

# **PHILOSOPHY**

Each archetype must wind through endless ways,  
Enact itself in countless plays,  
Before Brahma can ever know  
what can be done within his theme,  
and raise the curtain to reveal  
awaiting worlds for his next dream.  
All has been said and said before.  
So what is there to say?  
Except to say it once again  
in some less opaque way.

UNIQ01.W52

DISK:EPIONTOLOGY

April 26, 1994

# The Glory of Uniqueness

of 91-#83  
INWHITE.PG-1  
WINSHIP & UNIQUENESS

*There is one glory of the sun, and another glory of the moon, and another glory of the stars:  
for one star differeth from another in glory.*

I Cor 15: 41

In the age of science our focus is directed to the commonalities that appear to underlie the phenomena of experience. We seek to make generalizations from our experience, looking for fundamental laws that govern the behavior of the universe and its contents. We significate the processes of stellar and bio evolution and try to predict their outcomes. We attempt to formulate the archetypes that script the patterns and processes that unfold in the world and speculate on their eschatological 'omega point'. The driving force behind this epistemological approach is a **monistic** world view. The universe is **one** as the etymology of the word declares. Not only does our science seek grand unified theories, but our religions insist there must be **one** God, **one** faith, **one** people, [And our politics, **ein** Volk, **ein** Reich, **ein** Fuhrer]. However, since the pluralistic nature of phenomena cannot be ignored, the monistic worldview must resort to declaring what is significant in the world to be the commonalities in its processes and patterns, for the commonalities are **one**, while the differences are many.

Our monistic worldview celebrates the winner because the winner is **one** while the losers are many. The monistic worldview institutes orthodoxy and its derivative heresy. There must be **one** correct or superior way, the others are to be eschewed or obliterated. The truth must be like a pole, not like a tree having many branches. And certainly not like a forest of many trees (or even poles). Finally, there must be **one** superior race, religion, gender.

But what if Brahma created the world, not to see how it would end, but to enjoy the myriad variety that it could produce? What if it is not the commonalities and generalizations, but the variety and uniqueness that is of importance? What if the significant is not the theme itself but the possible variations on the theme; not the similarities, but the peculiarities; not the Boolean intersect, but the join or the join minus the intersect? How would this worldview change our institutions and lives?

UNION

Perhaps we would look not for **the** solution, but for the totality of solutions, not for **the** answer, but for the totality of answers. Perhaps we would honor all those who contended and did not win. Honor those who were rejected, disdained, oppressed, ignored, ridiculed, persecuted, burned at the stake, crucified. Celebrate all the branches that have been pruned, all the alternatives not selected, all the paths left unexplored, all the facets ignored. Celebrate the wisdom of each species, the uniqueness of each life, the glory of each star.

all the  
causes  
lost

PHIL

OVR

# ● TABLES FROM THE HANDBOOK OF BRAHMA

HUMAN INITIATIVE	HUMAN PERCEPTION	REALITY
EPISTEMOLOGY	ONTOLOGY	METATAXIS
HISTORY, RECORDS	DIALECTICS	METADIALECTICS
EMERGENCE	NEXT CONTAINER	BRAHMAN

IN THE BEGINNING WAS SAT OR BRAHMAN			
COSMIC	ARCHETYPE	PLOT	TRUE
GLOBAL	TEMPLATE	SCRIPT	VALID
CULTURAL	MYTH	SETTING	IMPORTANT
PSYCHOLOGICAL	MANIFESTATION	CAST	INTERESTING
PHYSICAL	EVENT	ACTION	PLEASURABLE

FACETED BRAHMAN MULTIPLEXED				
PERCEPTION!	ACCESS!	SELECTION!	INFLUENCE!	INFLUENCE!
sensory	epistemology	potential!	thought	miracles
recognition	belief	ruts	prayer	
		believe	hope	
			action	
reality				

BRAHMAN			
STATES	PATHS	FIELDS	LEVELS
0 DIMENSIONAL	1 DIMENSIONAL	2 DIMENSIONAL	3 DIMENSIONAL
STABLE	DYNAMIC	OPEN	DEPENDENT
UNSTABLE	RATES	BOUNDS	INDEPENDENT
ADD OUR INTERACTION: CAUSE; IS; OUGHT; DESTINY			

## BRAHMA TABLES II

Four interlocking evolutions take place governed by an algorithmic or Pythagorean ground. This ground is extracted from the Sunyata by Varicona and made SAT by Akṣobya. It is the source of the basic homogenizing dialectics, recalling all that exists to return to primal oneness. The basic counter dialectics driving to variety or complexity are TAO. All worlds emerge at the interface of SAT and TAO.

TABLE OF GROUND AND FOUR EVOLUTIONS

GROUND	COSMIC	BIO	CULTURAL	SPIRITUAL
EPISTEMOLOGY	PHYSICAL SCIENCE	BIO SCIENCES	SOCIAL SCIENCES	RELIGIONS
CAUSAL MODE	DETERMINISTIC	OPPORTUNISTIC	TELEOLOGICAL	FINALISTIC
AXIOLOGY	WHAT IS TRUE	WHAT IS VALID	THE IMPORTANT	THE LONGED FOR
MIND	COSMIC	GLOBAL	COLLECTIVE	INDIVIDUAL
THE DYNAMIC	CONSERVATION PRINCIPLES	NATURAL SELECTION	DISCOVERY AND CREATIVITY	THE SEARCH
DRIVEN TOWARD	EXPANSION	VARIETY	HEGEMONY	ACCESS
PART TO WHOLE RELATION	FRACTAL	BOTH PRINCIPLES OF PLENITUDE	HIERARCHICAL	HOLOGRAPHIC
THE REPETITIVE	CYCLICAL PROCESSES	RHYTHMS, MITOSIS	GROWTH AND DECAY "DECLINE OF WEST"	REPENTANCE, REINCARNATION
THE ITERATIVE	ELEMENT CREATION	SEXUAL	EDUCATION	METANOIA
THE RECURSIVE	PART --> WHOLE	CELLS > WHOLE	4-FOLD PARALLELS	RE-ENTIFICATION
REGRESSION	FRACTAL	FOOD CHAIN, PARASITES	HIERARCHY, CLASSES, CASTES	ONENESS, ENLIGHTENMENT

NOTES: The two Principles of Plenitude are 1) Lovejoy's "filling of every niche, and 2) the 'cancer cell' motivation to convert the whole into its likeness by proliferation and modifying the contextual environment so that it is unfavorable to competitors.  
 4-fold parallelism is 'checks and balances' between parts rather than containment.  
 There are 2 forms of recursion: part containing whole =holographic, or whole becoming part

~ EMERGING = REGRESSION

7/17/0

12

## THE BRANCHES OF PHILOSOPHY

Names for three of the basic categories of philosophy may be taken from tradition:

**ONTOLOGY:** The nature of existence. The worlds that exists and their properties, Forces, Forms, Energy, Information, Processes, Change, Evolution

**EPISTEMOLOGY:** The tools and methods of knowing the world: Perception, Logic, Intuition, Recognition, Representations, Language, Symbols

**AXIOLOGY:** The Free and the Fixed, Options and Selections, Choices and Criteria, Values, Morals, Ethics, and their sources, Risk and Optimization strategies

We must next pursue a fourth basic category of philosophy which has to do with modes of escape from the conclusions and limitations of the other categories. Perhaps it could be labeled:

**METAOLOGY:** The search for watersheds and limits and how to transcend them; the search for alternatives and how to discover or create them; the extension of known differences and commonalities; the search for unknown differences and commonalities; and looking beyond differences and commonalities, transcending all ontological, epistemological, and axiological orthodoxies

---

The purpose of an epistemology is to unveil an ontology. The purpose of axiology is to digest the results of epistemology-ontology and provide feedback for epistemological modifications and corrections. Metaology is to remain detached from the other three, yet incorporate whatever is learned in order to perform its mission of liberation.

Ontology subsumes cosmology, physics, and the other branches of science. It seeks to detect the order and structure inherent in the world. Epistemology subsumes the methodology of science and all other modes of knowing. It seeks the ordering and clarification of the isomorphisms between its symbols and their antecedents. Axiology is about that portion of the world that is amenable to choice. Axiology subsumes the ordering and optimization of relations between and within social aggregates. It seeks to create a viable infrastructure for the support and sustainment of its selected paths and goals of human activity and creativity. Metaology subsumes the perceptual, intellectual and feeling realms. It seeks the enhancement of being and its powers, and searches for powers and faculties beyond those we now possess. It goes beyond and replaces the role that human religions have attempted to fill in the past.

In what way does metaology differ from axiology? Primarily in that axiology is empirical, based on past experience, while metaology places no limits on the sources of its inputs. It grasps for every glimpse of "other worlds" beyond common experience. Its function is to keep all else open ended. While the first three are consumed with actualizing potential, metaology is dedicated to expanding potential. In this way it supplies the fuel on which the others depend for their respective operations of exploration, creation, and direction. Metaology is not about the world, knowledge of the world, nor relationships. Metaology is about the knower. ↳ THE MYSTERY

Riding the Range  
Metaphor → MATH

## MODEL & THEORIES

EPI

DISK: EPIONTOLOGY

November 29, 1993

Facts

herding cat,

strays

EPION01.WPW

last ship

An amplification of the two epistemological levels: ~~theory~~ See 13-93 EPISTEMA.WPW

- The basic problem of scientific explanation is to find the best model that fits the observations.
- The basic problem of applied mathematics is to provide a smorgasbord of models from which the scientist may select the most suitable.
- The basic problem of philosophy is to supply one or more meta-models which can contain all extant ~~models~~ knowledge.

Stock yards  
knowledge

There seem to be several species of existence: material existence, informational existence, numerical existence, spiritual existence, theo existence (the non-existent existence of God), ... We cannot assert whether these different species of existence are independent or exclusive or affirm in what ways they are interdependent. For example, we have no instances or experience of pure information, information totally detached from matter. Materialists maintain that information is an attribute of matter, others hold that matter is "frozen" information. A proper meta-model allows not only for the possible varieties of existence and also for the conceivable ways in which the varieties may be related or unrelated.

Returning to mathematics, in saying that the basic task of mathematical physics (or biology, ...) is to provide a smorgasbord of models from which the scientist may select the most suitable, mathematics is not "queen of the sciences", but is a chef to the sciences. But mathematics is more than a servant to the sciences. It is itself an independent and alternate approach to understanding. Theories are generally tied to observations at several points, but mathematics may sustain an existence independent of observations, data, and sensory experience. The Pythagorean view is that math does not derive from the sensory, but that it derives from number and that number has a different sort of existence than material objects.

also Kant's views

the essence of

*E.P.*

## KNOWLEDGE AND UNDERSTANDING

The schema is the bottle  
 Experiences are the wine  
 Understanding is the taste

### Knowledge

Derives from communication  
 (a special limited kind of experience) Is inculcated and truncated by verbal and symbolic communication

Head centered

Involves memory and recollection and the creation of a code book

Usually requires repetition to gain significance.

Organization of Knowledge  
 Requires an epistemology  
 First, the creation of a schema or matrix for organizing inputs, then the proper placing of the inputs.

### Understanding

Derives from direct experience and deep involvement  
 May be symbolized usually in ritual

Heart centered

Involves recognition and an indigenous "code book"  
 Where is this code book?  
 In the collective unconscious?  
 In past experience?  
 Outside of time?

May involve only a single occurrence.

Organization of Understanding  
 Experiences into stories  
 Stories into archetypes  
 Archetypes back to Myths

Since understanding involves recognition and we can recognize ourselves and our experiences best through stories, the story is the module of understanding.  
 [story=anecdote=parable=myth]

**theott2.wp6**

**April 5, 1995**

Today there is much knowledge and little understanding. This is because understanding derives from direct experience while much of our culture lies beyond everyone's direct experience. For our culture to function we are forced to depend on indirect experience, schooling, books, lectures, for the transmission into each head of somebody else's primary experience. Secondary or transmitted experience rarely carries with it an adequate measure of understanding. The case of the astronauts illustrates this effectively. Russell Schweickart reported that

"...having spent ten days in weightlessness, orbiting our beautiful home planet, the overwhelming experience was that of a new relationship. The experience was not intellectual...[it was] the unavoidable and awesome personal relationship, suddenly realized, with all life on this amazing planet...Earth, our home." "What the experience of seeing this amazing planet ~~from~~<sup>on</sup> space does is to take it beyond the intellectual and into the personal." from The Home Planet

Understanding involves recognition and it appears that what is at root in recognition is relationship. A relationship with something beyond and bigger than ourselves. What we recognize is what we are related to and we recognize only because we are related. Those who share recognitions are related not only to each other but to some common invisible source, indeed their relation to each other comes through and from this common source. This source need not be genetic, but is parental in the sense of its begetting from the same image. And begetting is the right word, for the begetting source empowers those whom it begets to become begetters.

ORSC

KNOWLEDGE ≠ UNDERSTANDING ≠ REALIZATION ≠ LIBERATION  
 MINDFULNESS                    ENLIGHTENMENT                    TRANSFORMATION

≠ EXPLANATION

EXPLANATION: LINKING LOGICALLY TO KNOWN BODY OF KNOWLEDGE  
 UNDERSTANDING: LINKING METAPHORICALLY TO THE ALREADY FAMILIAR

## FOUR ONTOLOGICAL DYADS

### 1. Stapp's rocks and thoughts

"Nature appears to be composed of two completely different kinds of things: rocklike things and idealike things. The first is epitomized by an enduring rock, the second by a fleeting thought. A rock can be experienced by many of us together, while a thought seems to belong to one of us alone."

H.P. Stapp Mind Matter and Quantum Mechanics

Energy - Matter  
Information  
of 4.

### 2. Kalu Rinpoche's wake state and dream state

If reality is to be decided on the basis of clarity and intensity, then both states are real. [If Chuang Tzu's criteria of continuity is used, then the wake state is the real state.]

### 3. Plato's archetype and manifestation

All forms, processes, and 'laws of nature' are archetypes, i.e. patterns which can be manifested in space-time in specific, but similar instances. The archetypes exist in their own world, their manifestations occur here and there, now and then in this world. Myths are stories descriptive of the archetypes.

Archetypes ~ fo loto  
of a play

### 4. Science's information and matter/energy

Matter has been shown to be a form of energy. Whether pure information can exist independent of an incarnation in matter/energy is an open question. Particle physics has gone deeper into categorizations with its fermions,

bosons, baryons, leptons, hadrons, etc.  
suggestive of different ontologies.

Some of the concepts that appear to be basically involved in exploring the structure of the world:

### SYMMETRY

As defined by Herman Weyl: A structure that remains unchanged after the performance of a certain operation is symmetric with respect to that operation. Symmetry is thus associated with invariance, and consequently with conservation principles. It refers to an attribute that is changeless within change. [Therefore ~ SAT, the eternal. Symmetry provides a clue to the extra-temporal or is a bridge between the temporal and extra-temporal] cf 1995#65, re "perfect symmetry"

### DIALECTICS

These are the forces of change, oftentimes being adversarial pairs obeying Newton's Third Law, "to every force there is an equal and opposite reaction". At other times dialectical forces may be mutually supportive in which case they are temporally multiplexed thus avoiding Newton's third law. In the case of opposing forces novelty occurs at the interface, in the case of supportive forces, the action is in effect an "engine" producing some form of change.

*"balance  
necessary  
for existence"*

### ORTHOGONALITY

Independence and interdependence are determined by orthogonality. Orthogonal forces or parameters operate independently of one another. However, orthogonal instruments must at some time and place intersect. Non-orthogonal parameters, on the other hand, are interdependent with a modification in one parameter effecting modifications in other parameters. The orthogonals intersect one another; the non-orthogonals modify one another. Orthogonal parameters are parameters that cannot be expressed in terms of one another. Orthogonality is the essence of dimensionality. Examples are the x,y,z dimensions of geometric space and the physicists' Mass, Extension, and Time. Parallelism is a special case of non-orthogonality in which there is independence without intersection. [quadric diagram: orthogonal:non-orthogonal::intersect:modify] [also skew instruments]; [zones of immunity to interaction, e.g. light cones]

### LIMITS

Infinity is an illusion. In nature bounds are placed on all parameters. Bounds are discriminated from limits in that bounds are contextual while limits are internal. Bounds and limits take one of two forms: Cyclical or wall-like, [Kreisgrenze oder Mauergrenze]. The conditions of open or closed refer to the existence of intrinsic or self-imposed limits within systems. Open and closed have no meaning with respect to bounds which are SAT. A bound or limit is usually expressed mathematically by an inequality,  $a \leq b$ . Among the bounds so far discovered and believed to be universal are:

- ▶ The Einstein Bound  $v \leq c$
- ▶ The Heisenberg Bound  $E.T \geq \hbar$

- ▶ The Schwarzschild Bound  $M/R \leq c^2/G$
- ▶ The Bell Inequality

These bounds govern what is possible or not possible in the cosmos.

