the Federal District Court in Manhattan that his goal was to set off an explosion that would cause one World Trade Center tower to fall onto the other and kill 250,000 civilians. Ramzi Yousef's message was that he had no message, other than to rip up the message coming from the all-powerful America to his society"²

At his trial Ramzi Yousef said: "You keep talking about collective punishment and killing innocent people. . . You were the first one who introduced this type of terrorism to the history of mankind when you dropped an atomic bomb which killed tens of thousands of women and children in Japan and when you killed over 100,000 people, most of them civilians, in Tokyo with firebombings. You killed them by burning them to death. And you killed civilians in Vietnam with chemicals, as with the so-called Orange agent. You killed civilians and innocent people, not soldiers, in every single war you went to. You went to war more than any other country in this century, and then you have the nerve to talk about killing innocent people. And now you have invented new ways to kill innocent people, You have so-called economic embargo, which kills nobody other than children and elderly people, and which , other than Iraq, you have been placing the economic embargo on Cuba and other countries for over thirty-five years. The government in its summations and opening statement said that I was a 'terrorist'. Yes, I am a terrorist and I am proud of it. And I support terrorism so long as it was against the United States government and against Israel, because you are more than terrorists; you are the one who invented terrorism and are using it every day. You are butchers, liars and hypocrites."³

¹ From the book, SKYSCRAPERS, Black Dog Publishers, 1996 p 67

² From the book, THE LEXUS AND THE OLIVE TREE, Thomas L. Friedman, Anchor Books, 1999, p 402

³ ibid p 404

CREATIVITY: VARIATIONS ON A THEME

All creativity is a matter of variations on a theme, of what can be done varying certain parameters while holding others fixed; that is, freedom within constraints. This is true both in art and in science, and perhaps even in nature. For example, in music, the scales have fixed values, but the selection of the order and length of notes is left free to the composer. In the art of Japanese dress, the kimono and obi are fixed in form, but pattern and color are left free to the designer. But science as well as art conducts variations within a theme. The empirical method designs experiments with certain parameters fixed, others free to vary. The ultimate fixed constraints of science, however, are *consistency* and *reproducibility*. We may question whether even the cosmos itself, taken as a creation, is also but one variation of some theme.

Some examples of variations within a theme:

In the case of film, there are the parameters of plot and setting. Film makers who vary the setting have kept the plot fixed [plot of horse opera = plot of space opera], but those who work with a fixed setting vary the plot [soap operas].

As for cities: Those with a random street plan, constrain building style, as in Santa Fe, New Mexico, a city whose streets were laid out by straying cattle, but which restricts all buildings to the uniform style of *adobe*. But most American cities, permit total freedom within the constraint of *orthogonality*. That is, the street plan must be rectangular and all buildings, whether skyscrapers, warehouses, or residences, must be boxes. But within the orthogonality constraint, architects may be creative. [But one or two Frank Gehry type non-euclidean structures per city might be allowed.]

Astrophysicists have adopted the policy that only theories subject to the Cosmological Principle are permitted. This principle is the assumption that terrestrial experience is both universally valid and is sufficient to explain the cosmos.

Politicians like to "frame the issue". This means the public has freedom to take sides once the sides have been defined. But the public is constrained from participating in the framing process.

In the above examples we are the ones who decide on the constraints and the zone of variability. But nature also sets up constraints and zones of choice. What worlds are possible within the theme fixed by the values of the fundamental physical constants? We experience a world in which there is both necessity [determinism] and choice [zone of freedom]. But ultimately variations on a theme become a *tradeoff*. For example in a given optical system, the resolving power times the field of view is constant. There is no freedom of field size without running into a resolving power limit. Thus the product of necessity and options is also constrained.

$$N \times O = K$$

The theme, N , is still fixed, but the variations, O , are limited by the equation $O = K/N$. From this a law of creativity emerges:

If you want to do this, you will have to cut back on that.

LETTER TO JUDY

Hi Judy,

I am happy to report that the stars are steady in their courses and that the sun will rise tomorrow on time. If that be the cause of loss of confidence, let any doubts concerning this be put to rest.

The waning of confidence seems to have causes of a more terrestrial nature. And, as you have noted, these causes were operative before 9/11. However, the impact of the events of 9/11 has been to accelerate some trends, make others irreversible, and initiate even others. The aftermath has shown that Americans are a compassionate and generous people, sacrificing and caring for those immediately affected. But for the immediate present we are also perplexed and bewildered. This tragedy has new components that will not let it be reduced to a second Pearl Harbor, or to a traditional form of war. Modern technology has for the first time in human history given the few power over the many, the powerless power over the powerful, and the voiceless a forum in which to be heard. Good and evil have become scrambled and our disagreements with one another reflect our confusion. And certainly this is not an environment in which confidence can take root.

But why was this evident to some before 9/11? Perhaps this is the essence of your question. In my thinking distrust of high places goes back as far as the Kennedy assassination and was reinforced during the Vietnam days. Some feel as though the government itself has been slowly hijacked over 35 years and no longer speaks for the American people either abroad nor now at home. The irregularities of the last election created a cloud over government and fiscal policies were adopted that further eroded confidence. Now we perceive either widespread incompetence or ignorance or perhaps both. Our intelligence agencies goofed; a department labeled, Department of Defense, proved not to be such. It is a department of offense and was [and still is] useless in defending the homeland.

There are three battles to be waged: Against terrorists, against terrorism, and the repair of great psychological damage. For the first, fly the flag, root out and bring Al Qaeda to justice; for the second, drop the unilateralism and create an international community of nations each policing its own terrain for terrorists; and for the third, what FDR said is now more true than when he said it during the great depression: "We have nothing to fear but fear itself." Let us have the courage of those firefighters who went into the ruins to rescue.

I believe in that old Buddhist aphorism, "We will make it only when we all make it together."

Albert

"The best defense is a good offense"

- Donald Rumsfeld Secy of "Defense"

Perhaps our definitions of defense differ.

Subj: **What's been going on in the stars?**
Date: 9/26/01 10:16:48 AM Central Daylight Time
From: JLockwoodPurcell@cahners.com (Lockwood Purcell, Judith (TeleCom Group))
To: alw1871@aol.com ('alw1871@aol.com')

From Today's NY Times: Spending Weakens as Confidence Wanes

In the 10 days before terrorists struck the World Trade Center and the Pentagon, consumer confidence plunged more sharply than at any time since the last recession.
<http://www.nytimes.com/2001/09/26/business/26CONF.html?todayshadlines>

For several weeks preceding the attacks, life seemed to be spinning out of orbit, we had haywire behavior from people at work, a "downer" feeling all over. Is there something astrologically or astronomically that could be influencing current events? Feels like a wave we are all swimming against.

Love,
Judy

----- Headers -----

Return-Path: <JLockwoodPurcell@cahners.com>
Received: from rly-zd05.mx.aol.com (rly-zd05.mail.aol.com [172.31.33.229]) by air-zd04.mail.aol.com (v80.30) with ESMTP id MAILINZD44-0926111648; Wed, 26 Sep 2001 11:16:48 -0400
Received: from smtpdenver.denver.cahners.com ([206.26.89.202]) by rly-zd05.mx.aol.com (v80.21) with ESMTP id LRELAYINZD54-0926111630; Wed, 26 Sep 2001 11:16:30 -0400
Received: by bindenexc001.denver.cahners.com with Internet Mail Service (5.5.2650.21) id <TVSAR7LN>; Wed, 26 Sep 2001 09:16:29 -0600
Message-ID: <C055E113D8A0D411B20D00805F6F1F1302680C2B@bindenexc001.denver.cahners.com>
From: "Lockwood Purcell, Judith (TeleCom Group)" <JLockwoodPurcell@cahners.com>
To: "alw1871@aol.com" <alw1871@aol.com>
Subject: What's been going on in the stars?
Date: Wed, 26 Sep 2001 09:16:28 -0600
MIME-Version: 1.0
X-Mailer: Internet Mail Service (5.5.2650.21)
Content-Type: text/plain;
charset="iso-8859-1"

VARIATIONS ON A THEME

There are several recent books,¹ authored by physicists and cosmologists, that hold that our universe is exactly what it is because of the values of particular numbers, called the constants of physics. The inference is that if the values of these numbers were different, even slightly different, then the world itself would be completely different. [chaos theory again], or might not even exist. This same theme is picked up in the so called "Anthropic Principle" which holds that the fine tuning of the values of these numbers is why we are here. With other values life would never have happened. In all, the conclusion is that the values of these constants are a necessary condition for the universe, the galaxies, the stars, the elements, life, and for us to exist and be what we are.