---

*It is difficult at this point to causally order the fundamental concepts. Some items are independent, some are the results of others. What belongs to SAT, to primary dynamic principles, to resulting forms and structures remains to be discriminated. This study must be done by "successive approximations".*

---

## HIERARCHIES

Hierarchies consist of sets of levels where levels are discrete categories usually separated by existential voids or gaps. Levels may usually be indexed according to values of a single parameter, such as scale. Several classes of hierarchies may be distinguished:

### REGRESSIONS

Regressions are hierarchies characterized by inclusion or containment. Commonly a regression is a set of systems within systems within systems,... say in the manner of nested Russian dolls. Usually the members of a regression at all levels are similar in that they differ only with respect to the value of a single parameter such as size. Fractals are an example of a regression.

### MODULAR HIERARCHIES

Whenever a hierarchy is a containment hierarchy in which the levels are not similar, it is usually referred to as a modular hierarchy. An example is the observed astronomical universe consisting of stars contained in galaxies contained in clusters contained in super clusters,..

### MODULATION

Modulation is a type of hierarchy in which a set of similar operations act between the levels. The most common form is a two level system in which the amplitude or frequency of one wave is modulated i.e. modified according to the properties of second wave. This process could be carried on beyond two levels.

## STABILITY

Configurations equipped to resist the dialectics of change; perhaps in some sense possessing orthogonality to most dialectic vectors. Or possessing internal clocks that operate much more slowly than the clocks of "proper time". [Orthogonal to prevalent zeitgebers?]

MUTUALITY

MUTUALITY

ARCHE TYPES

# THE THREE COMPLEXITIES

## PART I

A few nights ago I had a curious dream. There were three men walking along a corridor intently discussing what I overheard to be "the three complexities". Their conversation was focused on the role that these complexities played in the structure of the universe, and how they were the key to the beginning of true understanding. What these three concepts that they called complexities were, I either never heard in the dream or lost upon waking. But perhaps that is best. For in not knowing what they were I am launched upon a search for any possible candidates.

It is felt by certain sages that all basic descriptions of the outer or physical world are four fold in nature, and that basic descriptions of the inner or spiritual world are three fold. If this be so, then the three complexities must have to do with the world of thought and spirit.

Starting with this, what ideas present themselves as candidates for the three complexities?



One possible set of candidates consists of the three fundamental cognitive operations of 1) discrimination, the noting of differences; 2) integration, the noting of commonalities; and 3) linking, making associations.

**Discrimination:** Noting differences. Inclusion and exclusion, this and not this, here and elsewhere, before and after, us and them, inside and outside, dyads, and G. Spencer Brown's crossing. Dynamically the dialectics: departure and return, **TDMA**, **breathing** in breathing out, taking and sending, etherialization and materialization, genotype and phenotype, extinction and radiant, crucifixion and resurrection, bread and wine-- are all based on the operations of repetition and iteration, with the directionality of fragmentation and diversification.

**Integration:** Noting commonalities. Clustering, lumping, grouping through commonalities. Dynamically based on synthesizing, standardizing, homogenizing, and uniformization, with directionality of coalescence and uniformity, decrease in variety and uniqueness.

Discrimination and Integration dialectically oppose one another, but their combination effects an "engine" that produces complexity or leads to extinction.

**Linking:** Making associations. Associations beyond those based on commonalities, address and content, terrain and map, figure and ground, archetype and manifestation, object and symbol, decisions and criteria, as above so below, and G. Spencer Brown's naming; with the directionality of abstraction and generalization, producing explanation and understanding.

Other possible candidates:

- Time, Consciousness, Existence
- Levels, Dimensions, Spaces
- Symmetry, Orthogonality, Topology
- Sunyata, Brahman, Cosmos
- Chance, Necessity, Design
- Mathematics, Music, Life
- Turtles, Egrets, Humans
- ?, ?, ?

Randomness

Juxtaposition  
A basic tool in all

## THE WHOLE WORLDVIEW CATALOG

### ALTERNATIVES-APOPHASIS-ANONYMITY

#### CANDIDATE TOPICS:

1. ALTERNATIVES:
  - Los Angeles
  - Fritz Zwicky
  - Real Wealth
2. AMERICA: UNRESOLVED ISSUES
  - What sort of melting pot
  - Church and State
  - First Amendment
3. APOPHASIS: VIA NEGATIVA
  - Induction and Falsification
  - Balance and Inversion
  - Beyond the Law of Excluded Middle
4. ATHROISMATICS: PARTS AND WHOLES
  - Repetition, Iteration, Regression, Recursion
  - Reversibility and Irreversibility
  - Nodes, Links, Traffic, Messaging
5. BRAINWASHING: CONTROL AND MANIPULATION
  - Conspiracies, Cover ups, Diversions
6. COSMOGONY: G, c, ħ and α, μ, S
  - Schwarzschild and Heisenberg Limits
  - CHON
7. DIALECTICS: PRINCIPLES AND FORCES
  - Departure and Return, Chamberlain and Moulton
  - Diversification and Homogenization
  - Private and Public
  - Change and Permanence, Herakleidos and Parmenides
  - SAT and Repetition
8. EPISTEMOLOGY: <---> ONTOLOGY
  - Templatonics: Archetypes and Templates

secret

## Intellect and Non-intellect epistemologies

## 9. INFORMATION: THOUGHTS WITHOUT A THINKER

Degree of Surprise-- Shannon  
 Negentropy-- Szilard  
 Bits and Bytes--  
 Useful Data--  $F(t, x, y, z, \text{person})$   
 Minimum Length of Description

*Quality of energy*  
 $= f(\text{information content})$

## 10. NUMBERS: PYTHAGORAS AND PLANCK

Discrete and Continuous, Digital and Analog  
 The Species of Dyads, Triads, Quadrads, ...  
 Quadric Diagrams and Fourness  
 Prime Numbers and Fibonacci Numbers  
 Rationals, Radicals, Transcendentals

*Nature's Numbers*

w

*Natural Numbers*

## 11. PYRAMIDS: STONE AND SYMBOL

Pi and Phi  
 Rorschach and Typology

## 12. SIGNIFICATION:

Pleasure/Pain Physical  
 Desire/Aversion Physio-psychological  
 Interesting/Boring Psychological  
 Important/Irrelevant Societal  
 Valid/Invalid Spatio-Temporal  
 TRUE/ Cosmic

## 13. SPACE AND TIME: TEMENOS AND KAIROS

Duration and Interval  
 TDMC  
 The Six Physical Definitions of Time  
 Motion Time vs. Density Time  
 Kairos: Journey of the Year  
 Space: Extension and Separation  
 Space: Dimension and Curvature  
 ADMC

$\tau \propto t^3$

## 14. NOISE AND SUNYATA

Vairacona and Akshobya  
 White, Pink, and Brown Noise  
 The Central Limit Theorem  
 Modulation: White Noise ---> Gausian

## THE MATTER OF CHOICE

In the term "mass-customization" a new oxymoron has appeared. In an editorial in the December 8th issue of Wireless Week, Rob Mechaley states that before Henry Ford innovated the assembly line to produce his Model-T Fords, there was such a thing as customization, the tailoring to individual specifications. With mass production customization disappeared, (Ford said that you could have any color car you wanted so long as it was black), being replaced by either a limited smorgasbord or a one size fits all lunch. Now with new computer technology Mechaley claims that even under the rubrics of mass production customization has returned. His point seems to be that instead of doing market research to find out what most consumers want and standardizing production to make that the norm, it is possible for companies to have a basic product and 'customize' it through the availability of a set of optional add ons. But this "advance" toward pre Model-T times is a far cry from the traditional definition of customization, the crafting to individual specifications. But if Mechaley wants to introduce the term "mass-customization" for a little less limited smorgasbord, we can accept that as another one of the prevailing deceptive euphemisms of marketing.

Certainly, mass production has homogenized products, but even so bill boards tell us that advertising creates choice. This infers that choice is recognized as important to consumers and if there is no real choice, the illusion of choice must be created. Illusory choice is one of the devices by which homogenization, monopoly, uniformity, and hence control take over. The matter is no longer confined to the business ball park, but spills over into the political ball park. [Once an American reporter was interviewing a dictator in a sub-Saharan African country. He asked the dictator, "How can you claim to have democracy here when you have only one political party and no choices?" The dictator replied, "How can you claim to have democracy in America where you have but one political party, but with your usual American extravagance you make two of them?"] The challenge emerges: How do we decide what choices are illusory and what choices make a difference?

To engage this challenge, we must first understand the nature of variety. Here it is useful to introduce "Hamming Space". This is a multidimensional abstract space in which distance is used to measure the degree of variety or difference between two products or entities. The degree of variety or complexity of an object is given by the number of dimensions required to give its position in Hamming Space. Superficial variety requires only one dimension (or parameter). Take ice cream, for example, while it may require several dimensions in H-space for its complete description, when it comes to the flavor of the ice cream, flavor difference is one dimensional. Returning to choice, the more dimensions in H-space involved in the choice the greater the difference it makes, the more meaning the choice has. Most of the choices in a mass production society involve very few dimensions. Substituting one dimensional (or we might say, illusory) choices for multidimensional choices is a strategy used by those seeking to create monopoly.

When the number of dimensions in H-space that specify entities is reduced, it

shrinks our available domain of awareness, accessibility and possibility in the real universe. A dimension in H-space disappears when it is reduced to having only one value. If there is but one point, there is no line; if there is but one line, there is no plane; if there is but one plane there is no volume; If there is but one temperature, then there is no such thing as temperature; if there is only one color, then there is no such thing as color. It must be concluded that Total extinction ensues when every parameter has been reduced to one value. Hence, **The road to homogenization is the road to extinction.**

#### Note 1)

By the above reasoning, If there is one God, there is no such thing as God. But it is not that simple, while temperature and color are but one parameter quantities to begin with, God is multi-dimensional. However, it is also true for multi-dimensional entities that unless there exists more than one and that there exists some additional difference between them, then they do not exist. [Hence, the Virgin Mary]

#### Note 2)

A plurality in number of identical entities may guarantee their existence, not requiring other differences, but only if they are localized, in which case their difference in position in space and time constitutes the required H-space difference for existence. However, if they are non-local, they must possess some differences beyond those in space-time in order to exist. Thus cloning is O.K. for localized entities, but not for non-localized entities. [No two angels can be alike.]

#### Note 3)

The Buddhist argument for the illusion of existence as given in the dismemberment of the Maharaja's chariot, disregards the existence of the template of the chariot, which has not been destroyed by the fragmentation of one of its manifestations.

#### Note 4)

-->"1" effects extinction in the manifestation world, but not in the template world;  
-->"0" destroys the template. However "SAT" is never destroyed or destroyable, it is like the ROM, needed to "boot up" a universe.

#### Note 5)

The fascination with quantum mechanics is the inference of non-locality, but there is the equally important inference of +, - balance (or  $x, 1/x$  balance)..

All of the above is based on an apophasic epistemology.

## PIECES OF THE PUZZLE

1. PYTHAGORAS: "One does not exist"  
EDDINGTON; "Uniform sameness is undistinguishable from non-existence."
2. HERMES TRIMEGISTUS: "As above, so below". What was lost in transmission was that there are many aboves and many belows.
3. THE HOPI DYAD: Manifest and unmanifest
4. Light does not manifest until it 'intersects' with matter.
5. KANT'S DYAD: Phenomena (the experiencable) and Noumena (the inexperiencable)
6. J.G.BENNET'S DYAD: Being and Existence
7. C.S.LEWIS' DYAD: What it is made of and What it is.
8. BUBER'S DYAD: I and THOU
9. LI KIANG'S PAIR: Epistemology and Ontology
10. PLATO'S TRIAD: Known, Knowable, Unknowable
11. KHUFU'S DYAD:  $\Pi$  and  $\Phi$
12. DIRAC'S PAIR: " $- <-- 0 --> +$ " and " $1/x <-- 1 --> x$ "  
negation and inversion
13. KEPLER'S PAIR:  $t = L/V$  and  $\tau = (G\rho)^{-1/2}$
14. SCHWARZSCHILD-HEISENBERG PAIR:  $GM < Rc^2$ ,  $\frac{MR^2}{T} > \hbar$   
*E, T*
15. VON NEUMAN'S DYAD: Continuous (analog) and Discrete (digital)
16. LI KIANG'S DYAD: Recollection and Recognition
17. ZWICKY'S PAIR: Parameter and Value
18. ARISTOTLE'S DYAD: True and False

19. POPPER'S DYAD: Verification and Falsification
- 20A. PLATO'S PAIR: Archetypes and Templates ✓  
20B. PLATO'S DYAD: Archetype <--> Manifestation
21. CHAMBERLAIN AND MOULTON'S DYAD: Departure and Return  
Isolation and Cosmopolitanism
22. JUNG'S QUADRAD: Sensation, Thinking, Feeling, Intuition
23. LI KIANG'S QUADRAD: Repetition, Iteration,  
Regression, Recursion.
24. Modulation of white noise with white noise leads to a Gaussian. Successive iterations diminish the variance. Successive iterations lead to  $\frac{1}{\sqrt{2\pi}} \delta$  function.
25. Quantum Mechanics manifests non-localization and conservation of parameters, such as charge, polarization, ...
- DIVERSITY
26. SANTA FE TRIAD: Multiplicity, Variety, Complexity
27. PRINCIPLE OF PLENITUDE PAIR: Organisms and Ecologies
28. GÖDEL'S LIMITS: Proofs, Logic, Files, Intellect,  
Infrastructures
29. LI KIANG'S DIALECTIC: Diversification-Homogenization
30. DARWIN'S DYAD: Extinction-Radiant
31. BOOLE'S DYAD: Intersect and Union
32. HUBBLE'S PARADOX: How to be older than your mother.
33. POSSIBILITY A: Information without a Medium
34. POSSIBILITY B: Energy without Mass
35. POSSIBILITY C: Thoughts without a Thinker
36. POSSIBILITY D: Non-localization of mind
37. NOETHER'S SYMMETRY <--> CONSERVATION LAWS
38. PAULI'S EXCLUSION <--> UNIVERSAL UNIQUENESS

## Some Observations on the English Language

During the past century English has become the global language. There are several reasons for this: A consequence of the once wide spread British Empire; The growth of world wide trade with English being recognized as the language of business; The built in efficiency of English, its ability to put across the same message with fewer words in a smaller space; The large size of the English vocabulary. With the present global dominance of Western culture, it is fair to say that, English in being the representative language of this culture, English is the most Western Language.

All of the above seem to be pluses, especially in the view that the development of a single global language is a vector toward better international understanding and world peace. But there is also a minus side. In acquiring efficiency, English has lost accuracy, and worse, has lost the ability to capture profundity. This will immediately be disputed, but let us look at a few developments.

First, English, and many other languages as well, has merged the singular and plural of the second person. "You" now stands for one or for many. "Thou" is long gone. (In certain areas the singular/plural need has been met with you for singular and you all for plural.) Efficiency has been gained, but what was lost? Intimacy has been lost. There are no longer special people whom you save "thou" for. Family, relatives, friends, and strangers have been reduced to the same category. This might have been an improvement if all had become more cherished, but it went the other way. Today, spouse and family have lost their special status and it is easier to treat them as you would anybody else. Only God held out for a while. But now God has also lost the intimacy of "Thou". God and all others have been democratized into a common pool. I--Thou has been replaced with me vs everyone else.

Second is the matter of doing away with case endings. (The word "whom" has disappeared from English in my own lifetime.) The greatest source of gain in efficiency for English has probably been the homogenization of case endings. But there has been a price: loss of accuracy and flexibility. If nominative and objective are merged then it is left to word order alone to convey the meaning of a sentence. And this is a load that word order cannot always carry. Inflection is a "second dimension" to language, allowing a richness of expression not available to one dimensional word order. And a language whose cases have been homogenized limits poetry whose need for flexibility in word order is essential.

Finally, we come to the matter of the various moods of verbs. The Table gives us a brief review of the moods, their domains, and their use.

MOOD	REFERENTIAL DOMAIN	USE
INDICATIVE	THE OBJECTIVE AND FACTUAL	DESCRIBE REALITY
SUBJUNCTIVE	THE CONTINGENT AND POTENTIAL	CREATE POTENTIAL
IMPERATIVE	THE INJUNCTIVE AND EXHORTATIVE	CREATE REALITY
INFINITIVE	THE REFLEXIVE, SELF REFERENTIAL	ENTIFY PROCESS
EXCLAMATORY	THE INTERJECTIVE, INTERRUPTIVE	ESCAPE HATCH

The moods of verbs reflect metaphysical pictures of the world. Pictures that entertain not only an objective reality but also possible and preferential realities. These moods have been present in languages for millennia and reflect a linguistic approach to a richer world than we subscribe to today. Evidently language follows worldview and the decline of the subjunctive mood in English parallels our acceptance of the world as consisting of a single materialistic deterministic reality. The disappearance of the subjunctive, that is of the worlds of could be, would be, ought to be, leave us with only an "is world" devoid of choice and eventually of hope.

In summary, since we think in words, our erosion of English will in due time limit the thoughts we can express, muddy accuracy, corral flexibility, and reduce the alternatives that would otherwise be available to us.

---

### **Postscript**

But there is another result to declaring all cases to be created equal. The distinction of subject and object in language reflects a perception of reality that has been basic to the way humans view themselves and the world since the cave days of "ME TROG, YOU DOG. The nominative-objective discrimination of observer and observed and actor and acted-upon has historically shaped epistemological and ontological thinking to the point that the encounter with quantum phenomena in the twentieth century created metaphysical chaos. The quantum world in which the observer was part of the observed and the observed was part of the observer didn't fit with the structure of the languages with which we think. Whether the current merging of nominative and objective is a result of quantum discoveries, or the changes in English are anticipating the need to be able to think differently about reality, we cannot be sure. But either way both language and reality are changing and showing us how intimately they are interconnected.