But are these values sufficient? Do they constitute a sufficient condition for all to have happened as it did? In other words, given the **template** created by these values, did what happened have to happen? Was it necessary that the template be "filled" or realized in just the particular way it was? Were there other options? The template being partially filled in different ways? Portions of the template never realized? While the numbers template defines or limits what *might* happen, does it state what *must* happen?

If the numbers template is both necessary and sufficient, then the universe is totally determined and it will follow a single scenario to its conclusion. If, on the other hand, the numbers template is only necessary, then there would be a *set* of possible universes any one of which could occur. [Or possibly many members of the set could occur]. Lack of sufficiency then infers that the universe is, at least in part, open ended. There is a portion of the universe that permits options, choices, and selections. The numbers template creates a group of primary "nodes" and the rules by which they must be linked, but that is all. It leaves open ended and free the innumerable patterns in which the nodes may be assembled so long as the rules are followed.

If this be the case, then Creation, the Creation of Brahma the Creator, is like all the other creations, those of artists, architects, mathematicians, and even of theoretical physicists and cosmologists. Creation and creativity is a matter of variation on a theme. Brahma's theme is annunciated in the values of the fundamental constants, but multifarious variations within his theme are possible. The architect can design many buildings but within the constraints of the strength of building materials. The mathematician can create many theorems but within the constraints of logic. The cosmologist can create many cosmologies but within the constraints of observables. It might appear that what Brahma had in mind when he created the world was to discover how many variations on his theme would occur. He was not interested in one show and was bored with repeated reruns. Brahma loved variety, all the variations that were possible on his theme. [Self Reminder: Next time alter the theme so that even more variations will *occur*]

¹ Books with the thesis appearing in the title itself include: Just Six Numbers by Martin Rees, and The Nine Numbers of the Cosmos by Michael Rowan-Robinson

ONE DAY IN THE NEWS: OCTOBER 2, 2001

PENTAGON CALLS FOR NEW FOCUS ON DEFENSE

Esther Schrader, Los Angeles Times

Washington—The Pentagon called yesterday for making homeland defense as high a priority as girding for conflicts abroad, reflecting a shift in attitude toward its mission after the Sept. 11 attacks on the United States. The agency fails to address specifically how to accomplish that aim. It now calls for a greater role for the National Guard and Reserves in protecting U.S. interests at home, beefed up intelligence and surveillance efforts to fight terrorism, and for moving carrier battle groups, ground forces, battleships and airplanes out of Europe and into the Persian Gulf and Asia to protect evolving U.S. interests abroad. The Pentagon defers most specifics on defending U.S. territory to the Office of Homeland Security, the Cabinet-level agency recently created by President Bush. The Pentagon's most useful role in protecting the homeland will be to combat threats before they reach American shores. Overall the shifts echo Rumsfeld's concept of a more agile military.

The so called Department of Defense is seen for what it is, a Department of Offense. It has no design for defending the lives of Americans at home, only for defending the interests of certain corporations abroad. What should have been of the highest priority, defending America, was subverted by handing over a branch of the government to those with financial interests abroad.

HUMBOLDT BRUTALITY CASE SENT BACK BY HIGH COURT

Bob Egelko, San Francisco Chronicle

Washington—The Supreme Court directed a federal appeals court yesterday to reconsider whether Humboldt County protesters who were subjected to pepper spray during an anti-logging demonstration can sue law enforcement for excessive force. Earlier a federal judge dismissed the case saying no reasonable juror could find that the officers acted unreasonably. But the U.S. Court of Appeals in San Francisco disagreed and ordered a retrial, saying the officers inflicted needless pain on unresisting protesters. But yesterday the Supreme Court set the ruling aside, and told the appeals court to take another look at the case under a new standard. That new guideline—which favors police—was established earlier this year by the high court in the San Francisco case. [The demonstrators had chained themselves together at the office of a pro-logging congressman. Sheriff's deputies and Eureka police applied cotton swabs doused in pepper spray to the corners of the protester's eyes. Those who then resisted were sprayed in the face at close range.]

Increasingly the role of police in America has been shifted through court decisions from protection of the public to suppression of the public. The police forces are being subverted to play the role of Brown Shirts to carry out the policies of vested interests that have bought control of the Congress and Courts through the system of campaign support and repayment per the instructions of lobbyists. While protests may still be permitted under the Constitution, in practice they are being criminalized.

TIME TABLE I MAXIMUM VALUES

$$\Delta M = (\alpha \mu S)^{1/2} ; \Delta R = (\alpha \mu S)^{1/2}$$

	$t = R/c$	$\Delta(t, T)$	$T = GM/c^3$	$\Delta(T, \tau)$	$\tau = (G\rho)^{-1/2}$	$\Delta(\tau, t)$
PLANCK	-43.268366	0	-43.268366	0	-43.268366	0
$\Delta(PL, B)$	$(\alpha \mu S)^{1/2}$		$(S/\alpha \mu)^{1/2}$		$(\alpha \mu)^{1/2} S$	
BARYON	-23.026889	S	-62.382770	$S^{3/2}$	-3.348949	$S^{1/2}$
$\Delta(B, D)$	0		S		$S^{1/2}$	
DARK	-23.026889	0	-23.026893	0	-23.026887	0
$\Delta(D, *)$	$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$	
STAR	-2.785412	0	-2.785412	0	-2.785412	0
$\Delta(*, U)$	$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$	
UNIVERSE	+17.456065	0	+17.456065	0	+17.456065	0
$\Delta(U, K)$	$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$		$(\alpha \mu S)^{1/2}$	
KOSMOS	+37.697542	0	+37.697542	0	+37.697542	0

$$19.114404 = (S/\alpha \mu)^{1/2}$$

$$19.677940 = S^{1/2}$$

$$20.241477 = (\alpha \mu S)^{1/2}$$

$$39.355881 = S$$

$$39.919417 = (\alpha \mu)^{1/2} S$$

$$59.033821 = S^{3/2}$$

TIME TABLE II MEAN VALUES

$$\Delta M = S^{1/2} ; \Delta R = S^{1/2}$$

	$t = R/c$	$\Delta(t,T)$	$T = GM/c^3$	$\Delta(T,\tau)$	$\tau = (G\rho)^{-1/2}$	$\Delta(\tau,t)$
PLANCK	-43.268366	0	-43.268366	0	-43.268366	0
$\Delta(PL,B)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(\alpha\mu)^{1/2} S$	
BARYON	-23.026889	S	-62.382770	$S^{3/2}$	-3.348949	$S^{1/2}$
$\Delta(B,D)$	$(\alpha\mu)^{1/2}$		$S/(\alpha\mu)^{1/2}$		$(\alpha\mu S)^{1/2}$	
DARK	-23.590427	0	-23.590427	0	-23.590427	0
$\Delta(D,*)$	$S^{1/2}$		$S^{1/2}$		$S^{1/2}$	
STAR	-3.912486	0	-3.912486	0	-3.912486	0
$\Delta(*,U)$	$S^{1/2}$		$S^{1/2}$		$S^{1/2}$	
UNIVERSE	+15.765454	0	+15.765454	0	+15.765454	0
$\Delta(U,K)$	$S^{1/2}$		$S^{1/2}$		$S^{1/2}$	
KOSMOS	+35.443394	0	+35.443394	0	+35.443394	0

$$19.114404 = (S/\alpha\mu)^{1/2}$$

$$19.677940 = S^{1/2}$$

$$20.241477 = (\alpha\mu S)^{1/2}$$

$$39.355881 = S$$

$$39.919417 = (\alpha\mu)^{1/2} S$$

$$59.033821 = S^{3/2}$$

$$0.563537 = (\alpha\mu)^{1/2}$$

$$38.792043 = S/(\alpha\mu)^{1/2}$$

TIME TABLE III MINIMUM VALUES

$$\Delta M = (S/\alpha\mu)^{1/2} ; \Delta R = (S/\alpha\mu)^{1/2}$$

	$t = R/c$	$\Delta(t,T)$	$T = GM/c^3$	$\Delta(T,\tau)$	$\tau = (G\rho)^{-1/2}$	$\Delta(\tau,t)$
PLANCK	-43.268366	0	-43.268366	0	-43.268366	0
$\Delta(PL,B)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(\alpha\mu)^{1/2} S$	
BARYON	-23.026889	S	-62.382770	$S^{3/2}$	-3.348949	$S^{1/2}$
$\Delta(B,D)$	$\alpha\mu$		$S / (\alpha\mu)$		$\alpha\mu S^{1/2}$	
DARK	-24.153963	0	-24.153963	0	-24.153963	0
$\Delta(D,*)$	$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$	
STAR	-5.039560	0	-5.039560	0	-5.039560	0
$\Delta(*,U)$	$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$	
UNIVERSE	+14.074843	0	+14.074843	0	+14.074843	0
$\Delta(U,K)$	$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(S/\alpha\mu)^{1/2}$	
KOSMOS	+33.189246	0	+33.189246	0	+33.189246	0