## THE PA-NO-PL-PY ONTOLOGICAL POSTULATES

In selecting basic principles of a very general nature from which the properties of phenomena can be derived, certain propositions taken from the works of Pythagoras, Plato, Noether, and Pauli, suggest themselves as possible candidates. The following four postulates are here taken as fundamental:

- ▶ 1) One does not exist. One of anything has no existence. Only when there are two or more instances of a thing does that thing acquire the attribute of existence.  
---Pythagoras
- ▶ 2) In addition to the realm of physical material existence there is a second realm which contains the archetypes, templates, patterns, and programs that shape physical entities and processes.  
---Plato
- ▶ 3) There is a general conservation principle governing all existence which emerges out of symmetry. For every entity that exists there is a balancing counter entity preserving symmetry.  
---Noether
- ▶ 4) There is a general exclusion principle that requires that no two entities can be identical in every respect. This principle implies that every entity that exists is unique.  
---Pauli

The first question is, do these postulates form a consistent set? Postulate 1) and postulate 4) appear to be contradictory. Pythagoras requires that there be at least two examples of a thing before it can exist. Pauli requires that no two things be identical. This can be resolved by employing postulate 2), which holds that everything exists in at least two realms, the physical and the archetypal. Existence in two realms would supply the more-than-one requirement of Pythagoras but would also be in accord with Pauli in that the entity in physical space is not identical to that same entity in Plato's information space. This also could be said as follows: Pythagoras would say that unless there be both phenotype and genotype there is no existence. Pauli would say that phenotype and genotype are not identical.

A second way in which postulates 1) and 4) can be reconciled

is to allow multiplicity of a thing in physical space endowing it with Pythagorean existence, but since things cannot occupy the same position in physical space, their space-time coordinates would differ, meaning they are not identical in every respect.

## PIECES OF THE PUZZLE PART II

### RE GÖDEL

Some (unwarranted?) generalizations of Gödel's Theorem:

- No axiomatic system is capable of completeness.
- No system is capable of explaining itself.
- No program can generate a number more complex than itself.\*
- No file can be both perfect and complete
- The logical cannot exhaust the rational
- The rational cannot exhaust the valid
- The valid cannot exhaust the True
- The intellect cannot encompass the whole

[---Chaitin see Peterson p197]

### BUILDING BLOCKS

- SPACES
- QUADRANTS
- DIMENSIONS
- LEVELS

---

- Symmetry
- Orthogonality

---

- Dialectics
- Imperatives

---

- Realities
- Cultures

---

- NODES
- LINKS - *FIELDS*
- TRAFFIC
- CARGO      *VEHICLES*

### THE FOUR LEVELS OF MIND

- Personal      Sensory based
  - Collective    Cultural
  - Noosphere    Planetary
  - Cosmic        Brahman
- And SUNYATA

### SPACES

- P-SPACE      Particle or Position SPACE
- W-SPACE      Wave SPACE (or Quadrant)
- H-SPACE      Hamming or Form SPACE
- B-SPACE      Force or Bonding SPACE
- S-SPACE      Selection or Option SPACE

FOUR FEATURES OF QUANTUM MECHANICS

- Complementarity Wave-Particle duality
- Heisenberg uncertainty principle  $E \times T > \hbar c / 4\pi$
- Non-localism Coherence after separation
- Oscillation of monads between existence and non-existence ~ SUNYATA

MORE QUESTIONS

- Is Creator <--> Creation a Noether symmetry?
- Is reality a function of scale?
- In what SPACE does a mental conception exist?
- In what SPACE does mathematics exist?
- Do I think or does it think in me?

MISCELLANEOUS

- The rational cannot be measured.
- MAP:TERRITORY::PERCEPTION:REALITY
- A belief is neither true nor false. cf Schrödinger's cat.
- Recognition is possible because we are holograms. or said in another way: God created us in His Image.
- Archetypes are generalizations <sup>↑</sup> <sub>many levels</sub> They are for top-down
- Consciousness is awareness of awareness. <sub>The opposite of a generalization</sub>

SUN MON

CONTOL01.WPD

SEPTEMBER 8, 1999

## COSMOS TO CONSCIOUSNESS

### AXIOM 1.

The cosmos is here taken to be the totality of all that in any sense exists. It is all that there is. All parts of this cosmos are interconnected, making the cosmos a unity, a plenum, a continent, no islands. In addition no part of the cosmos exists independently or independent of the other parts. [*This implies that Brahman or whatever existed prior to cosmos did not exist in the same sense that cosmos exists. But that with cosmos now existing, Brahman becomes part of and one with what it may have created.*]

### AXIOM 2.

The cosmos may be divided into two parts which we shall call Subject–Object, such as I–Thou, observer–observed, knower–known. However, this dichotomy may be made in many ways. What is included in Subject and what is included in Object depends on the manner in which cosmos is “sliced” into the two parts. But what is not included in Subject is Object, and what is not included in Object belongs to Subject. Here the whole (cosmos) is the sum of the two parts. Further, each division or slice creates a set of ontologies.

### AXIOM 3.

A particular “bridge” between the two parts of an ontological set which selects a specific member of the set is called an epistemology. Each epistemology thus describes a specific ontology that belongs to the particular ontological set created by the original Subject–Object slice.

### AXIOM 4.

Each division or slice also creates a particular species of consciousness. Thus there are many possible consciousnesses each resulting from a particular dichotomy. And each governing the epistemologies that may be used.

Another contrary postulate:  
There can be no such thing as a whole

## PUZZLE2.WPD

PIECES OF THE PUZZLE JUNE 1999; OCTOBER 1999 #48

1. DYADS

2. DIALECTICS

Homogenization//Diversification

Stability//Change

Realization//Potentialization [The Great Dialectic]

Materialization//Etherialization INTER SPAN

3. SPACES

P-SPACE POSITION or PHYSICAL SPACE

H-SPACE PATTERN, ARCHETYPE, GENOME SPACE

B-SPACE BONDING, CONSOLIDATION, MERGER SPACE

O-SPACE OPTIONS, ALTERNATIVES, DECISION SPACE

S-SPACE INFRASTRUCTURE, GROUND SPACE

4. FOUR

*STRUCTURES*

5. PYTHOGOREAN COSMOLOGY

The Planck value for the Hubble parameter

Cosmology without telescopes

The four quadrants

6. TIME

7. CORTEZ//MOCTEZUMA

8. NODES//LINKS

9. ATHROISMATICS

PARTS//WHOLE

10. TOP DOWN//BOTTOM UP

GOD//REDUCTIONISM

CHOICE//NO-CHOICE DOMAINS

WORD: IMAGE :: ALPHABET : GODS

? PLAN: FREE MARKET :: FUTURE : ITS ENEMIES  
VIRGINIA POSTREL

SYSTEMS APPROACH AND ITS ENEMIES  
C. WEST CHURCHMAN

GOETHE / NEWTON

CELLULAR AUTOMATA

ITERATED RANDOM → ORDER

Me<sup>iθ</sup>

## THE FOUR BRANCHES OF PHILOSOPHY

Names for three of the four basic aspects of philosophy may be taken from tradition:

ONTOLOGY: The nature of existence. The worlds that exists and their properties,  
Forces, Forms, Energy, Information, Processes, Change, Evolution

EPISTEMOLOGY: The tools and methods of knowing a world: Perception, Logic,  
Intuition, Recognition, Representations, Language, Symbols

AXIOLOGY: The Free and the Fixed, Options and Selections, Choices and Criteria,  
Values, Morals, Ethics, and their sources, Risk and Optimization strategies

The fourth basic aspect has to do with modes of escape from the conclusions and limitations of the other three. Perhaps it could be labeled:

METAOLOGY: The search for limits and how to transcend them, the search for alternatives and how to detect and create them, the extension of known differences and commonalities, the search for unknown differences and commonalities, looking beyond differences and commonalities, stepping outside all orthodoxies

---

The purpose of an epistemology is to unveil an ontology. The purpose of axiology is to digest the results of epistemology-ontology and provide feedback for epistemological modifications and corrections. Metaology is to remain detached from the other three, yet incorporate whatever is learned in order to perform its mission of liberation.

Ontology subsumes cosmology, physics, and the other branches of science. It seeks to detect the order and structure inherent in the world. Epistemology subsumes the methodology of science and all other modes of knowing. It seeks the ordering and clarification of the isomorphisms between its symbols and their antecedents. Axiology subsumes the ordering and optimization of relations between and within social aggregates. It seeks to create a viable infrastructure for the support and sustainment of its selected paths and goals of human activity and creativity. Metaology subsumes the perceptual, intellectual and feeling realms. It seeks the enhancement of being and its powers and searches for powers and faculties beyond those we now possess. It goes beyond and replaces the role that human religions have attempted to fill in the past.

In what way does metaology differ from axiology? Primarily in that axiology is empirical, based on past experience, while metaology places no limits on the sources of its inputs. It grasps for every glimpse of "other worlds" beyond common experience. Its function is to keep all else open ended. While the first three are consumed with actualizing potential, metaology is dedicated to expanding potential. In this way it supplies the fuel on which the others depend for their respective operations of exploration, creation, and direction.

Metaology is not about the world, knowledge of the world, nor relationships.

Metaology is about the knower.

## THE MEANING OF MEANING

In the structuralism view, the ur-meaning of a word is to be found in its **context**, not in its definition. In fact, a definition is but a description of the term's immediate context. But in our customary way of thinking we tend to focus on the immediate context because of the difficulty of visualizing or acquiring access to more inclusive contexts. Meaning thus comes down to determining the specific location of a word in that network of interlinked words called language. The larger this network, the richer the meaning of words. Which implies that the larger a person's vocabulary, the larger the network to which they have access, the more effectively they can both think and communicate.

What may be said about the meaning of a word being determined by its location in a network also applies to the concept of meaning in other usages. For example, the structuralism view as applied to such philosophical questions as 'What is the meaning of life?' or 'What is the role of humanity in the scheme of things?', paraphrases to 'What is our location in the network of that which physically exists? [What is our location in P-Space?] Where the answer must include the *where*, the *when*, the *how*, and the *why* in reference to quarks, atoms, .... stars, galaxies and the multiple patterns through which we and they are interrelated.

A disturbing ontological feature regarding 'meaning networks', such as language or the physical world, is that when larger and more inclusive contexts are explored ultimately the network turns out to be a "loop". The network is free floating, which is to say that its existence appears to be completely independent and self-sustaining. But this is an illusion. The existence of any network depends on there being an isomorphism between it and some other network. The language network, for example, maps a human experiential network, i.e. maps [and hopefully is isomorphic to] a set of experiences taking place in a physical universe. The physical network or universe exists, probably not because we are mapping it with our language network, [although this has been argued] but because there is another network, sometimes called a 'Platonic network', which is isomorphic to the physical network. It is interesting to note that we just may have succeeded in symbolically constructing this network. We call it mathematics.

There are many sub-networks, networks within networks, Russian matreshka dolls. Humans have created trade networks, market networks, and now comes the Web or Internet which, though virtual, is indeed a network in accord with the present usage of the term. On the Internet our physical being becomes a web page, and we are beginning to see, as is predictable, that meaning in this new network also derives from our location in it, on how much we have access to, how many linkages we have, on how many hits are made each day on our web page.

From the above two points seem of primary significance:

1) Meaning in any system or network is a matter of location within that network. This involves primarily the number of links a particular node possesses to the rest of the network. But also involves the amount of energy and information moving through those links.

2) The matter of **access**. Going beyond the number of links and the traffic they carry is the importance of the percent of the total number of nodes in the network that are connected to a given node. Meaning for a node grows with the extent of access the node has to the remainder of the network. However, it is not so much the number of links that a node might possess, rather it is the variety of the nodes accessed by those links that is significant for meaning: Variety not multiplicity.

## DEDOGMAFYING PHILOSOPHY, RELIGION, AND SCIENCE

*The death of dogma is the birth of reality—Kant*

Hsün Tzu<sup>1</sup> objected that each philosopher would emphasize some particular facet of a problem and ignore the whole. He felt that any such approach could never arrive at truth. But what Hsün Tzu felt was a meaningless practice has always been the norm, not only in his time but up to the present day. And not only by philosophers, but also of by religious authorities and politicians. Perhaps the main reason for this is that consideration of the whole is overwhelming, and we perforce settle on what we are able to handle. But sometimes there are other reasons than the complexity of the problem. Politicians are especially adept at persuading the public to focus on some particular sub-issue. They do this at times because of a personal investment in the issue, but frequently to keep the people's attention diverted from an agenda they wish to keep hidden. The practice of demanding consideration of the whole would do much to render such manipulations obsolete.

In the 20<sup>th</sup> Century we have seen many examples of the "facetism" that Hsün Tzu deplored. In the field of science, for example, there were the Logical Positivists, the Vienna Circle, those who possessed and used the only correct methodology, and who dismissed as nonsense all results but those coming from their particular brand of reasoning. (Very reminiscent of the history of religions.) And the persecution by some leading professional astronomers of Velikovsky who derived hypotheses from a study of comparative mythology. That some of his predictions were subsequently observationally validated did not matter, his methodology was out of bounds.

But the 20<sup>th</sup> Century also brought us disciples of Hsün Tzu (although they probably never heard of him), who challenge methodological dogmas as well as propositional dogmas. Their message is go for **alternatives**, find additional alternatives, find all possible alternatives. No longer one method, one solution, one conclusion, <sup>(invented and)</sup> to be supported dogmatically by self anointed authorities. Use the entire spectrum of approaches, develop as many feasible theories and models as possible, and hunt for more. If many turn out to be wrong, they have nonetheless contributed to keeping search going and dialogue open. The disciples of Hsün Tzu are not pursuing "A theory of everything". Rather they are pursuing: "Every thing modeled by all possible theories".

---

<sup>1</sup>Hsün Tzu, Chinese philosopher, fl c 250 BCE, Critic of all earlier philosophers, but great admirer of Kung Fu Tzu. (Confucius)

# IDENTITY

## Identitysum

A n identity crisis is inability to select a category in which to place oneself. A category crisis is that no category exists that fits the thing to be identified. Existing categories do not fit do not work. These crises are related to the two epistemological levels of framework construction and placing items properly in the framework. An identity crisis arises with difficulty in finding the proper place in an existing framework, a category crises arises when the framework itself is defective, no longer supplying proper places for all items. A category crisis may also arise when two categories are split is split in two leading two a new alignment. The crisis arises over whether the old or the new categories are more important. This latter situation is here termed the **cross dialectic**.

RECOGNITION: Recognition Physics J.A.Wheeler  
Lost Paradigms--Casti p419

Recognition implies non-localism, not only non-localism in spacetime but a more general non-localism. It implies a basic linkage, or even identity, between our thought processes and event occurrence in the universe. Recognition's mechanisms may lie within the spacetime world or beyond it or both. Wheeler asks how do space, time and dimension arise both as concept and as structure of reality. Concept may be the constructor of reality.

*Consciousness*

The perennial questions and their derivative questions arise from a partial and limited view of the structures in which we find ourselves imbedded.

However, only a few are concerned with these questions. Only when one reaches a higher level of consciousness, or a level of identification with some encompassing module such as humanity or all living systems, do these questions arise. They are not important to the minds of those struggling for a living, competing on personal, tribal (read corporate), national, racial, religious, species, or any other level. The problem of meaning arises over finding a place and function in the order in which your identity is imbedded. If your identity is with ego, then your meaning is probably to be found in your function and position in your family and tribe.<sup>10b</sup> If your identity is with family, then meaning is found in the place and function of your family (and self) in the community and workplace. If your identity is with your corporation, meaning is with the status and vitality of your corporation in the context of the corporate world. If your identity is with your nation, then the status of your homeland in the global order is an essential ingredient to your meaning.

The achievement of oneness is the only possible mode of no-relationship. In all other cases an identity is related in one way or another to everything else in the universe from the tiniest insect to the most distant galaxy. But for the enlightened Sage there is no Sage and there is no Other therefore no relationship.

In this class the vehicle is **surrender**. The view of Heaven is the view of Heaven. KENOSIS

Chuang Tzu said, "All creation could not disturb the equilibrium of the sage,

hence his repose". Is this because the sage recognizes his identity with all creation?

#### 4) The Egret: The Epistemologies of Recognition

These are epistemologies, not designed by us, but given to us. Recognition (not empiricism) is the way of knowing what is Beauty, what is Love, what is Good, what is True. Through them we know without believing, we understand without articulating, we participate harmoniously without direction. This because when we achieve union, one identity, then identity disappears; for ONE has no-existence.

Before we turn to the broader aspects of the crisis in meaning, let us inquire into what are the sources of meaning for an individual and for mankind as a whole. In fact, What do we mean by meaning? Without going into philosophical depths and details, we may simply say that meaning for an individual, for a society, for mankind as a whole derives from a sense of identity, a sense place, and a sense of belonging. For there to be meaning implies there is a role to be played, a task to be done. For there to be meaning there must exist a relationship between the individual and the other, such as the relationship of need between members of a family. For there to be meaning there must exist a linkage with the environment, or a function in the ecology. In general, meaning implies a connection with context, and a relation to the past and the future.