$$19.114404 = (S/\alpha\mu)^{1/2}$$

$$19.677940 = S^{1/2}$$

$$20.241477 = (\alpha\mu S)^{1/2}$$

$$39.355881 = S$$

$$39.919417 = (\alpha\mu)^{1/2} S$$

$$59.033821 = S^{3/2}$$

$$1.127074 = \alpha\mu$$

$$38.228807 = S / (\alpha\mu)$$

$$20.805014 = \alpha\mu S^{1/2}$$

TIME TABLE IV MIXED VALUES

$$\Delta M = (S/\alpha\mu)^{1/2}; \Delta R = (\alpha\mu S)^{1/2}$$

	$t = R/c$	$\Delta(t, T)$	$T = GM/c^3$	$\Delta(T, \tau)$	$\tau = (G\rho)^{-1/2}$	$\Delta(\tau, t)$
PLANCK	-43.268366	0	-43.268366	0	-43.268366	0
$\Delta(PL, B)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$(\alpha\mu)^{1/2} S$	
BARYON	-23.026889	S	-62.382770	$S^{3/2}$	-3.348949	$S^{1/2}$
$\Delta(B, D)$	0		$S / (\alpha\mu)$		$(S/\alpha\mu)^{1/2}$	
DARK	-23.026889	$\alpha\mu$	-24.153963	$(\alpha\mu)^{3/2}$	-22.463352	$(\alpha\mu)^{1/2}$
$\Delta(D, *)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$\alpha\mu S^{1/2}$	
STAR	-2.785412	$(\alpha\mu)^2$	-5.039560	$(\alpha\mu)^3$	-1.658338	$\alpha\mu$
$\Delta(*, U)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$\alpha\mu S^{1/2}$	
UNIVERSE	+17.456065	$(\alpha\mu)^3$	+14.074843	$(\alpha\mu)^{9/2}$	+19.146677	$(\alpha\mu)^{3/2}$
$\Delta(U, K)$	$(\alpha\mu S)^{1/2}$		$(S/\alpha\mu)^{1/2}$		$\alpha\mu S^{1/2}$	
KOSMOS	+37.697542	$(\alpha\mu)^4$	+33.189246	$(\alpha\mu)^6$	+39.951691	$(\alpha\mu)^2$

$$19.114404 = (S/\alpha\mu)^{1/2}$$

$$19.677940 = S^{1/2}$$

$$20.241477 = (\alpha\mu S)^{1/2}$$

$$39.355881 = S$$

$$39.919417 = (\alpha\mu)^{1/2} S$$

$$59.033821 = S^{3/2}$$

$$1.127074 = \alpha\mu$$

$$38.228807 = S / (\alpha\mu)$$

$$20.805014 = \alpha\mu S^{1/2}$$

THOUGHTS ON OCTOBER 8, 2001

As many have said, the world changed on 9/11. And I find that my thoughts have been wondering in strange and unfamiliar places ever since. One change that 9/11 effected was to open us up to alternatives that were invisible on 9/10. This I would say is good, but only if we are prepared to risk the alternatives. However, what has happened in the intervening three weeks is that we have chosen to travel once more the road that for centuries has returned us to the same pit from which we started. We either lack the courage or imagination to risk an alternative. Or perhaps it would be more accurate to say that leadership, those who make the decisions for us, lack the courage and imagination to do something untried. For there seem to be thousands of plain citizens who have articulated realistic alternatives that would allow us to escape the loop of revenge and counter revenge. We are again faced with the ancient Confucian paradox that those who want and seek power are the least qualified to exercise it.

The "first war of the 21st century" is a "framing war". A fight over who will define the issue for the public's frame of mind, and thus permit other pertinent issues to be downplayed or ignored. In other words, how to simplify a complex tangle of conflicting historic trends, interests and motives in order to seize the moral high ground for a particular agenda and thus compel God to choose sides. Or in cowboy terms, how to create a frame that makes us the good guys and them the bad guys. The Bush Administration is drafting the frame: Freedom and Peace against Terrorism. Osama bin Laden is seeking the frame: Islam and Justice against American Imperialism. A neutral, but moral, alien from Venus or Mars would agree and disagree with both frames and wonder why the avoidance of the real issues. The same aliens know that all frames are not only wrong, but obstruct and preclude understanding.

Two days after the 9/11 assault on the American homeland, President Bush established a cabinet level department of Homeland Defense. Most of us thought we already had a department of defense. But we have learned that this so called Department of Defense can do little to protect the lives of Americans either at home or abroad. The real department of defense turned out to be the fire and police departments of various communities. In these departments were the heroes who gave their lives defending America. But what is this multi-trillion dollar Department of Defense that we have been supporting for decades under the illusion it could defend us? If we look at some of the weapons it has bought to defend us we find: B-52H Stratofortresses, range 8,800 nautical miles carrying cruise missiles; B-1B Lancers, range 5,600 nm with bombs, cruise missiles and cluster bomblets; B-2 Spirit stealth bombers, range 6,300 nm with cruise missiles and guided bombs. And C-17 Globemaster cargo planes, range 3,225 miles, which can carry three Apache helicopter gunships, 100 paratroopers, or a mobile 155mm howitzer. Do these ranges sound like these weapons were designed to defend the home land? Rather it appears, the bombers and globemasters were designed to command distant parts of the globe. We have been deceived. We do not have a Department of Defense. We have a Department of Colonialism.

Imperialism

There seem to be some things that Osama bin Laden knows that American leadership has either forgotten or not grasped.:

First, Colonialism.

History has shown that the peoples of the colonized parts of the world have overwhelmingly rejected colonialism, from the Minute Men of 1776 to the Viet Cong of 1976. The take over of foreign lands and peoples by Western powers which began with Portuguese explorers in the 15th century, reached its peak in the 19th century, but was then eroded by two great wars fought between colonial powers in the first decades of the 20th century. Following World War II global unrest and uprisings forced the colonial powers except for the Soviet Union and the United States to abandon colonialism. The United States sought indirectly to replace the French in Viet Nam and the Soviets sought to sovietize Afghanistan. Both actions were part of a struggle for global dominance, (colonialism, that is) labeled "The Cold War".¹ Both colonial wannabees were defeated, not by each other, but by indigenous peoples. Finally, in 1991 the peoples in the Soviet Empire from the Baltic to Central Asia threw off Soviet colonialism leaving only the United States to continue to play the colonial power game, specifically with the Gulf War and numerous "incidents" in such places as Granada, Panama, and Somalia. While American neo-colonialism is more economic than political, like the old colonialism, it requires military presence in far parts of the globe. But indigenous peoples resented a return to colonialism in any form and it did not require an Osama bin Laden to create the awareness that there was a new generation of exploitation at hand. The United States formed a tentative and fragile alliance with local rulers, but the peoples of the region stand ready to oppose all who represent foreign dominance and exploitation. It is this wide spread resentment that bin Laden hopes to mobilize to his own purposes by morphing it into a jihad.

Kipling's
"Great Game"

Second, Random Warfare

The first war of the 21st century is not a war. Sun Tzu and Clausewitz would not recognize it. From the days of Alexander's phalanxes to America's nuclear aircraft carriers military might has resided in the concentration of force. The rules of war were for force to meet force head on to decide outcomes. But over the years there were annoying exceptions to the rules. Such as, General Braddock upset by "cowardly" Indians shooting from behind trees instead of facing off man to man. Or, German outrage in three wars at the cowardly franc-tireur, civilian snipers shooting at troops from windows and roof tops. Although guerilla groups have plagued legitimate warriors for centuries, they never were sufficiently effective as to force a change in the rules of war—UNTIL NOW. And what has happened to render the guerillas sufficiently effective? Technology! With modern technologies the few can now overcome the many. A "cowardly" handful with modern weapons, nuclear, chemical, biological, can destroy the multitude. And as was demonstrated on 9/11, the handful did not need to make or own the weapons, they could convert the technology of their enemies into weaponry. Box cutters converting commercial aircraft into guided missiles. But the technological dimension is not the only dimension that has scrapped the traditional rules of warfare. The chess board of traditional war has been replaced by the spin of the roulette wheel and the random toss of dice.

¹ Soviet colonialism flew the banner of world communist revolution. American colonialism flew the banner of free markets and anti-communism.

What today we are calling cowardly is not hiding behind trees or shooting from windows but skill in exploiting the properties of randomness: Attacks at random times in random places with random weapons against random targets. The result –random and paralyzing fear, with the overriding question, ‘What must we change in order to fight a random war’? To fight such a war, we have to ask: Who is the enemy? Where is the enemy? What is he up to? Who is helping him? The answers are again random. He could be anybody, He could be on the plane, in the ballpark, in the supermarket. He could be part of a terrorist network based in Afghanistan, agent of a drug cartel in Columbia, member of an disaffected local minority, or just plain wacko. He could be laying land mines in golf courses, launching computer viruses, spraying anthrax, fitting out a truck bomb, putting together a nuclear weapon. And who is helping him? A network of laundered transfers from difficult to trace anonymous accounts. Or he might just be acting alone on his own funds. How do we protect against the randomness of all of these possibilities? We try to create targets by saying if the enemy resides in your country then you become the enemy. This might allow us the satisfaction of employing our traditional weapons in the traditional way, but does very little in the war against randomness, except possibly to create more enemies. Military leadership is beginning to glimpse the nature of random war. The Secretary of Defense, Donald Rumsfeld, now says that neither the air war nor a ground war will put a quick end to terrorism. “This war may take a long time.”² So it may turn out that the solution to terrorism is not war.

stealing a
pipeline

It may be that the first war of the 21st century will not be a religious war as bin Laden hopes, but will be the war that finally puts an end to colonialism. A war demonstrating that history cannot be defied and that is not in the interest of any nation, even a “super-power”, to dictate unilaterally to the world. I do not wish to conclude that Osama bin Laden will have two powerful allies on his side—the power of randomness and history itself. But if we do not understand these factors he might coopt them to his advantage. We should remember,

“Whom the gods would destroy, they first make mad with power.”

² If it turns into a religious war, a jihad, as bin Laden wishes, it could take a very long time. We should recall that the last religious war lasted 30 years [1618-1648] and some of those before that [e.g. the Crusades] lasted for centuries.

REASON, FEELING, AND RECOGNITION

To suspect the basic canons of thought, to doubt that logic is without error, and to distrust reason itself as a reliable guide to validity alienates us from the foundations of our culture. To fall back on feelings and emotions, on our desires and aversions, on our hopes and fears, is to reject the world that reason and science have built. But when viewed in toto the weltanschauung structured by reason and logic seems as unreliable as any world view built on fear and wish. Then if we are to reject both reason and feelings, to what do we have access that can guide us to validity?

There is, besides reason and feeling, our third epistemology, the one called intuition. Which can be defined as the awareness of something that we have always known, something planted or wired into our very being, known without having been experienced. Such knowledge, not derived from personal experience is not remembered or recalled but is recognized. We may speculate whether this knowledge comes from previous lives, as many believe, or from access to a collective mind belonging to all humanity, or somehow to our being mentally isomorphic to the cosmos.

I would like to submit that it is recognition that underlies reason and logic. Logic cannot establish the validity of the premises it assumes, but it can manipulate valid premises to derive other valid premises. Much of the development of scientific knowledge can be traced to an intuitive insight or "hunch" on the part of the researcher. Logic and reason did not produce the insight, but were necessary afterwards to communicate the insight to others.

Using "vertical" and "horizontal" metaphorically, we may say that the vertical communication between the cosmos and the human mind is per recognition, while the horizontal communication of knowledge between humans is per logic and reason. This, having been said, by no means rules out the roles of feelings and hopes in both vertical and horizontal communication, but is to warn us that unless recognition is at the root of the knowledge, skepticism is justified. And the beauty of recognition is it can always be used as a personal test, even in the absence of laboratories and libraries.

RECOGNITION IS THE VALIDATOR OF REASON

Modes of Validation:

- Repetition - Induction
- Reason - Logic - Deduction
- Feeling, hunch, intuition, recognition
- "Signs" Give us a sign
that which violates probability
wcf. synchronicities

Ways of Knowing

- Experience - Sensory - Induction
- Reason - Logic - Deduction : Patterns
- Hunch, intuition, recognition
Dreams, Feelings, Revelation
Pipe Line to God
- Signs

Only a portion
of a pattern can
be concealed

Are there Ontological spin Doctors?
hiding much ontologically from us? - why?
or is this a projection?

Myron C. Smith

Myron Chawner Smith, 81, Malibu, Calif., died Oct. 8, 2001, at his home.



Mr. Smith was born in Independence, the eldest son of architect Henry C. and Mabel Smith. After graduation from the University of Kansas City,

he pursued a master's degree at Brown University under a Rockefeller grant. He taught engineering in the U.S. Navy's program at Princeton University during World War II. He sought a doctorate in physics at Brown University, designing a research project in underground sound absorption that brought recognition in The New York Times. He received a Ph.D. in 1950. He married Betty Mallet of Independence, a fellow Brown Graduate School student, in 1948. He moved to the Los Angeles, Calif. area in 1956, where he lived and worked the rest of his life. He was a physicist on the staff of Rand Corporation in Santa Monica, where he presented and published papers on the navigational systems of satellites. He also worked for IBM Corporation at Westlake Village, Calif. He enjoyed choral singing and playing the keyboard. He sang tenor in the Independence Messiah Choir at the Community of Christ Auditorium for many years. He also enjoyed traveling to Greece in the exploration of Greek sites and their mythology.

His survivors include his wife of 53 years, Betty; his son, Marston, and his wife, Betty, Los Angeles area; his daughters, Shelley Schubert and Shonti McKee, and her husband, Charles, Los Angeles area; his brother Lawrence Smith, and his wife, Louise, Independence; his six grandchildren, Rebecca Schubert, Hampton Smith, Hellie Schubert, Hallic Smith, Hunter Smith and Kendra McKee, all of the Los Angeles area.

A memorial service is being planned. The family requests that in lieu of flowers, contributions can be made to The Myron Smith Music Scholarship Fund, P.O. Box 1006, Malibu, Calif., 90265.

Indep. Examiner 10-13-01



Myron Smith

Myron Smith, 81, a Malibu resident of 36 years, died at home in his sleep on Oct. 8 of complications from Parkinson's disease.

Born in Independence, Mo., Smith was educated at the University of Kansas City and Brown University, where he received a Ph.D. in physics in 1950. During World War II, he taught engineering in the U.S.

Navy program at Princeton University.

In 1948, he married Betty Mallett, a fellow Brown Graduate School student.

Smith moved to Southern California with his family in 1956, where he was a physicist at RAND Corporation and later worked for IBM Corporation. He presented and published numerous papers on the navigational systems of satellites and underwater sound absorption. He had a passion for music and choral singing, and loved to explore the ancient sites of Greece with his wife.

Smith is survived by his wife of 53 years, Betty, his brother, Lawrence Smith, his son, Marston Smith, his daughters, Shelley Schubert and Shonti McKee, and six grandchildren. The family requests in lieu of flowers, contributions be made to: The Myron Smith Music Scholarship Fund, P.O. Box 1006, Malibu, CA, 90265. The fund will assist in the music education of children. A memorial service is being planned.

Malibu Times

October 19, 2001

Dear Betty,

I was saddened to learn of Myron's passing. Though we did not see each other often in recent years, it was always a pleasure to visit with him. His perspectives on the world were always refreshing. He seemed to take in stride all the vicissitudes of our times and yet hold a steady course guided by timeless moral and esthetic values. He was definitely in the world but not absorbed by it. His dedication to Quaker stillness and Baroque music were a rudder and sail that carried him safely through many turbulent waters. And I should add, also inspired the rest of us. By displaying alternatives, he gave much to us in times when the world was being homogenized to the least common denominator. And alternative views, such as he represented, not only help us find deeper meaning in daily things, but hold the key to survival itself.

My prayers and meditations are with you in these days of blessed introversion as we each treasure the glimpses of truth that come to us with the passing of those near us. I regret that my physical condition will prevent my joining with you on October 27th, but be assured that I shall be with you in spirit.

Much love,

A handwritten signature in cursive script, appearing to be the initials 'AL'.

THE WISDOM OF TREES

There is more wisdom in the tree outside my window than in all the halls of government and board rooms of business. The branching of limbs and roots, is for establishing the alternatives and redundancy essential to survival, and to prevent monopoly that would surrender life to the power of central control. Even the central trunk is not a control center, but a distribution channel. And the leaves follow the adage: "From each according to his ability, and to each according to his needs." Though both political hierarchies and trees are constructed with levels, the former is a pyramid of power and control, the latter a vajra of diversity and endurance. In a tree administration is for coordination and distribution not for acquisition of power. While there is profit and growth it is distributed and shared by every portion of the tree, not reserved exclusively for any part. And the business of a tree is to carry out the will of Heaven, succoring all of life by being a bridge between ground and sky, worshiping both Earth and Sun,



Synecdochic to a tree, in life we are each leaves. In old age we are the leaves of autumn. Some of us dry up and turn brown, others retreat to yellow, or compromise into orange, and still others turn a brilliant red. It is my wish that as I age I might become one of those fiery reds. As my chlorophyllic usefulness ends may I continue to serve by awakening beholders to the essence of red that resides in each of us, the warmth of compassion, the bonds of sharing, and the glory of sacrifice.