Within the United States one possible contributing cause to our regression to immaturity is the melting pot. The price of cultural co-existence is superficiality. This trade-off is seen as true from the level of chat at a cocktail party to the level of difficulties encountered at international negotiations. Globally we share only the most basic emotions and values: security, control, esteem, greed, sexuality. Our visions and ideals may be so different from others as to not be mutually communicable nor understandable. Achievement of understanding requires suspension of our cultural prejudices and transcending our cultural memes. It requires we explore the identity bases of others. But to do this, we must first discover our own identity--and here we face a paradox. The understanding of others begins with understanding of self, and the understanding of self only comes from interactions with what is different from self. A melting pot becomes both a challenge to understand others and an opportunity to understand ourselves. And from these

There are many modular hierarchies with which we identify ourselves and find meaning. Population modules: me, my family, my clan, ...; Place modules: home, neighborhood, region,...; Political modules: party, country, allies, ...; Belief modules: cult, sect, religion,...; Genetic modules: race, species, genus, ...; and many others. There is even an hierarchy among the types of modules, but assignments of the order in that meta-hierarchy vary by individual choice. It has been noted that the extent of spiritual growth of individuals can be measured by the extent of each domain of modules by which they identify themselves. The child starts with me; the sage ends with an all inclusive domain of domains in which all living beings are themselves but a sub module. We become what we include in our domains of identity.

## SOME NOTES AND QUESTIONS REGARDING CONSCIOUSNESS

THE FOUR DIACHRONIC MYSTERIES ARE:  
 EXISTENCE<sup>1</sup>, CONSCIOUSNESS, RANDOMNESS, GOD

ON CONSCIOUSNESS:

What is the role of consciousness in ontology?

Is existence a necessary condition for consciousness or vice versa?

Or are they mutual and inseparable?

It was said by the ancients that God and the world did not exist until they were self-referenced by the consciousness of humans.

There must be a dialogue between two entities in order for them to exist or possess consciousness.

Eddington has noted that uniform sameness is the equivalent of non-existence.

In other words variety and differences are a prerequisite to existence.

Pythagoras also maintained that ONE of anything could not exist.

Only multiplicities existed.

But perhaps it would be better to say that uniform sameness precludes awareness rather than existence. That awareness and consciousness derive from differences.

Or is there a regression?

Nothingness	0 or 1
Existence	2 or more
Awareness	4 or more <sup>2</sup>
Consciousness	N or more, a mix of alike and unalike

Another approach is that consciousness is an attribute of an aggregation.

An aggregation of neurons or neural networks, as brain researchers propose.

Or perhaps an aggregation of individual brains?

Note the phenomenal behavior of flocks of birds, schools of fish

Is not their ability to maneuver together a manifestation of some form of consciousness? Of collective consciousness?

Jung speaks of a collective unconscious, is there not also a collective conscious [collective ==> multiplicity or aggregation]

What are "higher states" of consciousness? "Altered states" of consciousness?

Does evolution effect an increase in complexity? in diversity? in consciousness?

<sup>1</sup> Existence is about the species of somethingness and the species of nothingness or oneness.

<sup>2</sup>Four are needed: There must be at least 2 a's for a's to exist and at least 2 b's for b's to exist. And a's must be different from b's.

KNOWKNOW.WPD

MARCH 4, 2001

## 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 body<sup>1</sup>. 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.

---

<sup>1</sup> 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.

## PROJECTS: APRIL 2002

### I. THE LAST PISCEAN

Personal experiences. Anecdotes

### II. THE JOURNEY OF THE YEAR

Liturgical years, Calendars, Epochs

### III. A PYTHAGOREAN COSMOLOGY

Quadrants, Matrices, Force, Time and Frequencies

### IV. COGITANS

New Think, Four Thought, Logic, Spin

### V. EPIONTOLOGY

Epistemologies, Ontologies, Nontology

### VI. ATHROISMATICS

Parts and Wholes, Nodes and Links, Spaces

### VII. THE PRIMARY DIALECTICAL ENCOUNTERS

Dyads, Homogenization/Diversification, Indifference/Compassion, Random/Order

### VIII. SOCIETIES AND CULTURES

Economics, History, Melting Pots

### IX. NATURE

Kingdoms, Rocks, Trees, Streams, Clouds, Birds

### X. SHAPES

Topology, Pyramids, Polystars, Form <----> Force

### XI. UNFAMILIAR QUOTATIONS

Aphorisms, Apothegms, Li Kiang

### XII. CODICES

Longer Quotations, Stories

## PROCESSING EXPERIENCE

### VAIRACONA THE SOURCES OF EXPERIENCE INPUTS AND RESPONSE

The source channels may be encountered passively or intentionally. What is called *empirical* is the element of intention included in the following.

Perception: sensory, gestalt perception

Intuition: recognition, revelation

Feeling: emotion, the heart, the spiritual

Imagination: belief

### AKSHOBYA THE SELECTION OF EXPERIENCE SIGNIFICATION I

This is about the basis on which experiences are captured, noted, recorded or on the other hand missed, ignored or rejected.

Repetition, multi-occurrence

Multi-sensorial channel

Multi-observer, consensus

The Improbable, so rare as to gain notice, whether cyclical or unique

### THE REPRESENTATION OF EXPERIENCE SYMBOLIZATION

This is about the creation of symbols to represent experience. These symbols are elements in the set we call knowledge. It must be emphasized that all representations truncate the experience. The map or the picture is not the same as that which it represents. Although the symbols may participate in that which they represent. Definitions, both direct and apophatic, are cross symbolizations.

Articulation verbalization, words, language

Images

Sounds, music

Models, mathematics

### RATNA SAMBHAVA THE ORGANIZATION OF EXPERIENCE

This is about ways or modes of knowing. All of the modes are interlaced in a complex manner. Knowledge is constructed in part by each of these modes. While decisions concerning what is relevant and what is valid are frequently made by *authority*, by the authority of tradition, which is the accumulated experience of a culture, or by the authority of political or ecclesiastical power, or by the obsessions of a particular period of time, our ultimate concerns are:

#### SIGNIFICATIONS II

What is relevant or irrelevant,	Involves perspective
What is valid or invalid	Involves testing
What is consistent or inconsistent	Involves logic
What is important or unimportant	Involves values
What is right or wrong	Involves laws
What is meaningful or meaningless	Involves feelings

~~Amitabha: The assimilation of experience~~

~~evaluation~~

~~Amogha Siddhi: The applications~~

~~action~~

## THE ACQUISITION OF CONCEPTS

One of the attributes of humans, differentiating us from other creatures, is our ongoing pursuit of new ways to view and cope with the world. However, we habitually handicap ourselves by assuming that what we experience discloses the actual nature of the cosmos. We extrapolate and generalize to other realms what our senses lead us to conclude from local experience. Although we have succeeded in extending our sensory apparatus with an assortment of instruments—telescopes, microscopes, sensors of the non visual EM spectra, etc., we now know that our natural senses, even extended, give us only a partial snapshot of what may exist. We must now accept that it is illusory to equate the particular world view based on our limited perceptions with any Cosmic Reality.

But it is not only the limitations in our perceptions that have rendered our experience a special case, it is that the feed back from our perceptions on our thought processes has biased our manner of reasoning. Our logic and reasoning have been derived from and molded by our perceptions, and have contributed to our illusions as much as have the perceptions themselves. It follows that an effort to extend our reasoning apparatus could be as useful as the extensions to our sensory apparatus have been.

*what are the extensions afforded by computers?*

The enhancing of our thinking is largely through the acquisition of new concepts which extend our basic units of thought. While some of our everyday concepts, such as *saving* and *storage*, date back to pre-antiquity, sometimes the capturing of a basic concept is a matter of centuries. This is because a concept may for years lie dormant in countless anecdotes until a pervasive commonality is noted. When this happens the essence of the anecdotes is abstracted and defined in a phrase or two. And finally, with increasing familiarity, the concept is reduced to a single word. As an example, for centuries a notion of energy was sensed but the concept of *energy* wasn't grasped and explicitly defined until the 19<sup>th</sup> century. In the 20<sup>th</sup> century we have discovered that the relative equilibrium of the natural order that has obtained in our times is not absolute. We have learned from fossil records and deposits of rock and ice that major changes and great catastrophes occur from time to time. This realization along with the rapid advance of technology in the 20<sup>th</sup> century has resulted in a most remarkable rate of acquisition of new concepts: e.g., *catastrophe theory*, *chaos theory*, *ecology*, *genotype/phenotype*, *information*, *software/hardware*, *critical mass*, etc., etc.. Our everyday thinking has yet to catch up with the enrichment, and correction, afforded by these concepts.

*Reality has outstripped experience - Herman Hesse*

We must note, however, that some concepts resist definition and have remained permanently encapsulated in anecdotal form. For example, many of the stories of classical mythology contain basic concepts that have never been reduced to a hard definition. And it may be where there is a richness of interpretation a story is superior to a definition, for to define is to truncate. Our thought processes are more powerful when equipped with both precise concepts, and ambiguous notions. The former to guide our reasoning and the latter to feed our imagination.

## SLICING TRUTH

A slice is rewiring and re-entifying what we know, reorganizing our experience in an alternate manner. Such a restructuring of knowledge is predicated on the belief that **truth** is not a single picture. While there may be a single multidimensional **TRUTH**, [say of 26 dimensions], what we consider to be **truth** is but one slice through **TRUTH**. [say 4 dimensions] It has been said no system can explain itself. How then can we discover basically different ways of viewing the world, and how can we discern our limitations and biases in experiencing and viewing the world? Is it possible to get out of our human ontological box and see the world and ourselves from the outside?

In the past we have used many symbols and metaphors to organize our experiences. Our epistemology has had many elements. There has been myth: stories of the Gods their attributes and actions. There has been philosophy: words, with grammar, and logic on how to put them together. There has been mathematics: mapping the quantitative aspects of the world onto number. There has been music: creating sounds isomorphic to the music of the spheres. There have been games: emulating the contesting forces of nature. There has been dance: attempting to feel the movement implicit in the world in our bodies. There has been art: grasping understanding of creation by creating. And there has been silence: becoming one with the world.

While we are still imprisoned in the box of our own nature, we have learned that we are in a box and that the box has a context, perhaps many contexts. So long as we were unaware of the box, we organized its contents as our knowledge. Now in calling for new slices, what are we attempting? We hope by rewiring and re-entifying to make cracks in the box. Various slices through our box may split the box and open us to the contexts. But rewiring may be the right means for the wrong end. Alternate organizations of the contents may be a proper end in itself. But the possible consequence of opening the box and exposing us to the contexts could prove to be disastrous. Those philosophers, mathematicians, and artists, who have peered out of the box have become insane.

Is the box to protect us from the context? Is it a womb, an egg, from which we will emerge when the time is right? Or is the box a prison to protect the context from us? Both views have been proposed. Or maybe it is one of many experiments, to see what develops within a box under prescribed conditions and rules. Brahma, the master experimenter, is interested in all the possible variations on his themes. In that case, we would like to be able to see the final report evaluating all the variations and what the recommendations for the next Day of Brahma would be.

## A COGNITIVE MANIFESTO

The critical tasks at hand are:

---

- To detect the limits of human perception and cognition.
- To identify the distortions and biases implicit in our perceptions.
  - Distortions are physical and biological [hardware]
  - Biases are cultural and societal [software]
  - The psychological is both hardware and software.
- To identify the distortions and biases in our modes of thinking and reasoning.
  - Both those that are hardware and those that are software
  - Both those that are self deceptive and those implanted by spin masters.
- To identify the issues underlying the visible issues.
- To design and create alternatives for existing structures and processes.

And

- To develop procedures to implement the above.
- 

- To liberate ourselves from all dogmas
  - From those of our religions, cultures, and traditions
  - From nationalism, racism, sexism, and all us/them isms.
  - From fundamentalism, scientism, and selective skepticism

- 
- To allow all alternatives to be on the table.
  - To develop evolving criteria for signifying and prioritizing what is on the table.
  - To develop criteria for developing the criteria.
- 

- To alternate specific to general with general to specific.[bottom up with top down]
  - To periodically update, upgrade, and recycle all knowledge.
  - To ultimately shred ~~knowledge~~ when correction is not possible.
    - [cf bio-extinctions]
- 

*FIND*  
To permit Brahman

- To allow for the concept of truth, but hold that whatever we know is not truth, but at best only a special case.
- To seek the totality of pictures of the cosmos, not declare one to be the whole.
- If absolutes are needed, let them be subjective not objective.
  - Let them be to commitment, to courage, and to compassion.

## APPROACHES TO ONTOLOGICAL MODELING

### SPACES

#### P-SPACE: The spaces of location

First, the space of three spatial dimensions, the space of **entities**. (Events do not exist in this kind of P-SPACE because permanence or long duration in time is required for existence). In this space entities are located with respect to each other by the parameters distance and direction. Note that distance and direction may be considered to be LINKS.

Second, the space of space-time, the space of **events**. Events are located with respect to each other by not only the parameters distance and direction but by instant of occurrence and duration.

#### H-SPACE: The spaces of form

First, the space of shape or form only

Second, the form space that also allows scale

#### B-SPACE: The space of linkages, the factors underlying both **events** and **entities**.

First, the space of forces

Second, the space of bonds

Third, the multi-level space of sets of linkages, and sets of sets, etc.

---

### EPISTEMOLOGICAL STRATEGIES (Each of these has its counter part in military strategy).

#### PENETRATING SINGLE FOCUS

Can advance rapidly, limited territory, fixed goal,

Strip map, Eventual stagnation with encrusted dogma

→ *last in  
detain*

#### BROAD FRONT

Glacial advance, wide territory, receding goal,

Coastal map, Runs out of energy and ossifies

#### BOUNCING

Rapid movement, local territories, no goals except to keep moving,

No map, Illusion of accomplishment

#### LINKED SELECTED SECTORS

Moderate advance, territories with gaps, continually redefined goal,

Accurate but partial map, Self energizing

Success in any sector or parameter, attracts energy to that sector, resulting in the neglect or ignoring of alternatives. So LINKED SELECTED SECTORS may transform into PENETRATING SINGLE FOCUS.

→ *im Sicht position*

Gödel is a continent  
only islands

## SLICES

### THE UNIVERSE MODELED AS A MATRIX

Consider the universe to be an N-dimensional matrix. In this matrix, an entry,  $M_{i,j,\dots,k}$ , may represent an event; a column may represent a particular type of entity, [e.g. an atom], a row may represent a different type of entity [e.g. a photon]. a planar slice may represent a more complex entity [e.g. a virus]. Every linear and planar slice represents some simple or complex entity. Thus an entity is a particular way of organizing a set of events. Even a human being would be a way of organizing a set of events. Further, an archetype is a pattern of events that are organized differently from entity type organization, but whose organization has a measure of ubiquity that leads to repetitions.

What we call a world view is a package of slices. This package is not a picture of the whole, but only a *partial* picture of a *part* of the whole. However, we tend to take a particular package of slices as a surrogate for the whole. [e.g. the scientific world view]. Further, as our experience extends the size and dimensions of the matrix, we also tend to restrict the slices. This is an indication that there exist limits to our information processing capacity. Unless we can design some strategy for coordinating multiple world views, our understanding of the universe and of ourselves is forever limited.

There are two basic epistemological strategies:

First Enlarging the Matrix. Previous examples include:

- Flat earth to spherical earth as a result of extensions in distance.
- Relativity as a result of extensions in velocity.
- Quantum physics as a result of extensions to non-locality.
- Chaos theory as a result of extensions to non-linearity.
- Complexity as a result of extensions to non-equilibrium.

Yet to be extended:

- Economics 101, extensions beyond self interest
- Aristotelean logic, extensions beyond the law of the excluded middle.
- Randomness, extensions beyond probability theory.
- Theology, extensions beyond anthropocentrism
- Time, extensions beyond past-to-future causality.
- Truth, extensions to beyond one ontology.
- And others

Second, Making Alternate Slices

- Slices that are events
- Slices that are entities
- Slices that are linkages
- Slices that are archetypes
- Slices that are forms
- Slices that are locations

Yet to be fathomed:

- Slices that are essential
- Slices that are choices
- Slices that are selections
- Slices that are creations

Archetype: Event :: Set: element

Entities organize events in an way

Archetypes organize events in a different way

transmission of an event

through time

through space

An event transmitted through time becomes an entity  
entities can then be transmitted through space.

What would an event be that is first transmitted through space?  
an idea? e.g. independent identity?  
a thought. spread of an idea

### SLICING EXPERIENCE

### SLICING & DISCRIMINATION

GARBAGING = ERASURE OF A DISCRIMINATION

REPLACEMENT OF ELEMENTS WITH THEIR CONTAINING SET

*P L C T U R E*  
**PIECES OF A PUZZLE**

From time to time I feel that certain juxtaposed items speak to each other, some even embrace. This gives me the feeling that there is some hitherto unseen picture that these items are part of. I know of no set of algorithms that lead to assembling the picture. I can only start by listing the items that are suspects.

---

- Brahma created the world in order to see what variations are possible within his Theme.
- An epistemology must do two things:  
Add to Knowledge and Add to Mystery
- We must discriminate:      The Theme from the Variations  
Choices that create Options from Choices that destroy Options  
Actualization that creates Potential from Actualization that exhausts Potential  
Validity from Reality  
Survival as Success from Extinction as Success
- We must discriminate:  

Shizen Seki	Natural stone
Shizen Seki Chozubachi	Natural stone with water cavity [tinaja]
carved Shizen Seki Chozubachi	Natural stone with carved out water cavity
Chozubachi and Tsukubai Chozubachi	Artificial water bowl, and ceremonial water bowl
- If bio-evolution has any purpose it seems to be to increase variety. —Steven J. Gould  
*If variety has a purpose it is to increase complexity*
- We must develop:  
Qualitative Spectra [eg Shin, Gyo, So]  
Alternate Symbolisms  
Meta Axiological Criteria
- We must understand:  
The Middle Way   The two species of One   Path to Detail vs Path to Abstraction  
Sets, sub-sets, elements  
Levels   Horizontal and Vertical relations  
Vector Logic   Sectors, Angle-Power trade offs  
The Four Spaces  
The Four Strategies  
When Proshloye Proshlo and when Proshloye nye Proshlo  
Why the discovery on a parameter inhibits the discovery of other parameters  
Falsification by context  
The participation of the consequences in the cause  
Everything, including the universe, is a special case  
Ambiguous inference [Apple and worm]

*The two paths of the Second Law of Thermodynamics*  
*→ Entropy↑, → Uniformity*

*Some parameters → 1, ∴ extinction*

*Other parameters fragment*  
*→ diversity*  
*→ new parameters*

## THE LAWS OF CHANGE OVERVIEW

### Continually Operating Laws

The Second Law of Thermodynamics  
The Principle of Plenitude  
The Law of Hardening  
Evolution [diversity]  
Growth [multiplicity]  
Ozbekian's Law

### Dialectics: Departure and Return

Cosmopolitanism | Isolation [Chamberlain and Moulton]  
Polarization | Synthesis [Hegel]  
Action | Option  
Extinction | Radiant  
Packaging | Depackaging [Revolution ]

### Dialectics: Interactive

Consolidation \ Fragmentation  
Joining \ Separating  
Homogenization \ Diversification  
Centralization \ Diffusion  
Simulation \ Innovation  
Garberizing \ Discriminating  
Including \ Excluding  
Abstraction \ Generalization

### Infrastructure Dyads

Diachronic / Synchronic  
Recursive / Explicit  
Contiguous / Consistent  
Sequences / Loops [infinite regressions]  
Belong / Control  
Aggregate / Set  
Definition / Macro  
Focus / Diffuse  
Texture / Frequency  
Eigen / Continuous  
Order / Random

### Universal Principles

Universal Uniqueness Principle [everything is a special case]  
You cannot do only one thing  
There is no such thing as a “whole”  
There is no such thing as “truth”

# S O S

## SELF-ORGANIZING ORTHOGONAL SOCIETY

The S O S is against everything the establishment stands for and believes in.  
Not by 180 degrees, but by 90 degrees.

This is not to be misinterpreted that the S O S is neutral, middle of the road., or for compromise.  
In fact the S O S opposes each of these positions, by 90 degrees.

The S O S cannot be accused of being either for or against any position.

Nor can the S O S be accused of being both for or against any position.

The S O S cannot even be accused of being neither for nor against any position.

The S O S is orthogonal to all positions, view points, and belief systems.

There are some members of the S O S that are orthogonal to the S O S.

These are the ORTHOGS, those who are multiply orthogonal.

As in all societies there are extremists. These are those ORTHOGS who are self-orthogonal.

---

The S O S was organized as a response to the us//them, with us or against us, one dimensional thinking that prevails throughout the establishment. The establishment's thinking has resulted in restricting its menu of action to some form of revenge, the one dimensional eye for an eye solution. But the S O S does not hold that the solution is "a plague on both your houses", or some form of liberal lite or conservative lite. It holds that the problem is not just with the extremists of the one dimensional spectrum, but with one dimensional thinking itself. Our thinking must take off in entirely new directions. We must see how the issues on which we focus in our culture are pseudo issues, mostly about ego and power, that distract us from the real issues that we know are involved in human welfare and survival. While going beyond one dimensional thinking may be difficult for most of us, (and impossible for some of us), it has become the essence of our survival.

It is frequently said that the kind of thinking that created our problems will not be able to fine solutions for them. And it is apodictic that if something doesn't work repeating it over and over isn't going to make it work. And as Einstein said, "We shall require a substantially new manner of thinking if mankind is to survive."

## SOME LAWS GOVERNING THE NATURAL ORDER

Traditional thinking, both Eastern and Western has been dyadic, based on such dichotomies as yin/yang, masculine/feminine, good-evil, .....us/them, with us/against us. While dyadic thinking arises properly from the fact that nature is basically structured around symmetries and their corresponding conservation laws, about two centuries ago we became aware of a second category of natural laws: Laws of Change, examples being bio-evolution and the second law of thermodynamics. Then, a third category of laws—dialectics, governing the interactions between contraries and conflicting principles. And a fourth category governing the interactions between the synchronic and diachronic, between the ephemeral and long range, between the temporal and eternal.

### FIRST CATEGORY LAWS: THE SYMMETRY LAWS

- Conservation of energy
- Conservation of mass

### SECOND CATEGORY LAWS: THE LAWS OF CHANGE

- The Second Law of Thermodynamics
  - Homogenization aspect, Disordering aspect
- The Principle of Plenitude
  - Occupying aspect, Obstructing aspect
- The Law of Hardening
  - Actualization aspect, Convergence aspect
- Evolution
  - Diversity aspect, Complexity aspect
- Growth
  - Multiplicity aspect, Size aspect

### DIALECTICS

- Departure and Return [Chamberlain and Moulton]
- Thesis/ Antithesis | Synthesis [Hegel] [polarization]
- Action | Option
- Extinction | Radiant
- Fragmentation | Emergence

### DIACHRONIC | SYNCHRONIC INTERACTIONS

- Packaging | Depackaging [revolution ]
- Can demands DO [Ozbekian]
- Memes and Genes
- Archetypes | Games
- Power | Survival

## DIACHRONIC-SYNCHRONIC PART I

The Heisenberg Uncertainty Principle is usually presented in the familiar form:

$$p \times q > h$$

where p is position, q is momentum and h is Planck's constant. But the principle is also often presented in its equivalent form:

$$E \times T > h$$

where E is energy and T is time. This second form displays several implications beyond just uncertainty. For one, there is a basic **trade-off** between energy and time. For example, if T decreases, becomes small, then E must increase, become larger. Conversely, if E becomes small, T must increase. We may view this as a trade-off between time efficiency and energy efficiency. To perform a given operation, say to cross the Atlantic, to fly 100 people across in a brief time requires more energy than sailing them across in more extended time. Our present culture has become obsessed not only with movement but with rapid movement. The more we insist on our instant satisfactions, the more energy it costs. And a large portion of our present energy consumption goes not just for production but for time efficient production.

There may be several causes for our present obsession with time efficiency and its prime manifestation, speed. Perhaps our feelings about time derive from a technological imperative. The nature of technology itself forces the rate of the ticking of the clock to increase. Or perhaps there is a widespread feeling that the time remaining for us is short and we had better rush to get as much out of life as possible. Such feelings may have a religious source from certain interpretations of apocalyptic writings. Or they may have a non-religious source in a post-Darwinian world view that now is all there is. Or they may have a scientific source in climatic models of an impending ice age. Or maybe the clock is really ticking faster as some cosmologists have proposed.

Whatever the causes of an accelerating clock, there are many consequences in addition to an impending energy crisis. To examine these consequences it is useful to introduce two terms: diachronic and synchronic. By diachronic will be meant those principles, ideas, and activities that have persisted over centuries and millennia. By synchronic will be meant those ideas, values, and activities that are the center of focus over some short interval of time. Both terms might be described by the interval of time they adopt as being of relevance, what could be called their notion of "*now*". The greatest width of the diachronic *now* for western civilization extends from the beginning of written records, Egyptian hieroglyphs, Babylonian cuneiforms, through Greek and Roman times, up to the present. But diachronic nows also extends into the future, with speculations and visions of where we can or should be generations in the future. The synchronic now, on the other hand, is usually limited to the present decade (or less), or at most extending to the lifetime of one generation. The lengths of both diachronic *nows* and synchronic *nows* vary. However, both appear to be synchronic selections, selected by synchronic forces such as the media.. The result is the paradox of a **current** diachronic now.

Most human activities and occupations tend to emphasize either the diachronic or synchronic, but all have components in both *nows*.. The activities and occupations listed below are placed in columns according to their emphasis in current American culture.

DIACHRONIC ACTIVITIES

Education  
Exploration  
Religion  
Research  
Science

SYNCHRONIC ACTIVITIES

Economics  
commerce  
farming  
finance  
manufacturing  
Communication  
transportation  
Entertainment  
Health  
Litigation  
Politics  
military  
war

DIACHRONIC OCCUPATIONS

Architect  
Artist  
Educator  
Engineer  
Environmentalist  
Explorer  
Philosopher  
Scientist  
Statesman  
Theologian  
Writer

SYNCHRONIC OCCUPATIONS

Accountant  
Doctor  
Farmer  
Fireman  
Lawyer  
Merchant  
Minister  
Policeman  
Politician  
Soldier

A particular society at a particular time can be characterized by the relative emphasis placed on diachronic and synchronic activities, that is by diachronic/synchronic ratios.

The diachronic is like a cultural bank. The synchronic makes withdrawals and deposits, receives loans and repays and sometimes does not repay. But ultimately the synchronic is accountable to the diachronic.

Paraphrasing Wheeler's description of general relativity,

The diachronic designates the direction in which the synchronic moves,  
but the synchronic bends the diachronic.

CE - Space & Brahman

FOURGATE.WPD

October 12, 2004

DOORS Are Limits Brahman?

## FOUR GATES TO UNDERSTANDING THE COSMOS

GATE I

THE LAWS OF SYMMETRY Parmenides The Invariants  
These are the laws that establish and maintain equilibrium and balance  
These are the unchanging Parmenidean Principles  
These are conservation principles such as the conservation of energy.

movement to equilibrium stability, balance

Human Level: Justice Restitution vs Restoration

Parmenides: The Greek grasp of Brahman

Note  
symmetry is but  
one species of  
dyad.  
Others → conflict

Brahman and the

4 Movements:

E ↑ → equilibrium  
E ↓ ← equilibrium  
→ limit max  
↔

H-space → homogenization  
P-space → compactification

Brahman  
and P, H, B spaces

→ bonding  
aggregation  
B-dyad  
→ fragmentation

GATE II

THE LAWS OF AGGREGATION B-Space  
These are the laws governing modules and their structures  
The species of organizations, and principles of organizing  
These are modularization principles such as hierarchy  
movement to optimizations, to complexity

GATE III

THE LAWS OF CHANGE Herakleitos  
These are the laws governing growth and decay, evolution and emergence  
These are such principles as the maximization of diversity and openness  
These are diachronic principles such as the second law of thermodynamics  
movement to limits e.g. OZERIAN Law of Action → from the Potential  
Bio-Evolution → diversity  
Asymmetry as change  
b) disequilibrium

survive

GATE IV

THE DIALECTICAL LAWS Hegel  
These are the laws that govern the interactions between the other three classes

These are species of bridges between time and space Kepler's X

These are oscillatory principles such as departure and return

movement to dis-equilibrate SHIVA

Sub SIV  
of III?  
PICTURES  
of change

bridges between the laws of change and the laws of aggregation  
to fragment

Counter Gate I

Counter Gate II

to break limits ~ counter Gate III

Statistical Laws

Destroys existing pattern  
to permit diversity

To correct gaps where?

Before: Is the universe basically constructed with dyads or  
are dyads a human wired way of thinking  
projected on the universe

# O RTHOGONAL M ANIFESTO

✓ - 1

S OCIETY for O RTHOGONAL S YNTHESSES

---

---

This is a summons to revolution! Not a political revolution but a cognitive revolution, a revolution in the way we think. Scientists and philosophers in the 20<sup>th</sup> century have warned that if humanity does not soon develop a new way of thinking it will become extinct.

Our problems today have come about not just from extremist thinking at two ends of a one dimensional spectrum, but from one dimensional thinking itself. Our thinking must take off in entirely new directions. We must see how the issues on which we focus in our culture are pseudo issues, mostly about ego and power, that distract us from the real issues that we know are involved in human welfare and survival. While going beyond one dimensional thinking may be difficult for most of us, (and impossible for some of us), it has become sine qua non for our survival.

Traditional thinking, both Eastern and Western has been dyadic, based on such dichotomies as yin/yang, masculine/feminine, good-evil, ....us/them, with us/against us. Dyadic thinking arises quite properly from the fact that nature is basically structured around symmetries and their corresponding Conservation Laws. But about a century ago we became aware of a second category of natural law: Laws of Change, examples being bio-evolution and the second law of thermodynamics. Although we are all daily aware of change, our style of thinking remains locked into the dyads of symmetries. If we call thinking based on symmetries horizontal thinking, then we must develop a thinking **orthogonal** to the horizontal, a vertical thinking with a logic that takes into account the role of the asymmetries implicit in all change.

# **STRUCTURALISM**

## 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 in the differences rather than in the resemblances [p39-41]

Structuralism is concerned with the symbolic order /*éve/* [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?]

the 'cancer cell' motivation to convert the whole into its likeness by proliferation and modifying the contextual environment so that it is unfavorable to competitors.

4-fold parallelism is 'checks and balances' between parts rather than containment.

There are 2 forms of recursion: part containing whole =holographic, or whole becoming part

DISK - ~~xx~~

KROON!

Then how are we to regard thoughts and emotions, love and compassion, joy and beauty? One point of view is that it is only our lack of imagination which has prevented us from defining corresponding quantitative constructs, instead of considering them to be qualitative. The ultimate consequence of this approach is to regard living organisms, including humans, as complicated physico-chemical machines. In the extreme form, this leads to the notion that 'mental' activities are by-products of physical brains.

The dilemma, it seems, arises from the belief in a closed physical world of things. When we accept instead the notion that the physical world is a mathematical order, the dilemma is removed. Instead of abstract thought pushing concrete matter around, the interaction may be viewed as that between the qualitative and the quantitative. We can then think of the qualitative (the mental, the spiritual) and the quantitative (the physical, the material) co-existing as facets of the living world. It may be significant to note that both our language and our music are a harmonious blend of the qualitative and the quantitative.

The idea of a mathematical order to the physical world may thus open up new horizons for a more comprehensive philosophy of the living universe.

R. P. KROON MAIN CURRENTS V31 #3

# TOPICS

68

## PHILOSOPHY Some Philosophic Terms

Atomism. The universe consists of tiny, indivisible units called atoms.

Determinism. All events are the inevitable result of existing conditions. Free will is an illusion.

Dualism. The universe is basically composed of two elements, matter and mind.

Empiricism. All knowledge is derived from experience by way of sense perceptions.

Epicureanism. This school of philosophy taught that the supreme good in human life is happiness or pleasure.

*I p i s t e m o l o g y   W a y s o f k n o w i n g*

Existentialism. Based on the writings of Soren Kierkegaard, this family of philosophies teaches that humans create their own existence by choices and actions.

*See Roots to 102*

Hedonism. The pursuit and enjoyment of pleasure is life's main goal.

Idealism. Reality is essentially mental or spiritual. The material world is a lesser order of reality.

Intuitionism. Knowledge of reality is gained through the immediate apprehension of self-evident truths.

*x recognition*

Materialism. Reality consists essentially of physical substances.

Mechanism. The processes of nature--animate and inanimate--are machine like; the functioning and behavior of biological organisms are mechanical.

Monism. The universe is composed of only one substance, whether matter or mind.

Naturalism. Because objects in nature are regular and not haphazard, they are all subject to a scientific explanation.

Ontology. Nearly synonymous with metaphysics, the term refers to a deductive way of understanding.

*nd  
Being, existence, reality*

Phenomenology. The world's phenomena can be investigated and understood without having to form prior explanations of reality. By exploring examples, one can arrive at conclusions about underlying structures.

Pluralism. The universe cannot be explained on the basis of one substance. It consists of two or more, such as matter and mind.

Positivism. The principles and methods of science should be used to guide individual behavior and to solve social problems.

Pragmatism. The meaning and truth of an idea are tested by practical consequences.

Rationalism. Truth and knowledge are gained by reason rather than by experience or perception.

Realism (the name for two separate doctrines).

1. General ideas are not merely terms but refer to real things.
2. Material objects exist independently of any knowledge or perception of them.

Scholasticism. Late medieval philosophy taught by university professors, or Schoolmen, was given this name.

Skepticism. All philosophical assumptions can be challenged on the ground that it is impossible to prove that there can be any real knowledge of the world.

Sophist. The term means "sage," but it was applied specifically to teachers of wisdom who charged for their lessons.

Stoicism. Through reason it is possible to view the world as rational. In regulating one's life, the individual learns to accept what happens with a tranquil mind. In everything, duty to society is performed.

Transcendentalism. Humans are intuitively aware of a reality beyond sensory phenomena.

Utilitarianism. Social actions are valid if they promote the greatest good for the greatest number. Consequences are therefore more significant than motive.