ONE DAY IN THE NEWS: OCTOBER 20, 2001

CITY FEARS THREATS AFTER VOTE

Days after the city council voted to ask elected leaders to "break the cycle of violence" and stop bombing Afghanistan as soon as possible, some worried the city would become a target. The 5-0 vote Tuesday has prompted hundreds of calls and emails to city offices, many threatening boycotts.

How quickly the enemy becomes our fellow citizens who have a different approach from ours for defending us against the real enemy.. Ordinarily we will reluctantly tolerate different views and dissent, but in times of stress our true nature emerges. As de Tocquville pointed out in 1830, Americans replaced the tyranny of a British King with their home grown tyranny of intolerance of non-conformity. If you disagree, go back where you came from.

ANTIWAR SENTIMENT MOUNTING AMONG MUSLIMS

Muslims who are concerned about civilian casualties and the possibility of a wider war aimed at toppling regimes in Iraq and other Islamic nations are increasingly antiwar. Islamic opposition to the Afghan campaign is hardening. Such religious authorities as Shaykh Yusuf Al-Qaradawi of Qatar has called on Muslims world wide to resist the U.S. campaign in Afghanistan. AL-Qaradawi had previously condemned the terrorist attacks on America as a perversion of Islam.

We are attempting to form a coalition of states, including Islamic states, to fight terrorism. It seems that the best way to do this is to avoid emulating the terrorists by taking innocent lives. It is incredible that this vital point has escaped the decision makers in Washington. Following the present policy there will be no coalition, only more terrorists.

FDA BANS PRIVATE CIPRO IMPORTS

The Food and Drug Administration announced Friday that it would halt private imports of the antibiotic Cipro in an effort to curb illegal internet sales of the drug used to treat anthrax. Because some of the Web sites are based overseas, the FDA has asked the U.S. Customs Office to stop the shipments. "You may be getting a counterfeit product, a subpotent product, or sugar pills" said Tom McGinnis, FDA director of pharmacy affairs. In Canada, officials announced that they would override Bayer A.G.'s patent and order another company to make the drug. The Bush Administration said it would not do this.

There are two kinds of laws: those protecting all people promoting justice and those protecting special interests. In view of the fact that the cost of Cipro in the United States is now 30 times what it is in Europe and in much of the rest of the world, the FDA announcement is not to promote health benefits for the American people, but to protect the prices charged by those who are profiteering.

THE CHANGED WORLD

We have moved from a Cold War system to a globalization system. And in this new networked, integrated world without walls, a pair of tweezers in the hands of the wrong person can turn an airplane into a missile, which if it hits the right building, can set off dominos that destabilize the whole world. Being poor or uneducated no longer means being weak. This new system is an incredible force-multiplier that can super-empower evil people so they can destabilize a super power. —Thomas Friedman

As usual, Mr. Friedman has seen into the heart of the new balance of power. Now thanks to technology, the few can take on the many as has never before been possible in human history. But even more disturbing, the many with all their sophisticated weaponry cannot strike back. The game of power is no longer played on a military chess board, but by random strikes against random targets, with random weapons, at random times. Dice have replaced chess.

ABORTION CLINICS WELL-ACQUAINTED WITH TERRORISM

Over the years 150 clinics have been bombed or torched, seven people have been killed, and in 1998 clinics received the first threats of anthrax. On October 12 this year, in the middle of a national crisis, homegrown haters orchestrated a multi-state anthrax scare targeting more than 100 clinics. They sent envelopes with a return address from government offices marked :Time Sensitive-Urgent Security Notice-Open Immediately" Some of these envelopes, filled with powder that has -so far- not been anthrax, contained messages from "The Army of God"

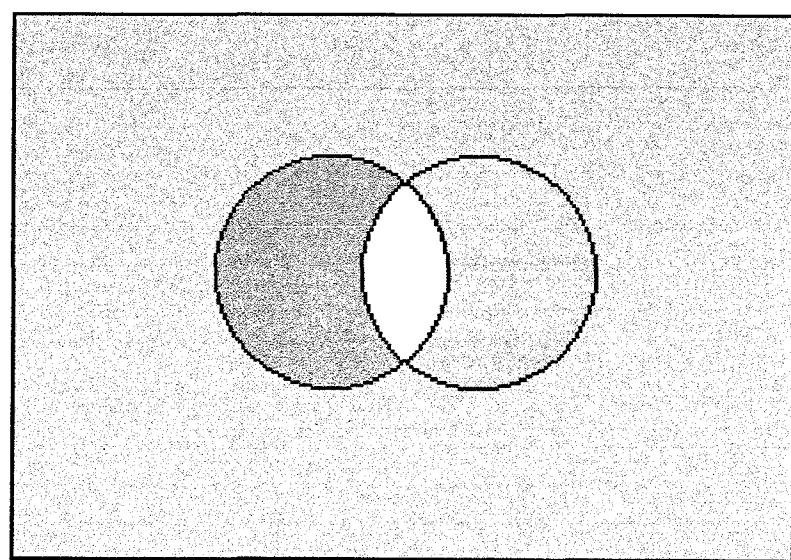
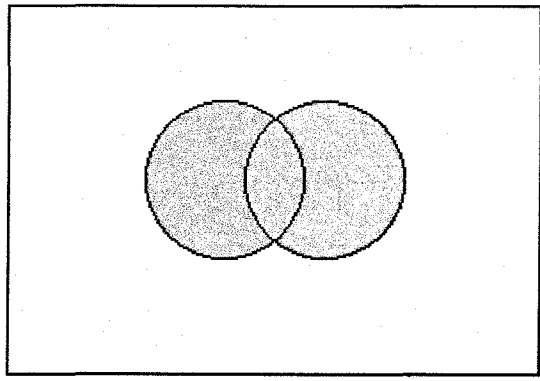
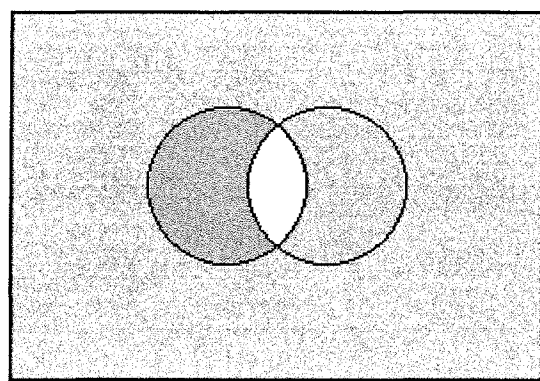
-Ellen Goodman

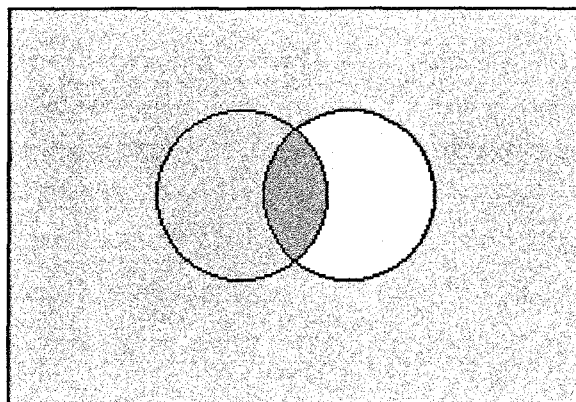
In attempting to force the present situation into a good guys/bad guys cowboy world view, there is the problem created by our disagreements over who the terrorists are. If the terrorist is carrying out my agenda, then he is not a terrorist, but a freedom fighter. Only those guys having a different agenda from ours are terrorists. So we shall not really be fighting terrorists or terrorism but fighting selective terrorists and carefully defined terrorism. What adds to the confusion is that so many of the current bad guys were once ours, were even trained by us.

FLAGS IN CHURCH POLARIZE CHRISTIANS

The American flag has replaced the cross as the most visible symbol in many churches across the country since the September 11 terrorist attacks. This hasn't set well with some Christians who say that faith transcends nationality so the flag has no place in sanctuaries. But others say the show of patriotism is a much-needed comfort. Since the tragedies, the Pledge of Allegiance has replaced the Nicene or Apostles' creeds at some worship services. Music has included patriotic hymns such as Irving Berlin's 1939 show tune, "God Bless America". "It's been a time of comforting, and the flag has been part of that", says one pastor. On the other hand, the position of the Orthodox Church was stated by the priest at St. Seraphim Orthodox Cathedral in Dallas. "The flag doesn't belong in the church. We have a higher allegiance and recognize a higher authority.