## AXIAL AGE

TORCH, WPF 1986

&lt;1990 #20

TORNADO TORCH

THE 600 B.C. RADIANT

THE FOUNDERS  
LIFE SPAN

CONTRIBUTION

LOCATION

(1) LAO TZU 604-531 BC	TAO TE CHING	CHINA
(4) KUNG FU TZU 551-479	ANALECTS	CHINA
(3) SIDDHARTHA GAUTAMA 563-483	DAMAPADA	INDIA
(2) MAHAVIRA, THE 24th TIRTHANKARA 599-527	[SAGES OF THE UPANISHADS] [FOUNDERS OF THE SIX SCHOOLS OF BRAHMANICAL PHILOSOPHY] WRITING OF THE RAMAYANA	INDIA
c 510 (5) ZARATHUSTRA 630-553 [HEBREW PROPHETS]	FIRST WRITING OF THE BIBLE DEUTERO ISAIAH	PERSIA
c 536 PYTHAGORAS 581-497 [IONIC PHILOSOPHERS]		ISRAEL
THALES 624-545		SAMOS
ANAXIMANDER 611-546		GREECE
ANAXIMENES 586-526		MILETUS
HERAKLIDOS 544-483		EPHESUS
ANAXAGORAS 500-428		ELEA
PARMENIDES 510 - 450		
EMPEDOCLES 490-430		
ZENO 490	PROTAGORAS	ELEA
RISE OF ZAPOTEC CULTURE AT MONTE ALBAN c 500 BCE		MEXICO

the communicable, the testable. Magic was replaced by science and priesthoods by academicians. Writing had the effect of democratizing learning, challenging authority, and discrediting elites. It effected a clear distinction between myth and history, between fantasy and fact, between imagination and reality. The world was seen not to be capricious, but lawful. These innovations began some 2600 years ago but are still working themselves out.

However, there was another result of transference to the written word. It had the effect of truncating knowledge. Only that which was expressible in vernaculars, that which could be communicated to and by everyman was of value. "Higher" knowledge was denigrated and then denied.

Second, was the transference of divinity. No longer could the ruler, the pharaoh, be the possessor of divinity. Mortality and divinity were separated. Either the ruler was not god or we all had the same immortality he claimed. Both views prevailed. However, the old view held on in proclamation if not in belief. The Caesars claimed divinity. O.K. if it stabilizes the state, make it official belief, but personally we don't believe it. The idea did not die easily. It continued not as the divinity of the ruler, but as the divine right of ruler. Most of this was put to rest with the French Revolution in 1789, but one anachronistic vestige of the divinity in a ruler was proclaimed in 1870 when Pope Pius IX pronounced papal infallibility.

Some specifics of the 600 B.C. radiant:

DATE	PLACE	PERSON	INNOVATION
630-553	PERSIA	ZARATHUSTRA	GOOD AND EVIL
624-545	MILETUS	THALES	SCIENCE
611-546	MILETUS	ANAXIMANDER	MATERIALISM
604-531	CHINA	LAO TZU	TAO
600-529	MESOPOTAMIA	CYRUS	EMANCIPATION
599-527	INDIA	MAHAVIRA	AHIMSA
581-497	SAMOS	PYTHAGORAS	MATHEMATICS
563-483	INDIA	SAKIMUNI	DHARMA
551-479	CHINA	KUNG FU TZE	ETHICS
544-483	EPHESUS	HERAKLIDOS	TIME
C 540	ISRAEL	DEUTERO ISAIAH	MONOTHEISM

**SINGULAR POINTS: PART I**

The nineteenth century physicist Clark Maxwell felt that one possible way to reconcile the deterministic world of the physicist with the ordinary world of human experience where free will and choice prevailed, was to postulate singular points in time during which deterministic chains were open and options were possible. Events causally followed events except during the open moments when selection among options became possible. Selections could be made randomly, teleologically, or by some contextual force.

Maxwell's approach has parallels in many traditions:

- ▶ The avatars of Vishnu: the world runs its course, but from time to time an avatar of Vishnu, such as Krishna, appears to make corrections.
- ▶ Dynasties of gods: Uranus reigns, then rebellion and the Titans take over, after a period again revolt and the Olympians seize power, their time ends and mankind comes to the fore.
- ▶ Paleontological extinctions and radiants: Since earth formed there appear to have been five major extinctions in which some catastrophic event temporarily or permanently altered the environment causing dominant species to become extinct and be replaced with a radiant of new organisms.
- ▶ Axial periods: Human history replicates paleontological history. From time to time there are "axial" periods when old patterns of thought and ways of viewing the world are replaced by a radiant of innovative concepts. For example, the period around 500-600 B.C.E. when Confucius, Lao Tzu, Mahavira, Buddha, Zoroaster, 2nd Isaiah, Thales and Pythagoras were all alive at the same time. And perhaps the present century, when Freud, Jung, Einstein, Schrodinger, Dirac, Turing, von Neumann, Watson, Krick, .... were all alive at the same time.
- ▶ Custodians of learning: Mystery religions in Egypt and Greece, The Academies of Pythagoras, Plato, Aristotle (from 500 B.C.E to 529 C.E.), The monastic orders (Benedictine from 529 C.E.) to the 15th Century. The universities from the 15th century to the present. Next the think tanks?

In an abstract way each period of development is representable by a sigmoidal function, an S-growth curve, in which there is a slow beginning, a period of great fruition, and a final diminishing period as the idea or institution's energy is depleted. When the curve reaches its upper asymptote, a singular point in time is reached. The torch is passed to a new curve. During the passage of the torch determinism is broken and choice, selection, innovation become possible. The envelope of all the S-curves displays the real picture of evolution.

The Second Law of Thermodynamics operates in two modes:

Mode I:

The Homogenization Mode.

Homogenization forces are those that tend to bring the range of values of a parameter to a single value. Gravity attempts to bring the positions of masses to a single point. The second law of thermodynamics attempts to bring temperature throughout the system to one value. Further, when a parameter contains only one value, then it ceases to be a parameter. Thus if homogenization succeeds in reducing all values to the same value it then effects the elimination of a parameter. If all parameters are eliminated, that is total sameness prevails, then extinction results. Ultimate homogenization is the equivalent of non-existence, a principle recognized by both Pythagoras in saying that ONE does not exist, and by Eddington in saying that uniform sameness is the philosophical equivalent of non-existence..

Mode II:

The Fragmentation Mode:

Fragmentation forces are those that lead to decay and the destruction of complexity and order. The second law of thermodynamics holds that entropy or disorder must in the large always increase. Fragmentation (expansion in B-SPACE), scattering (expansion in P-SPACE), diversification (expansion in H-SPACE) all represent an increase in disorder. Diversification effects an increase in disorder through the increase in difficulty of communication as elements become more diverse, thus inhibiting the emergence of complexity.

It seems paradoxical that the destruction of order is achieved both through homogenization and through diversification. It is counter intuitive to think of uniformity as disorder. However, the second law in stating increase of entropy is simultaneously stating decrease of information. and the amount of information implicit in a uniform ordering may be less than in a more diverse ordering. On the other hand as diversification appears to involve more information, what is the second law up to? In this case the second law is operating in an inhibitory mode by reducing the likelihood of the building of complexity which would be a definite increase in information.

The ultimate definition of homogenization is the destruction of uniqueness. Thus both the increase of order and the increase of disorder can result in loss of uniqueness. We may think of there being Yin homogenization, scattering to one condition and Yang homogenization, focusing or gathering to one condition. Gravity is a Yang homogenization, decay is a Yin homogenization.

# IDENTITY & MEANING

in file 2080T

TRANSFER 250 MB DISK

Identitysum, WPD

Date?

An identity crisis is inability to select a category in which to place oneself. A category crisis is that no category exists that fits the thing to be identified. Existing categories do not fit do not work. These crises are related to the two epistemological levels of framework construction and placing items properly in the framework. An identity crisis arises with difficulty in finding the proper place in an existing framework, a category crises arises when the framework itself is defective, no longer supplying proper places for all items. A category crisis may also arise when two categories are split in two leading to a new alignment. The crisis arises over whether the old or the new categories are more important. This latter situation is here termed the **cross dialectic**.

RECOGNITION: Recognition Physics J.A.Wheeler

Lost Paradigms--Casti p419 *The study of why I space, time, things*  
Recognition implies non-localism, not only non-localism in spacetime but a more general non-localism. It implies a basic linkage, or even identity, between our thought processes and event occurrence in the universe. Recognition's mechanisms may lie within the spacetime world or beyond it or both. Wheeler asks how do space, time and dimension arise both as concept and as structure of reality. Concept may be the constructor of reality.

*situation w rules*

*a category crisis*

The perennial questions and their derivative questions arise from a partial and limited view of the structures in which we find ourselves imbedded.

However, only a few are concerned with these questions. Only when one reaches a higher level of consciousness, or a level of identification with some encompassing module such as humanity or all living systems, do these questions arise. They are not important to the minds of those struggling for a living, competing on personal, tribal (read corporate), national, racial, religious, species, or any other level. The problem of meaning arises over finding a place and function in the order in which your identity is imbedded. If your identity is with ego, then your meaning is probably to be found in your function and position in your family and tribe. If your identity is with family, then meaning is found in the place and function of your family (and self) in the community and workplace. If your identity is with your corporation, meaning is with the status and vitality of your corporation in the context of the corporate world. If your identity is with your nation, then the status of your homeland in the global order is an essential ingredient to your meaning.

The achievement of oneness is the only possible mode of no-relationship. In all other cases an identity is related in one way or another to everything else in the universe from the tiniest insect to the most distant galaxy. But for the

enlightened Sage there is no Sage and there is no Other therefore no relationship.

In this class the vehicle is **surrender**. The view of Heaven is the view of Heaven.

Chuang Tzu said, "All creation could not disturb the equilibrium of the sage, hence his repose". Is this because the sage recognizes his identity with all creation?

#### 4) The Egret: The Epistemologies of Recognition

These are epistemologies, not designed by us, but given to us. Recognition (not empiricism) is the way of knowing what is Beauty, what is Love, what is Good, what is True. Through them we know without believing, we understand without articulating, we participate harmoniously without direction. This because when we achieve union, one identity, then identity disappears; for ONE has no-existence.

Before we turn to the broader aspects of the crisis in meaning, let us inquire into what are the sources of meaning for an individual and for mankind as a whole. In fact, What do we mean by meaning? Without going into philosophical depths and details, we may simply say that meaning for an individual, for a society, for mankind as a whole derives from a sense of identity, a sense place, and a sense of belonging. For there to be meaning implies there is a role to be played, a task to be done. For there to be meaning there must exist a relationship between the individual and the other, such as the relationship of need between members of a family. For there to be meaning there must exist a linkage with the environment, or a function in the ecology. In general, meaning implies a connection with context, and a relation to the past and the future.

Within the United States one possible contributing cause to our regression to immaturity is the melting pot. The price of cultural co-existence is superficiality. This trade-off is seen as true from the level of chat at a cocktail party to the level of difficulties encountered at international negotiations. Globally we share only the most basic emotions and values: security, control, esteem, greed, sexuality. Our visions and ideals may be so different from others as to not be mutually communicable nor understandable. Achievement of understanding requires suspension of our cultural prejudices and transcending our cultural memes. It requires we explore the identity bases of others. But to do this, we must first discover our own identity--and here we face a paradox. The understanding of others

begins with understanding of self, and the understanding of self only comes from interactions with what is different from self. A melting pot becomes both a challenge to understand others and an opportunity to understand ourselves. And from these

There are many modular hierarchies with which we identify ourselves and find meaning. Population modules: me, my family, my clan, ...; Place modules: home, neighborhood, region, ...; Political modules: party, country, allies, ...; Belief modules: cult, sect, religion, ...; Genetic modules: race, species, genus, ...; and many others. There is even an hierarchy among the types of modules, but assignments of the order in that meta-hierarchy vary by individual choice. It has been noted that the extent of spiritual growth of individuals can be measured by the extent of each domain of modules by which they identify themselves. The child starts with me; the sage ends with an all inclusive domain of domains in which all living beings are themselves but a sub module. We become what we include in our domains of identity.

Identity: To what set do I belong?

function as in ecology

Meaning: Where in this set is my place and function?

Identity 2: To what set does my set belong?

Meaning 2: What is the place and function of my set in the larger set?

Identity 3: ...

Meaning 3: ...

Casti p. 433

Question B. How does the act of observing an electron show a limit  
to the set of likelihoods

Answer: An observation is a selection from  
a menu, a human-centric selection

Nature answers appropriately with a  
reply suitable to the "human-world" [as defined by sequences of  
selections]

The set of likelihoods ≈ a menu

JULY 19, 1999

## OBSESSION

The sage Hsün Tzu (c. 250 B.C.E.) was disturbed with the obsessions of philosophers, that they emphasized one aspect and ignored others:<sup>1</sup>

Mo Tzu was obsessed by utilitarian considerations and did not understand the beauty of form.

Sung Tzu was obsessed by the need to lessen desires, for he could not understand how they could be satisfied.

Shen Tzu was obsessed with the concept of law and did not understand the part played by worthy men.

Shen Pu-hai was obsessed with the power of circumstance and did not understand the role of human intelligence.

Hui Tzu was obsessed with words and did not understand the truth that lies behind them.

Chuang Tzu was obsessed with thoughts of nature and did not understand the importance of man.

Who thinks only of utilitarian concerns will take the Way to be wholly a matter of profit. Who thinks only of desires will take the Way to be wholly a matter of satisfaction. Who thinks only of the law will take the Way to be wholly a matter of policy. Who thinks only of circumstance will take the Way to be wholly a matter of expedience. Who thinks only of words will take the Way to be wholly a matter of logic. Who thinks only of nature will take the Way to be wholly a matter of harmonization. But Kung Fu Tzu (Confucius) was free of obsession. He studied the doctrines of all schools and established his own school, open to correction.

What Hsün Tzu observed centuries ago we see today. Philosophies, Religions, Political Parties, Professions, obsessed with some aspect of the world and failing to either effect balance or find solutions. As in China in the third century B.C.E. we find many of the same obsessions:

Business with bottom line	Scientists with Nobel Prizes
Politicians with re-election	Television with ratings
Republicans with tax cuts	Sports fans with winning
Presidents with polls	The Church with authority
Lawyers with litigation	Jews with Jewishness anti-Semitism
Health care with profits	Teenagers with sex

<sup>1</sup>Hsün Tzu, Basic Writings trans B. Watson, Columbia Univ Press 1963, p 125

## THE SUPREME KOAN

Perhaps the world's most famous koan is: *What is the sound of one hand clapping?* What is the answer? Rather than seeking an answer, we are to inquire what is the purpose in the posing such a question. Such koans illustrate for us that it is easy to fabricate verbal situations that are experientially meaningless. This implies that the intellect, which is constrained by its principle tool, *language*, will inevitably create illusory situations and questions that are meaningless dead ends whose pursuit goes nowhere. It has been said that philosophy, the path of the intellect, is the attempt through the use of words to solve problems which were created by words. And there is basically no assurance that these problems are meaningful. Therefore koans were designed to alert those seeking deeper insight that the path of intellectual reasoning is by itself limited. This was pointed out by the Buddhist master, Kukai, who foresaw that of the ten levels of existence (Shingon), reason could not penetrate beyond the seventh. Similarly, and quite independently, the German philosopher Schopenhauer noted that in order to reach deeper understanding at some point philosophy as vehicle must be abandoned. And more recently Gödel's incompleteness theorem established that there were limits in axiomatic reasoning, there were truths beyond those which could be logically derived and proved.

Many have been troubled by the Madhyamika doctrines of the Indian teacher Nagarjuna, that independent existence is unreal, and even that both existence and non-existence are illusory. The pursuit of Madhyamika ultimately leads to nihilism and total meaninglessness. If koans are to redirect our path from the confines of rationalism, can we consequently conclude that Nagarjuna was fabricating a koan, indeed **the supreme koan?** If so he has constructed a koan of such complexity that it invites continued intellectual exploration that would defeat its purpose as a koan. The best answer in this case might be found by following the strategy developed by the late Herman Kahn of nuclear war fame.

"So, Master Nagarjuna, you claim that nothing exists, all is an illusion. OK, we won't dispute that. Let's grant that all you claim is correct, and see where we go from there. We are living in a world, granted that living is an illusion and the world is an illusion, where we must make illusory decisions but still are accountable for these decisions. So it is like being on a movie set, it is all about illusion. But still we have to do the several things required to make this movie, knowing all along that it is not real. But in both real illusion and in movie illusion there is a common ingredient, and that is are stuck with roles to play. So in effect the nature of reality, whether it exists or is illusory makes no difference, it is the script that counts. It follows that choices and responsibility do not depend on the ontological nature of our context, but on the structure itself of the context, be it real or be it illusory. The bottom line is, if meaning derives from relation to our context, even nihilism does not obliterate meaning."