The secularization of religion in America has not been limited to its subversion to materialism and consumerism. Replacement of the traditional symbols of worship with temporal idols and ikons is the latest step in its secularization. . Now that Caesar's emblems have replaced the Cross, will the worship of Caesar be next? This paradoxical inversion from the days of ancient Rome now has it that Christians themselves are "persecuting" those refusing to worship Caesar. Dissent and non-conformity have become the dangerous Sins. If there turn out to be too few Muslims to burn at the stake, dissenting Christians will make up the shortage.





THE BLUE REPRESENTS THE TRUE

THE YELLOW REPRESENTS THE FALSE

**THE GREEN REPRESENTS THE INCLUDED MIDDLE
THAT WHICH IS BOTH TRUE AND FALSE
THE VERGE**

**THE RED REPRESENTS THE EXCLUDED CONTEXT
THAT WHICH IS NEITHER TRUE NOR FALSE
THE CUSPS**

FOR TRUE/FALSE WE CAN SUBSTITUTE
RIGHT/WRONG, GOOD/EVIL,
INSIDE/OUTSIDE, NECESSARY/SUFFICIENT
BEFORE/AFTER, CAUSE/EFFECT
EXISTS/NOT EXISTS

SOMETIMES HOW IT SEEMS

In one sense it seems that Osama bin Laden and Bush, the Taliban and the Pentagon, al Quaida and the CIA, are all getting their orders from the same invisible command center. Or at least all of them have agreed on the scenario to be acted out and the parts they will play. This invisible command center may be physically fictitious but it is psychologically real. Life repeatedly presents us with menus, a set of choices we may make, and though the menu given to bin Laden is not identical with the menu given to the Bush Administration, the two menus have some common entries, and both parties after looking over the menus selected the **polarization** option. The option which reads: "You are either with us or against us".

This particular option has the property of oversimplifying any situation. It eradicates the need to consider other implicit and significant issues that complicate the picture. It allows dismissal of side effects by defining success not in terms of viable solutions but in terms of us winning and them losing. This is the option of choice of those who have difficulty with thinking in terms of final outcomes and long range consequences and who are comfortable only with modeling everything in terms of a win/lose game.

The convenience of the polarization option lies in that has many historical antecedents. Precedence is our conventional guide, even in those circumstances where it has never worked. It is a well trodden path and the familiarity of the subsequent menus and follow up options renders decision making [and blame passing] easier than would be the case on an untrodden path. But in these times "in which everything has changed", which call for innovative initiatives and the exploration of alternatives, it is fair to say that the polarization option is the selection of the dullard ^{or} and the coward.

To replace precedence: If the option selected leads to subsequent menus with increasing options then you know you have chosen correctly. If the option selected leads to subsequent menus with diminished options, [as is the case with the selection of the polarization option], then you know you have chosen incorrectly.

After selecting polarization, then
we select war! etc, etc. the path
is both deterministic - no options and well trodden

Without polarization

we would not have targets

Our "Defense" establishment
would be seen for what it is

- The Department of Imperialism and Colonialism

Polarization: The path leading to determinism - no options
∴ no decisions necessary cf. Bush Sr. and
the Gulf War.

THE MODERN SOCIAL STRUCTURE

The historic four fold social structure of Prince, Priest, Warrior, and Merchant has evolved to today's Government, Media, Military, and Corporations. This, however, is only the visible or apparent structure. The real structure is invisible, but is still four fold, with the following levels. .

First, behind and above all of the four visible components—government, media, military, and corporations— is "THEY", the hidden political and financial board of directors who are in global command. They dictate the cycles of growth and recession, peace and war, and control international flow of moneys and commodities.

Second, are the visible administrators of each country, the POLS, who take orders directly or indirectly from THEY. This category includes the elected or appointed officials (and in some cases hereditary rulers), and the vast army of civil servants and bureaucrats who are part of governments and militaries. These are all political want-to-bees who aspire to move up the visible ladders, including those at the top who know of the existence of THEY first hand and have hopes by diligently following orders to someday be coopted as members of THEY.

Third, is the HERD. This category includes the vast majority, maybe 95% of the world's population. In former times these were the slaves, serfs, peasants. Today they have advanced somewhat and have become citizens or subjects having limited rights and partial access to certain portions of the global pie, becoming the so called middle class. The HERD always has to be controlled in order for society to be possible at all. In the past control was maintained by subjective class systems based on religions or mythic authority. (Examples: Hindu caste system, Socrates' Royal Lie). Today control is achieved for the most part by spin, the science of psychological manipulation, but also by ^{even} ~~by~~ illusions of achieving wealth and access as by winning the lottery. But the basic control is, and always has been, the HERD must be kept busy working for a living. However, when all else fails, bayonets are ready to do the job.

Fourth, is the group that might be called the FRINGE. This group stands outside the metabolism of society but has made all the contributions that have enhanced the metabolism of society. The troglodyte who had enough spare time from hunting to learn how to control fire, his descendants who later had the spare time to invent the wheel, develop writing, fabricate a plow, make music, paint pictures, erect temples, discover medicinal herbs, solve triangles, make engines, electric motors, structures that could fly, land on the moon. The FRINGE had somehow to find the time and the freedom from the demands of the existing social order to create, discover, and invent.

However, THEY recognizes the FRINGE as being quite useful for its agendas. Consequently THEY have supported the FRINGE in exchange for new weapons of control—physical, biological, economic, and psychological, and have seduced the FRINGE into accepting THEY's definitions of success.

THEY: Control : Power per Wealth , Wealth per Power
Eschew Celebrity

POLS: are the lackeys of THEY [hidden sycophants]
Allowed a degree of power
all the celebrity (fame) they want

HERD: Obey, Work, Consume, and HEIL, allows some wealth

FRINGE: The Arts, Sciences
Religion, Philosophy
Literature
Vision, Morals
Compassion - Spiritual Energy

Technology - Part FRINGE
Part THEY

THEY need the FRINGE for technology
also recruit some FRINGERS for Membership in THEY
e.g. - Bill Gates

Oct 8, 2004

They, [the Establishment], also fears the Fringe.

Innovation is disruptive of the Establishment's Interests

∴ The Fringe must be co-opted [eg to produce new weapons]
or suppressed.

RETURN TO TIME

Time is a subject to which I repeatedly return over the years. I feel that culturally we have swept much undifferentiated experience of change under the single rug we call time. We have reduced all species of change to one kind of change—the change of position, i.e. the change produced by motion. And our concept of time is derived from particular properties of motion. This motion type of time, called Chronos by the Greeks, has become the exclusive time of Western culture, the time of Aristotle, Newton, Minkowski, and Einstein. While it had its beginnings in Greek thought, it also had rivals. Before a cultural consensus was achieved, there were heady disputes about the nature of time such as those between Herakleidos and Parmenides. And there were persistent dissidents like Zeno who speculated on alternative relations between events and change. The refusal of the Greek dissidents to grant exclusiveness to Chronos was based on their reverence for another kind of time they called Kairos. While chronos was purely quantitative, kairos preserved the qualitative dimensions of time. Another ancient culture, the Hebrew, also made this distinction, that between historical time (chronos) and qualitative time (kairos), described in Ecclesiastes 3:1-8.¹

A residue of the difference between chronos and kairos is found today in the difference between linear time and cyclical time. Linear time consists of the counting of the ticks of the clock or the number of days, years, centuries, , eons. But what is being counted? In each case some cycle, ^{or} some return to a previous place. This leads to the notion of cycles within cycles within cycles [or wheels within wheels with wheels...] as being closer to what is being measured by clocks, calendars, Carbon 14, isotope ratios, Hubble parameter, etc. than something that is purely linear. Kairos maintains that quality emerges from the superposition of the cycles. When certain cogs on a wheel return to meet with specified cogs on another wheel the quality of the moment is affected—a resonance effect. But the Mayans saw this more clearly than the Greeks. They created specific wheels corresponding to cycles of different length that allowed them both chronos [long count] and kairos [short count].

But our experience of change other than that caused by motion—such as, growth, decay, mutation, evolution, etc.² may involve more parameters than either the Greeks or the Mayans perceived, and go beyond both the linear and the cyclical. For example, non-localization in quantum mechanics disputes the $v \leq c$ time inferred limitation on information exchange, allowing instant transfer over any distance. If the distance factor is removed from velocity, then all of our traditional motion derived time becomes ^{but} a special case.

¹ The Jews have two new years days, the first of Nisan, the first month, and Rosh ha-Shanah. These speak to the existence of two kinds of time. Rosh ha-Shanah is a celebration of the beginning of time, a linear time, while the yearly cycle begins with Nisan and springtime.

² Of course, all of these changes may be attributable to different kinds of motion, hence to special cycles contained within traditional time.