TOTALITY.WPD

SEPTEMBER 3, 2000

## DE-DOGMA-FYING PHILOSOPHY, RELIGION, AND SCIENCE

**H**sun Tzu<sup>1</sup> objected that each philosopher would emphasize some particular facet of a problem and ignore the whole. He felt that any such approach could never arrive at truth. But what Hsun Tzu felt was a meaningless practice has always been the norm, not only in his time but up to the present day. And not only by philosophers, but also of by religious authorities and politicians. Perhaps the main reason for this is that consideration of the whole is overwhelming, and we perforce settle on what we are able to handle. But sometimes there are other reasons than the complexity of the problem. Politicians are especially adept at persuading the public to focus on some particular sub-issue. They do this at times because of a personal investment in the issue, but frequently to keep the people's attention diverted from an agenda they wish to keep hidden. The practice of demanding consideration of the whole would do much to render such manipulations obsolete.

**I**n the 20<sup>th</sup> Century we have seen many examples of the "facetism" that Hsun Tzu deplored. In the field of science, for example, there were the Logical Positivists, the Vienna Circle, those who possessed and used the only correct methodology, and who dismissed as nonsense all results but those coming from their particular brand of reasoning. (Very reminiscent of the history of religions.) And the persecution by some leading professional astronomers of Velikovsky who derived hypotheses from a study of comparative mythology. That some of his predictions were subsequently observationally validated did not matter, his methodology was out of bounds.

**B**ut the 20<sup>th</sup> Century also brought us disciples of Hsun Tzu (although they probably never heard of him), who challenged methodological dogmas as well as propositional dogmas. Their message was alternatives, find alternatives, find all possible alternatives. No longer one method, one solution, one conclusion, and support for it by authoritarian dogmas. But use the entire spectrum of approaches, develop as many feasible theories and models as possible, and hunt for more. If many turn out to be wrong, they have nonetheless contributed to keeping the search and research open. Not supporting such attitudes as, "We do not have all the data yet, but when we do the answer will be such and such" [Heard frequently at scientific meetings] The disciples of Hsun Tzu are not pursuing "a theory of everything", rather they want for everything all possible theories.

get  
McLuhan  
Quote

**A** humorous example of the Hsun Tzu approach is given by the answers one student gave in reply to the exam question: Given a barometer, how would you find the height of a tall building. [The identity of the student in this story has frequently been assigned to Niels Bohr. But Bohr is velcro for humorous attributions.]

- 1) Tie a long string to the barometer, lower it from the top of the building. The height will be the

---

<sup>1</sup>Hsun Tzu, Chinese philosopher, fl c 980, Critic of all earlier philosophers, but great admirer of Kung Fu Tzu. (Confucius)

# SEMIOTICS

IDOLSTAT.WPD

MARCH 8, 2001 # 31

## STATUES, IDOLS AND WORSHIP

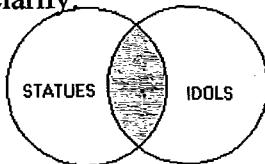
*Thou shalt have no other gods before me. Thou shalt not make unto thee any graven image, or the likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth: Thou shalt not bow down thyself to them, nor serve them.*

*Exodus 20:3-5*

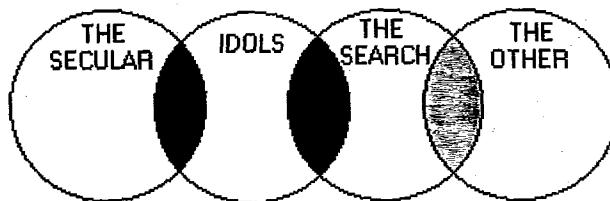
The Taliban decree that all statues, being an insult to Islam, must be destroyed has brought forth an international outcry of assorted protests. These range from defenders of art heritage to Muslim clergy who discriminate between statues and worship of statues. The outcry has also given social critics 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

NOT IN SOTPS  
USE ZIP MASTER BACKUP

*Dot*  
IDENTITY

INDWHITE.P51

DISK:SCRAPS → CONSTATE

July 13, 1991

## KINSHIP NO

(PMA of Discovering America)

But there is a curious paradox in this. In those aspects where the Indian emphasizes uniqueness, as with individual humans, the white man seeks to garberize\* by emphasizing commonalities for the purpose of generalizations. On the other hand where the Indian seeks to bridge differences, as in the concept of universal kinship of all animate (and inanimate) creatures, the white man seeks rigid distinctions as with the scala of rocks, plants, animals, man. When using the scientific approach the white man is concerned with the likeness of chimps and humans, when using the macho approach, the white man wishes no kinship. Superiority is the essence to be preserved. In both cultures there is a blurred line between uniqueness and kinship. In the Indian cultures, the ultimate emphasis is on kinship; In the white cultures, the ultimate emphasis is on elitism.

For Indians the dichotomy is kinship and uniqueness.

For the white man the dichotomy is commonality and elitism. It is the same dichotomy, but the choice of words leads to an entirely different attitudinal approach.

kinship w diversity  
commonality w elitism

For the Indian, diversity does not contain the imperative of elitism, of a ladder of superior/inferior, as it does for the white man. For the white man, commonalities do not contain the concept of kinship, as for the Indian.

*garberize*  
~~garberize~~ = remove distinctions, + discriminations

OWNERSHIP

Add Chinese views

COMMONS

JUJU SHINRON  
ONTOLOGY  
AXIOLOGY

SHINGON.P51

DISK:THEO.P51

September 3, 1991

(From 'The Dictionary of Asian Philosophies', Nauman)

p204ff

Kukai (774-835) was the founder of Shingon, the second main school of Buddhist philosophy in the Heian period. He was an esotericist. His emphasis was on the primacy of Vairachona and on those teachings which were independent of space and time, the teachings that were absolute in the sense of being a necessary infrastructure to all schools of thought.

Kukai's Ten stages of religious consciousness:

1. Uncontroled passion, animal life
2. Confucianism, morality devoid of heart
3. Taoism, believers hoping for heaven, but ignorant of heaven
4. Hinayana, some philosophical and psychological understanding
5. Advanced Hinayana, goal of personal salvation
6. Pseudo-Mahayana, the compassionate path of contemplation
7. The Sanron, elimination of false conceptions
8. Tendai, the moments of eternity *Glimpses*
9. Kegon, interdependence and convertability
10. Shingon, esoteric, ineffable

Shingon teaching cannot be verbal, it must be through art. Hui-kuo, Kukai's master, taught that whatever was beautiful partook of the nature of Buddha. "Art is what reveals to us the state of perfection." For Kukai the arts, as taught in his school, were:

- 1) Painting and sculpture
- 2) Music and literature
- 3) Dance and gestures
- 4) Social order and religion

For Shingon, religious truths are not the limited result of revelations by the historic Buddha, but of repeated revelations by the Cosmic Buddha, transcending all human limitations.

## EXTINCTIONS AND RADIANTS

The temporal pattern that extinction must precede radiant may not be completely accurate. In the cretaceous-tertiary case where the extinction was caused by the intervention of an outside agent, an asteroid, it appears that extinction clearly preceded radiant. However, there is evidence that dinosaur termination was in process and mammalian life existed prior to the asteroidal impact. The outside agent could more accurately be described as catalytic rather than purely causal, speeding up a process that had already begun to take place, and which probably would have been effected over time even without the asteroid.

When we look at extinction/radiants in human history, we see certain catalytic events occurring but never a single catastrophic event to which extinction could be unequivocally attributed. For example, World War I could not be considered as causal of the extinction/radiant taking place in the twentieth century, but it was certainly catalytic. We see rather that the innovations of the radiant are themselves causes of the extinction. Examples are Darwinism, relativity, quantum reality ... challenging and replacing creationism, newtonism, objective realism. World War I played a catalytic role in accelerating the development and acceptance of innovations, but was more symptomatic than causal.

Taking the view that an extinction/radiant is a complex interplay of untested emergent innovations and established adaptive traditions, abetted by catalytic events, let us put in juxtaposition the e/r of 600 B.C.E. and that of today.

### **The Extinction/Radiant of 600 B.C.**

First we look for catalytic events, that disequilibrated the established social orders of the time. An innovation that appears both catalytic and causal was the spreading of writing with the invention of alphabets that took place about a century prior. This single development, changing oral traditions to written ones, is perhaps the central hallmark of the "Piscean Age" extending from 600 B.C. to the present. Oral traditions were not terminated, many oral lineages persist to this day, but the torch of knowledge was passed to the written word. (And today the torch is being placed to books themselves.)

There were two important results of the writing revolution:

First the erosion of proprietary knowledge. The mystery religions, the hermetic, the occult, all lost ground to the open,

THEO1945.WPD

August 6, 2006

## THE THEOPHANY OF 1945

Today is the Feast of the Transfiguration commemorating Jesus' appearance on the mount with Moses and Elijah, with the One Above announcing that the teachings of Jesus were a new theophany, "Listen to him".

<sup>Hebrew?</sup>

August 6, 1945, Hiroshima. Sixty one years ago this day an atomic bomb was dropped on the city of Hiroshima. Was this act in some sense also a new theophany? If so, like all previous theophanies, it has been ignored, distorted, and exploited for <sup>mundane</sup> purposes. But the teaching implicit in the theophany of 1945 is not one of "good news". It is a dire warning, a warning that has been almost totally ignored. The promise of the Transfiguration was that God was ever with us and would reveal more to us as our understanding matured. But our response, like the Hebrews of the Old Testament, was to pursue other gods. A human archetype! Today, as then, prophets warned and were ignored. Human business as usual ignores warnings and resents diachronic interruptions. The diachronic is tolerated only because it can be exploited for business purposes. But the 1945 theophany, appropriately labeled "Trinity", is not ignorable. It has been said, "We have nothing to fear but fear itself." It would be closer to the mark to say, "We have nothing to fear but our selves." It is not 'them' that it the enemy, it is 'us', all of us. The challenge is real and is final. Grow up and shape up or it is over.

But how can we grow up to be something different when our only role model is the past? We keep doing over and over what doesn't work and has never worked, but we do not have any alternative. Not so, alternatives abound. But those bound and blinded by tradition and habit cannot see. And the most binding tradition, the one so internalized we are not aware of it, is our mode of thinking, even that which we regard as 'logical'. (Even our most distinguished justices seem to be unable to distinguish an element belonging to a set from the set itself.) Our culture is obsessed with the win/lose dichotomy, whether in games, war, or business. And this is so even when the definition of winning is totally detached from any advantage. But dichotomies do not end with win/lose or us/them, they pervade all our thinking. Aristotle's true/false dichotomy is inescapable for us. Anything else just doesn't make sense. And this is just the point. What is wrong is that what for us makes sense is invalid outside its limited cultural context. We can no longer project what we locally have arranged or agreed upon onto our outer or inner contexts. This not only for the societal and political, but for the scientific and physical. Laboratory physics may not be universal, terrestrial phenomena may not be cosmic. There may be no universals, no absolutes, no Truth. Too scary, we have to have our "blanket", we must have certainty. But human survival does not come from certainty, rather from the ability to live with ambiguities, to not only tolerate diversity, but to treasure it. When we can make these changes in our mode of thinking, then and only then, we will no longer have to fear ourselves.

~~177.5~~ 2008

ORTHO

GENAB0.WPD

April 1, 2007

## *ways out of the box*

DIMENSIONS OF ZOOM:

INCLUSION DIVERSITY

SCALE FRACTALS

TIME WIDTH OF NOW, DIACHRONIC | SYNCHRONIC

ACCURACY PRECISE | FUZZY EQUATIONS | POEMS

FREQUENCY

COMPLEXITY

ENERGY TEMPERATURE

NUMBER OF ORTHOGONAL DIMENSIONS

GENERALIZATION W INVERSE DEFACETIZATION eg the great pyramid

LIN AND ABSTRACTION

THE FEYNMAN DIALECTIC

TIME IS AN ABSTRACTION TO ACCOUNT FOR THE VARIOUS SPECIES OF CHANGE

GENERALIZATION IS TO DISCOVER MORE DOTS

ABSTRACTION IS CONNECTING DOTS

FINDING COMMONALITIES IN THE DOTS, IN PARAMETERS, IN PATTERNS

NEW PARADIGM ~ NEW BIGGER TABLE

DOT IS NON DIMENSIONAL ~ A VALUE IN A PARAMETER

A PARAMETER IS ONE DIMENSIONAL

AN ARRAY IS MULTI-DIMENSIONAL

A SET IS AMORPHOUS

MORPHOLOGICAL BOX IS A CARTESIAN ARRAY

NO SKEPTICISM EVERYTHING LEFT ON THE TABLE

TOTAL SKEPTICISM NIHILISM

SELECTIVE SKEPTICISM PROTECTING THE BOX

## ABSTRACTION vs GENERALIZATION PART I

### THE RULES VS SETS APPROACH:

- 1) Abstractions eliminate non-essential parts of the problem and focus on the concepts that are really necessary.
- 2) Abstraction shows that problems that appear to be different are essentially the same or have similar solutions. {[cf General Systems Theory]}

—James Anderson, Discrete Mathematics p 226

According to Anderson,

Abstractions use existing sets to extract their common rules or essences.

---

Say we have a set of elements or objects together with rules governing how they are to be combined. Generalization is about keeping the rules but adapting them to a wider class of objects, i.e. finding additional sets of objects for which the rules work. While the symbols may remain the same, their meaning becomes different.

—Feynman, Lectures on Physics, Vol I, 22-3

According to Feynman,

Generalizations use existing rules to find other sets for which the rules can apply.

---

Abstraction is based on commonalities.

It is the lumping together of those special cases having common essences, principles, or rules into a “higher level” class. The special cases become the elements of the abstract set.

Seeking and unifying existing commonalities.

Generalization is based on extending existing essences, principles, or rules to other sets of objects. Adapting to a prescribed set of rules.

According to the Rules vs Sets approach, both abstraction and generalization build on what exists. abstraction on existing sets, generalization on existing rules.

Neither break out of pre-existing patterns or processes.

## IDENTITY AND MEANING

KRASNIK 74

Every living organism is connected in multiple ways to other organisms and since these interconnections continually change, conscious living requires an on-going dialectic process of creating, severing, and rebuilding identity. Indeed, our identity may be defined as the conscious portion of our total interconnectedness. And this conscious portion can range from the go-it-aloner's identification with ME to the Bodhisattva's identification with all sentient beings.

We meet a new person, we become friends. But we not only have a new friend, we have a new identity. We grow up, go to school, we have a larger identity. We move to another town, we have to reconstruct our identity. My girl friend dumps me, I have an identity crisis. We finally agreed to divorce, now we both have to rebuild our identities. My precious daughter died in an auto crash, part of me died too. The country I proudly identified with, condones torture, I have an identity crisis. The store where I have worked for over 20 years has merged with an international, I not only have a job crisis, I have an identity crisis.

The radical changes taking place in the 21<sup>st</sup> century are creating global wide identity crises. Widely diverse individual identities are now being threatened and respond by converging to one of the readily available simplistic and secure us/them identity packages. Conservative/Liberal has become meaningless, so identity packages that have been dormant for centuries, are resurfacing. e.g. Crusaders/Muslims, and others like Evolutionist/Creationist are being sharpened.

Not only are we personally confronted with the basic identity question, what is me and what is other; but every institution, political, economic, and religious aggregate also is faced with having to redefine its identity in order to function. [Western Union: Are we in the telegraph business or the communication business? The Pentagon: Are we in the defense of the United States business or in the defense of the Pentagon business? Etc.]

Our usual identities are *belonging* identities: to my family, my church, my country. But there are other sources of identity. We can find an identity in *labels*: I am religious, I am a patriot, a feminist. And we have *apophatic* identities: I am not a racist, not a quitter, not a skeptic. And we can even find identity with a *hatred*: I hate foreigners, girlie guys, infidels. Identities other than belonging identities are associated with our values and principles. And these have priorities that frequently alter to fit the occasion. With this complexity in personal and collective identity, who and what we are is difficult to determine. In the long run, it is not definable, it is ultimately an adjustment between us and our multiple changing contexts.

● Identities can be classified by association or connection with groups, values, origins, etc. But priorities are given to these various associations. Thus real identity becomes a *priority hierarchy of identities*. And behavior in general is directed by this identity hierarchy.

#### SPECIES OF IDENTIFICATIONS or ASSOCIATIONS

BELONGING to	GROUP, INSTITUTION, NATION, RELIGION GENETIC
PLACES	ORIGINS
TIMES	
MEMETIC	PRINCIPLES VALUES TRADITIONS HERITAGE VISIONS, GOALS
PROFESSION	PARTY, PARTY LINE
POSSESSIONS	
APOPHATIC	NEGATE HATE

● What is perplexing to most of us are persons whose behavior is unpredictable. These are of two varieties. 1) Those with fragmented identity hierarchies. These persons are unpredictable even to themselves, and could be said to have no identity, or conscious identity. But they are not to be confused with 2) terrorists who have strong apophasic identities but whose behavior is unpredictable because of their conscious selection of randomness as guide for their activities.