ITERATIONS OF POLYGONS AND STARS

While geometry basically involves continuous parameters such as length, angle, area, etc., some important geometric properties are functions of discrete parameters. In particular, many of the important properties of polygons and polyhedra and the stars that may be constructed on them are functions of discrete variables, such as the number of sides, edges, vertices, etc. This essay inspects some functions of discrete parameters associated with polygons and their two dimensional stars. In the following only regular polygons and stars with number of sides > 4 are considered.

By extending the sides of a polygon to points of intersection, polygonal stars may be constructed, and by connecting the points of intersection larger polygons of the same number of sides as the original may be formed. These two steps can be iterated to generate a set or family polygon-stars. Alternately, by connecting the vertices of a polygon, inner polygonal stars may be constructed whose sides create smaller polygons similar to the original polygon. These steps may also be iterated to create a family of polygon-stars. A polygon-star family will be determined by n , the number of sides of the polygon, and by q , the number of vertices or sides skipped in the star constructions.

Since the extended sides of a triangle or square do not intersect, no iterated families of polygon-stars may be constructed on them. The first polygon permitting a polygon-star family is the pentagon. Both pentagons and hexagons support a single family of iterated polygon-stars. Heptagons and octagons support two families, nonagons and decagons three families. In general the number, N , of distinct polygon-star families that may be constructed expressed in terms of the number, n , of sides of the original polygon is given by:

$$N = (n-4)/2 \text{ for } n \text{ even and } N = (n-3)/2 \text{ for } n \text{ odd}$$

It can be shown that if r is the radius of inscribed circle of a polygon or star and R is the radius of the circumscribed circle of the polygon or star, then

$$\frac{r}{R} = \frac{\cos((q+1)\varphi)}{\cos(q\varphi)}$$

where $\varphi = 180^\circ/n$ and q is the family order number, $q = 0$ for polygons, $q = 1$ for stars constructed from one side or vertex skipped, $q = 2$ for two sides or vertices skipped, etc. Polygon-stars are thus a two parameter family, functions of n and q .

An interesting question arises. For any given value of n , when, if ever, will a polygon that is a member of one family coincide with a polygon that is a member of a different family? Stated mathematically, for two different families with numbers q_1 and q_2 , and with u and v both integers, when will

$$\left\{ \frac{\cos((q_1 + 1)\varphi)}{\cos(q_1\varphi)} \right\}^u = \left\{ \frac{\cos((q_2 + 1)\varphi)}{\cos(q_2\varphi)} \right\}^v$$

Or putting this metaphorically, considering the initial polygon as a fundamental frequency, do any of either the 'harmonics' or 'sub-harmonics' of one sequence coincide with those of another sequence, that is, when do resonances occur?

SOME DECEMBER THOUGHTS

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Today we are celebrating the attack on Pearl Harbor which occurred 60 years ago this date. I wonder why we celebrate the beginning of a war instead of its ending. Everyone knows December 7, few know the date the war ended. Once there was a brief exception, We celebrated Armistice Day, November 11, 1918, the end of World War I. But that did not last long. We changed the celebration of that date from the ending of a war to the honoring of veterans. It is fitting we honor those who make sacrifices, but I find it a paradox for a nation that proclaims to hate war to celebrate the start of wars instead of their termination.

I also find it paradoxical, when we are repeatedly told that everything changed on 9/11, that it has become politically incorrect to question why politicians and the military are doing everything the same old way. Why hasn't their thinking changed? They are trying to force unprecedented situations into obsolete molds.. The random nature of terrorism cannot be forced into opposing lines of trenches or besieged cities just so the traditional practice of warfare can be employed. Instead of facing up to the new nature of the challenge and designing a way to oppose it, current leadership has put its energies into an attempt to bend the new challenge to fit old solutions. And it is not working. Furthermore, removal of Osama bin Laden, Saddam Hussein, Arafat, and their successors will not put an end to terrorism. The genie is out of the bottle and CVN's, F16's, gun ships, tanks, or troops cannot put him back in. The department of defense is not constituted to protect America against this kind of threat. Yes, many things have changed since 9/11, but not our way of thinking.

While reviewing the happenings of the past few weeks, four points about the nature of terrorism should be made:

- 1) Technology has disrupted traditional power balance. Now a handful can successfully take on an entire nation.
- 2) The random nature of terrorism has rendered the traditional force-against-force type of warfare ineffective in opposing it.
- 3) Terrorists are not motivated by greed, aspiration to power, or "winning". They are motivated by hatred. This leads to irrational and unconventional attacks.
- 4) Since terrorists are suicidal, they have little to lose physically against what they can destroy physically. And they have little to lose morally against what those who combat them can lose.

The imbalances noted in points 1) and 4) have made traditional security and stability procedures obsolete. Pretending we are in a conventional war, rather than confronting this new and different species of threat with the innovative thinking and action it requires, is inviting disaster. Those leaders and institutions that were made obsolete on 2001-9-11 are the ones who are in a war. They are waging a war against having to change, a war to preserve obsolete thinking and business as usual. But the price for the survival of ^{their} inflexibility is not one humanity can be expected to pay.

Terrorists have in common with all extremists the inability to cope with complexity. They must simplify all issues into black and white, them and us. They have lumped all Americans into the same package of being exploitive, arrogant, imperialists. They ignore the reality of millions of Americans who are compassionate sharing people dedicated to world justice and peace and the fact that we contribute billions of dollars each year to other countries to raise their standards of living. But for their agenda to work, the world must be polarized. The jihad must be all of us against all of them. No neutrals, no non-combatants, no innocents.

To counter the terrorists' attempt to polarize the world into a them and us, we have responded by attempting to polarize the world into a ^{us} them and ^{them} us. The result has been a cooperative effort in polarization. In order to fit terrorism into the traditional patterns of conventional warfare, where force directly encounters force, U.S. leadership had to lump entire nation states and terrorists into the same package. In order to supply targets for our global weaponry systems (CVN's, 8800 mile range B-52H Stratofortress bombers etc.), and give them a role to play, sovereign states such as Afghanistan, Iraq, Syria, etc. were equated to terrorist cults, ignoring the fact that a country that may contain a dozen terrorist cells also contains several million individuals who have nothing to do with terrorism. The logic behind this is as irrational as is the fanaticism of the terrorists. In fact, our us/them policy coincides exactly with their policy of a global jihad against the United States.

It is well known that in order for conflict even to be possible there must first be some agreements, agreements on the rules of war so to speak. The agreement that has been reached by both sides in this terrorism war is that there is to be global polarization in order to exclude any alternative solutions. Both sides have agendas that would be thwarted by alternative options. So you are either with us or against us, you are not allowed to be neutral and if you choose to criticize the polarization you will automatically be classified as one of them.

This has been the ultimate triumph of logic based on the law of the excluded middle.

With the masks removed and the contenders unveiled, the world is now in a war between the supporters of the madness of arrogance and the supporters of the insanity of hatred. The rest of us are not allowed to be neutral. Our role is to be collateral damage.

*The type of leadership that has created the present world crisis,
is not the type that can solve it.*

THE CULTURE OF TECHNOLOGY

Recently the CEO of a major corporation announced that he plans to contribute \$150,000,000 to either Stanford or Harvard to establish an institute for the study of the impact of technology on politics and culture. Which university receives the award will depend on his subsequent evaluation of their respective approaches. We must salute this CEO for his recognition of the importance of the role of technology in creating change in our society, not only changes that are intended, but also the side effects, the unintended and sometimes hidden changes.

While technology had its beginnings in the creation of tools to expedite the various tasks humans did in order to survive, it later came to compete with its past achievements to find ever better solutions to do the same things. Then came a major shift, technology started to create things that had never before been needed but to which humans became quickly addicted.. And now it has reached the point where, "The new version will supply everything you ever needed –until the next version comes out." Both technology and human addiction have switched from technology per se to technology as innovation. Today it seems more logical to consider technology as having become a culture, rather than being just a change agent within a culture.

Indeed, Technology [now capital T] has its own imperatives. It has become life like, seeking to grow, to diversify, and to fill every niche. It seems to have acquired the attributes of an intelligence in that it is highly motivated and self willed. And Technology no longer seems concerned with serving humans, but in using humans to effect its own agendas. In these times when we have options, Technology has brainwashed us into always opting for more Technology, even when of doubtful use to humans.

And what direction is Technology taking? Cutting edge Technology, such as robotics and artificial intelligence, is intended not only to supplement human capability but to take our place. As Jastrow put it. "The evolutionary function of carbon life will prove to have been the creation of silicon life." How is it that humans have unwittingly allied themselves with a power that seeks to replace us? Perhaps it is because in our assiduous drive to create power [unser drang nach Macht] we have lost sight of the fact that the control of power rarely remains in the hands of its creator.

Perhaps this is not all bad. It could be that this is evolution's way to create a species that can transcend the reptilian brain, for humans seem hopelessly trapped in their Jurassic past. So we should condemn Luddites not for opposing loss of jobs to machines, but for standing in the way of evolution itself.

Oct. 8, 2004

I a basic conflict:

The Establishment vs Innovation
Technological Innovation is threatening to
the establishment's fiscal and control agendas

The Silicon Valley collapse was engineered
by the establishment.
(after Bill Gates + Co. had to was
be admitted to its defeat)

VARIATIONS ON A THEME OF GÖDEL

Everything is a special case

The theorems of Gödel, Turing, and Chaitin are epistemological theorems. Theorems about limitations on knowing. A basic question is: Might these theorems also be ontological theorems? If so, what would their implications be?

1) The universe is not a single Kingdom. There would be no single set of rules [laws of nature] valid throughout the universe. Every rule and set of rules has a limited domain of validity, which cannot be the domain of the whole. [What about the paradox implied by this rule regarding itself ?] This invalidates such assumptions as the Cosmological Principle and the Perfect Cosmological Principle. It brings into question the relativistic assumption of a "proper time", a single time for the entire universe. All the pieces of the jigsaw puzzle do not make one picture, [Completeness infers inconsistency]. There may be several pictures possible from a portion of the pieces, [Consistency infers incompleteness]. Some pieces may belong to more than one picture. And some pieces may not fit anywhere.

2) Elements belonging to one part would not necessarily fit, be compatible with [cf. matter and anti-matter], nor be consistent with elements of other parts. Nor would diverse parts be able to communicate or even be aware of one another. It is conceivable that diverse parts could occupy the same space and time and co-exist without mutual awareness.

3) Phenomena that may occur regularly in one part of the universe would be uncommon or impossible in a different part of the universe. The meaning of *part* is not to be interpreted solely as a spatial part or a temporal part [different ages] but also includes scalar parts, harmonic parts, differences resulting from frequencies, linkages and other parameters.

4) The non-universality of any rule would support the creation and preservation of variety. No order or structure would be universal. There would be different dimensions, different forces and forms of energy, different periodic [and non-periodic] tables, different organizations resembling what we call life, different consciousness and different intelligence. [and different numbers ?]

But even Gödel's incompleteness theorem, which is an example of a class of structures that are auto-limited, [structures whose rules delimit realization of full potential], is a special case and not universally valid. .

Are Gödel's incompleteness theorems

⇒ There cannot be ^{just} one picture of the whole?

Ontologically: Is the whole inconsistent [our term]
or one?

While epistemologically, representations cannot be one
[i.e. the whole cannot be
consistently represented
by one picture]

SOME DECEMBER RAMBLINGS

The sky is a December sky, unlike the sky of any other month, overcast with gray clouds so heavy they droop to rest on the crests of the hills. And a few tall evergreens stand in bold contrast, not defying the clouds but complementing them. Both the clouds and the trees seem joined in some celebration that a human can only vaguely sense. And here and there on some scattered maples are a few red leaves marking the change of seasons that is taking place.

As I watch the trees I feel their contentment and composure. They radiate, or should I say, share their self assurance. Perhaps it is a property of all members of the plant kingdom that they can *be* without moving about and can *function* without having continually to go to some other place. It feels they have found in stillness and silence what we seek in motion and noise. Trees and humans live in different spaces. We live in the space of motion, and our sense of time derives from change resulting from movement, speed, and acceleration, –linear change. The trees live in a space of forms, and their sense of time derives from changes that take place in form, –cyclical change, seasonal change. Indeed, the seasons are their kingdom, not ours. We can only passively watch, but they gladly share their celebrations with us. And for the most part trees seem unconcerned with their location in our space of position and movement. A sacred grove only exists in form space, but it may be projected onto many places in our space.

And suddenly, there is a sign in the heavens. A flock of egrets flying overhead in a beautifully symmetric V. Birds must dwell in both motion space and form space, there is movement yes, but there is also such grace in the forms they collectively create. And now the gray mists move slowly along the crests of the hills and change form as they move. Clouds too must exist in both spaces. At this moment the trees, the birds, the mists, and the hills all seemed tuned to some transcendent consciousness that is beyond human grasp.

Why is it, when all nature goes together, that only man chooses to “go it alone”? Seeking, not to belong, but to dominate.

The place-space / form-space dichotomy
may be more basic than the mind-body dichotomy

What is a "sign"?

It is a synchronicity, a coming together of several journeys,
not foreseen, but bearing meaning.

See also Scraps, 2000, #77, #78

THE IMPROBABILITY CHANNEL PART III

The "formal age" of empirical science may be said to have begun with the publication of Francis Bacon's inductive canon. [Novum Organum] in 1620. Scientific laws were to be established on the basis of the number of observations of the repetitive occurrence of an event or by consistent reproducibility of a result in the laboratory. Since Bacon there have been some epistemological modifications to his concept of induction. Principal among these has been the introduction of the statistical nature of so called "laws". This modification was required in order to incorporate the implications of quantum mechanics. Modified induction allows statistical validity in the face of negative instances, which is to say that probabilistic propositions or laws cannot be falsified, only rendered less probable. Statistical validity in replacing classical induction has replaced the concept of "*truth*" with the notion of "*a probability of one*".

Elementary probability theory tells us that the probability of repetition of an event equals,

$$P = k^n$$

where k is the probability of occurrence of a single event and n is the number of repetitions that occur without an interruption. For example, in the case of tossing a coin, $k = 1/2$ [heads or tails] and n is the number of times heads is thrown without a tail occurring.[or vice versa] The inference of this is that for any event that repeats unvaryingly for large values of n , k must be equal to one. Otherwise P tends to zero as n increases. From this it can be inferred that the events in the natural order that unvaryingly repeat over and over possess no alternative but $k = 1$. Such events either belong to a part of the cosmos that is rigidly deterministic; or they are part of a highly improbable sequence that occurred throughout a certain length of time.

Consider the case where k is a very small number. That is, a great number of options are possible. The greatest probability for the occurrence of such an event is $n=1$. [The non-occurrence of such an event has the probability of one, i.e. $n=0$]. The inference is that the more variety and options involved in an event, the more remote its occurrence. [to say nothing of its repetition]. Knowing that a very large number of conditions must be met for the existence of life, we must conclude that its occurrence is highly improbable, unless of course there is some unknown built in parameter that limits the number of arrangements open to a large set of variables.

All of this has been predicated without its embedment in time.

In essence, induction predicates validity on the number of observations of the occurrence of an event. Most commonly, this *validity number* is the total number of independent observations of an event that give a consistent result. The validity number may be taken as the product of the number of occurrences of an event times the number of ^{distinct} observations of the event. Falsification is concerned with another number, the number of exceptions.

Basic questions that arise in the such an approach include: What is an event? What is an observation? What is meant by independent? and What results should be considered as satisfying the criteria labeled , “expected”. These questions have been extensively discussed by many authors, but what is of interest beyond the repetitive and reproducible are the “fringe” cases that may possess high validity in spite of having a very low validity number, that is, those occurrences that may be valid but are extremely rare. How are these cases to be evaluated, in particular what degree of validity is to be assigned to a single occurrence of a unique event? Here the epistemological use of stochastics requires supplementing.

If, when a certain number of improbable events occur, and through some similarity they form a recognizable *pattern*, then, although each event is improbable, the pattern itself may acquire statistical validity. The problem reduces then to “what is the difference between a statistically established *law* and a statistically established *pattern*” First, the occurrence of events indicating the existence of a law must be quite frequent while the occurrence of those events constituting a pattern may be quite rare. Second, the structure of a pattern may be of a more general or abstract nature than the structure of what we commonly consider to be a law. However, the similarities must be readily recognizable in order for there to be a pattern. Third, and most important, the specific incident of an event belonging to a pattern must possess some extremely improbable feature. In fact, paradoxically, it is the very improbability of the feature that supports the events validity! We can then assert, the validity basis of a law lies in the high *probability* of its events; while the validity basis of a what we are calling a pattern lies in the high *improbability* of its events.

One approach to constructing a bridge between time and meaning would be to postulate two worlds each occupying the same space but each operating at its own characteristic frequency. A slow universe and a fast universe, so to speak. [The communication engineers’ FDMA, Frequency Division Multiple Access]. Jung has said that there are no such things as “accidents”. When what we call an accident occurs, our world momentarily transfers command to the other world . The other world takes over and dilates time and leisurely adjusts causal sequences so that when compressed back to the clock speed of our world the events appear acausal and simultaneous, i.e. a synchronicity is created.

It appears that the “other”, or “spiritual” realm, speaks to us through the improbable, while the physical world speaks to us through the probable. However, the improbable does not falsify that which has been inductively established, it only temporally interrupts it. Nor does the probable falsify the improbable. Highly improbable is not the equivalent of false.