## INTRODUCTION

When I became 60, my oldest son Arthur said that now that you have been around for six decades you must have learned something. How about putting together a little booklet summarizing for us what you have learned.. I thought the idea made sense, so I put together a *few pages* booklet entitled "SIXTY", copies of which were distributed to family and friends. [A few copies may still be around.] Now that I am approaching 90, the same request has been made, and I am planning to put together another booklet, but this time not about what I have learned, but about what I have unlearned. *again after many years*

Indeed, the first five or six decades of life are about learning, mostly learning what is important and needed for getting along in the culture into which one is born. But later in life we begin to gain new perspectives and see that part of what we have learned is only a special case of more comprehensive insights, and another part of what we have learned is seen to have placed the current culture on a precarious path possibly leading to its self-destruction. Yes, the perspectives that come with age begin to separate us from the goals and even from the values of our culture. *The culture in which we live*

However, this separation has two components: one, the change that has taken place in the culture itself, and the other, the change that has taken place in me personally. In my case, I have not followed the culture and its changes, but have moved in a different direction. And this on many levels: political, axiological, epistemological, and even ontological. Of course, the culture replies, old guys become obsolete and make up excuses for not being able to keep up. I accept this rebuke in part, except I have not just been standing still and watching the culture move off without me. I myself have been moving, but in another direction. So inversely, I could say the culture has become obsolete and is not keeping up with the insights that many throughout the world are now grasping and formulating both with regard to the culture's cognitive limitations and its *perilous path*.

*in my*  
My task in this booklet is to specify and clarify the factors and details that underlie this two component separation: mine from the culture and the culture's from me. But at the outset, I want to reaffirm that vision of the future which decades ago I shared with so many of my neighbors, my countrymen and my fellow humans. (And I know many of my neighbors, my countrymen, and my fellow humans also still share that vision). But the culture itself now has a different vision and different direction which is increasingly separating us. And it must be emphasized, that like most separations, this one has been painful. It is difficult to rebuild identity and meaning when the foundations have crumbled. But a new foundation is being built and the despair over loss begins to evaporate as the new comes into being.

*base*

This could also be put in terms of an identity crisis. At age 90 I have become unsure of what I belong to, what I am part of, and to what I owe allegiance. I have split with many of the groups and institutions to which I once belonged and with which I once identified. But this must be viewed on three levels:

The Past: traditions, roots, values

The Present: memberships, professions, allegiances,

The Future: visions, directions, insights

I find I have not split with my roots and have great respect for the wisdom of the past, making me in political parlance a conservative. Nor have I abandoned the visions of a world where synthesis and openness will lead to peace, justice, and enlightened understanding, making me in political parlance a liberal. What I have split with is the Present, with its institutions and the direction in which they are moving making me in political parlance a radical, a skeptic, unpatriotic, and even guilty of treason. Yes, we have parted ways and I am ready to take the blame and punishment for what I now believe.

Add 2007 #28

The Epiphany of Oct 4<sup>th</sup> to introduction

The different drummer

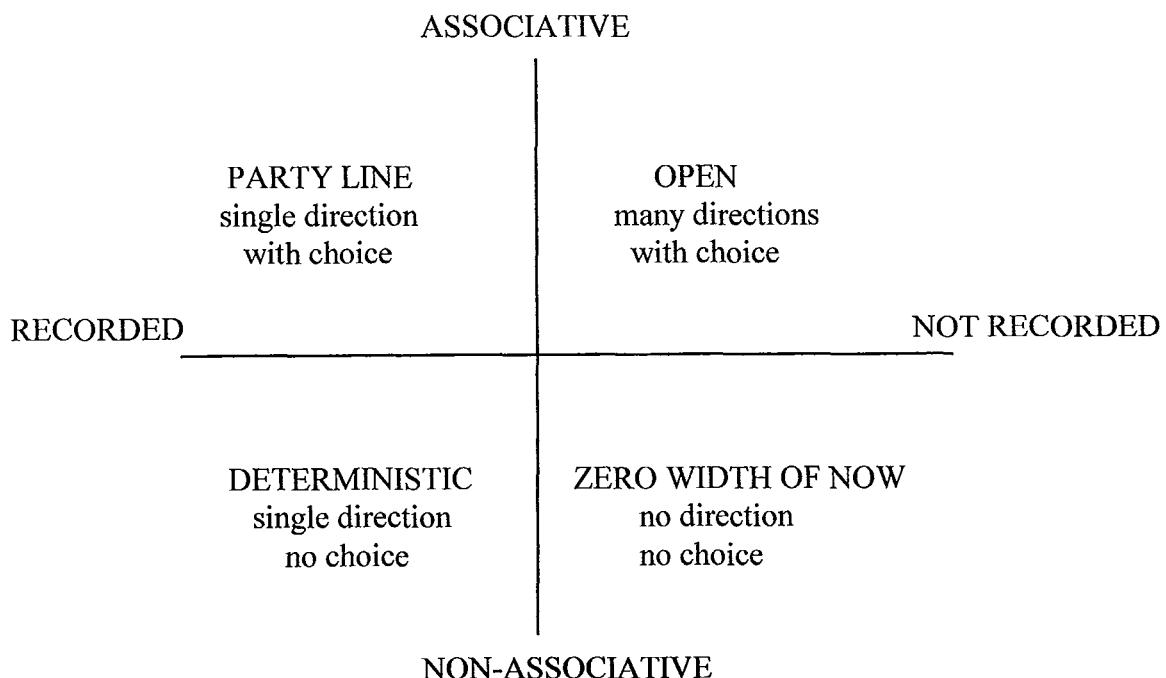
The road not traveled  
least

**FOUR BASIC DYADS**

NODE || LINK  
 Visible || Invisible  
 Mass || Force

CONTINUOUS || DISCRETE  
 Contiguous || Granular  
 Connected || Isolated  
~~Analogic~~ || ~~Digital~~  
 ASSOCIATIVE || NON-ASSOCIATIVE  
 Reversible || Irreversible  
 Priority free || Priority governed

RECORDED || NOT RECORDED  
 Memory || No memory  
 Past directed || Past free



JULY 12, 1999

## THE EXPLORATION OF NOTHINGNESS—PART I

At the time of Pythagoras there was no **zero** in the number system. The association of the abstract concept of number with quantity of objects had over millennia been gradually developed, but the association of number with complete absence of objects was felt to be wrong: No object, no number. But Pythagoras felt uneasy about this and thought that there should be a numerical symbol for nothing. He concluded that "1", **one**, could stand for nothing, for the non-presence or non-existence of objects. Perhaps he reasoned from ordinals. If there were no second, no third, etc., or if there were simply no second, then saying something was first was meaningless. Whatever his reasoning, the implication of **one** representing or being nothing was that there had to be two or more of anything in order for it to exist. Equipped with the symbol "0", **zero**, which was introduced to the West centuries later<sup>1</sup>, we hold Pythagoras' solution to nothingness to have been a quaint stroll down a dead end street.

However, there is something to be said for Pythagoras' view. Let us say that there is only one color, then we would not have the concept of color. Color would not exist. Only when there is more than one color does color come into existence.<sup>2</sup> Or if there were only one temperature, say 70° F all the time, we would not be conscious of temperature. Or more likely in Pythagoras' mind, the example of tone. If there were but one tone, then there is no tone. Only when there are many tones does sound or the awareness of sound come into existence. (Is this the origin of the Music of the Spheres which, it is said, we never hear because we hear it all the time?) It could even be said that Pythagoras' reasoning was supportive of paganism and pantheism. If there is but one God then there is no God. Monotheism infers atheism.

But what is valid in Pythagoras' approach is the fact that for a parameter (e.g. color) to exist or be recognized it must assume two or more values. We can then see the relation between conventional or **zero** nothingness and Pythagorean or **one** nothingness: There are two levels involved, the level of parameter and the level of values of the parameter. A parameter with one value is not recognized as a parameter; only when there are two or more values of a parameter does it come into existence (or awareness, depending on your ontological selections). **One** on the value level corresponds to **zero** on the parameter level; two or more on the value level corresponds to **one** on the parameter level. So when Pythagoras says that **one** can represent nothing, he means having only one value effects a **zero** or null parameter. This is not a quaint dead end at all. It reminds us that there may be many parameters of which we are not aware that are basic to the definition the world. We do not notice them because we perceive only one value, or they do not vary or change within our resolving power of space or time. Finally, we must give Pythagoras credit for a preliminary construction of what we now call category theory.

<sup>1</sup>Although the Babylonians had a symbol for void as early as 500 BCE, Zero, our symbol for nothing was introduced to Europe by the Arabs in the 9<sup>th</sup> century. The Arabs obtained it from India, but exactly when it was devised in India is not certain. It is also of interest that the Mayans in meso-America had quite independently created a symbol for nothing as early as the third century.

<sup>2</sup>There is an ontological argument here which we shall avoid for the present. We will not here probe into existence versus awareness of existence.

## THE EXPLORATION OF NOTHINGNESS PART II

*Uniform sameness is the philosophical equivalent of non-existence—Eddington*

From PART I we saw that Pythagoras felt that if there were only one of anything, it did not exist. He accordingly concluded that the number "1" could be used to represent nothing or non-existence in the manner we use the number "0" today. But it appears that what Pythagoras really had in mind was that the number "1" signified something that took on only one value, did not change, always remained the same. This would be something that we would be unlikely to be aware of. Centuries later Eddington came up with the same idea: uniform sameness in space or time would escape perception and as far as we were concerned would not exist. But if we make the distinction between existence and our awareness of existence, we can go along with Pythagoras and Eddington and use **one** to represent uniform sameness and hence non-awareness, but still use **zero** for non-existence.

In Part I we discriminated parameters and values. These may be represented as number pairs, [p,v] with the provisos: If  $v \leq 1$ , then  $p = 0$ ; and if  $v > 1$ , then  $p = 1$ . That is if there are two or more values, then the parameter exists in the sense of being in the domain of our awareness. But if no value or only one value (sameness) then the parameter does not exist for us. We shall take the first member of the pair to represent awareness or non-awareness with the possible entries p (a number  $> 1$ ), and 1. p in the first place means awareness exists, 1 in the first place means no awareness. The second member will represent existence or non-existence, with possible entries v (a number  $> 1$ ), 1, and 0. v in the second place means physical and perceptual existence, 1 in the second place means non-physical existence, and 0 means non-existence. There are six possibilities:

[p,v] represents that which physically exists and is perceptually experienced, the visible, the domain we usually designate as physical reality [Kant's phenomena]

[1,v] represents ontological domains which may physically exist, and even though changing ( $v > 1$ ) for some reason (such as epistemological limitations) we are not aware of them, (or choose to ignore them), [Kant's noumena]

[p,1] domains which have non-physical existence, but of which we are aware. These are cognitatively rather than perceptually experienced. Example: mathematics

[1,1] domains which have non-physical existence, and of which we are not aware.

[p,0] domains which do not exist, but of which we are cognizant  
Fiction, realms created by imagination

This could also include awareness of nothingness, the exploration of the gaps in existence, exploration of these realms may reveal that the non-existing portion of the universe may be as rich as the existing portion. And this non-existing portion may be knowable.

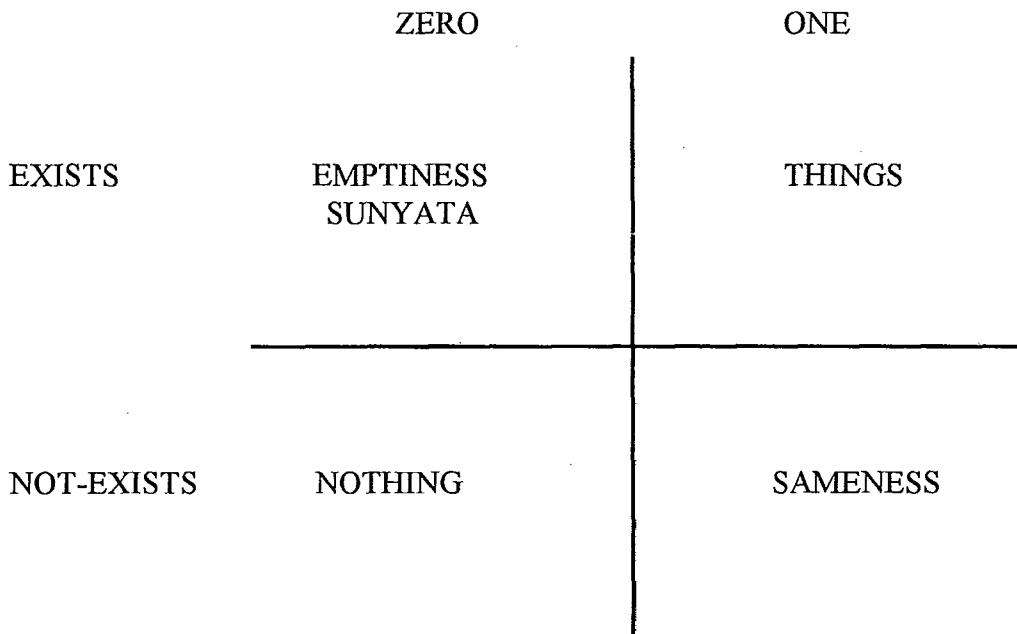
[1,0] no awareness and no existence, the domain of Nagarjuna and Buddhist contemplation.

Finally we must add [0,0], our symbol for Total Nothingness.

## NONTOLOGY PART I

### THE NON-EXISTENCE OF ONE AND THE EXISTENCE OF ZERO

This paradoxical proposition can best be introduced with a quadric diagram:



Our conventional view of symbolizing is that of the upper right and lower left quadrants. We associate zero with nothing or the absence of things, with non-existence. We associate one (or some higher number) with the presence of things, with existence. However, the inverse symbolization using zero for existence and one for non-existence as in the upper left and lower right quadrants also makes sense if we pursue the following reasoning:

Consider the lower right quadrant: Eddington noted that "uniform sameness is the philosophical equivalent of non-existence." Centuries earlier, before the introduction of zero, Pythagoras concluded that the number one was the correct symbol for nothing. He held that at least two of anything had to be present to confer existence. Eddington required that there be **diversity** in order for there to be existence. Pythagoras required that there be **multiplicity** in order for there to be existence. We may argue that Eddington and Pythagoras were really talking about perception rather than existence. Where there is no difference we perceive nothing. If there were only one color we would not be aware that there was such a thing as color. Only in there being two or more colors does the parameter or attribute of color come into existence or awareness. If there were only one tone (frequency), then there would be no tone. Only when multiple tones are perceived do we become aware of the existence of tone. The same argument may be made for texture, taste, aroma, *temperature*.

The Eddington perspective is that a parameter or attribute does not exist unless it takes on two or more distinct values. The Pythagorean perspective is that an object does not exist unless it has at least two realizations or manifestations. In either view, the necessary condition for material existence is diversity of quality or multiplicity of quantity, that is, a difference in some value. Human epistemologies require that material existence be experienced through perception—no perception, no existence. The epistemological requirements for non-material existence also depend on multiplicity of experience, either one event experienced by many observers or a multiple (repeatable, reproducible) event by more than one observer. **The key to what we call existence is multiplicity and/or diversity.** Hence one logically represents non-existence.

Turning now to the upper left quadrant: The symbolization of existence with zero.

# 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,

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

$\rightarrow$  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,

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

$\rightarrow$  involution

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.<sup>1</sup> Multiplicity alone does not assure existence. Variety, diversity, variation, deviation, difference is necessary.

<sup>1</sup> **ZERO** to **ONE**, Vairacona; **ONE** to many, Akshobya. ?

6-05, WP6 rev  
01/05/04  
from 97/06/14

The universe is constructed of symmetries

[conservation laws - Noether]

and inverses. [holographics?]

) ( ?

Another inversion [besides the additive and the multiplicative]

Fourier Transforms

$$\int e^{izx} f(x, z) dz \longleftrightarrow F(x)$$

in  
2001 Date?  
after 47 1997?

# Logos

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,  $1 \rightarrow a$  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  $-a \rightarrow 0$ .

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.

—+—  
ELEMENTS

## THE FOUR KINDS OF ONENESS

In P-SPACE, the space of position, place, and movement, the space-time of the physicist, ONENESS becomes a **singularity**, concentration in a point, a black hole.

In H-SPACE, the space of form, shape, and metamorphosis, the space of Proteus, ONENESS becomes **sameness**, uniformity, mere multiplicity.

In B-SPACE, the space of links, bonds, and relationships, the space of ~~the~~ Zeus, ONENESS becomes **monopoly**, concentration of wealth, power, control.

In M-SPACE, the space of mystery, the unknown, the space of unlimited potentiality, ONENESS becomes **completeness**, wholeness, all inclusiveness.

And in each space the ONENESS becomes a NOTHINGNESS, but in each a different kind of nothingness. In P-SPACE, the nothingness of isolation; In H-SPACE, the nothingness of non-identity; In B-SPACE, the nothingness of extinction; In M-SPACE, the nothingness that is infinity.

*randomness*

## THE FOUR KINDS OF NON-ONENESS

In P-SPACE, diffusion, expansion, non-localism

In H-SPACE, variety, diversity, uniqueness

In B-SPACE, multiple access, multiple options, choice

In M-SPACE, fragmentation

It seems that expansion is for the best in H and B spaces, and contraction is for the best in P and M spaces. Expansion in H-SPACE provides the variety requisite to complexity. Expansion in B-SPACE establishes a menu of alternatives and options. Contraction in P-SPACE leads to the formation of node or entities. Contraction in M-SPACE results in an organic wholeness.

ONE as Sameness  $\sim 0$  most differe-

ONE as Inclusiveness  $\rightarrow \infty$  2 to exist

ONE as fulcrum  $\frac{1}{x}$ ,  $x$

ONE as unit  $1+1=2, 1+2=3, \dots$

ONE as all integers  $1 = e^{2\pi i n}$

## FOUR MEANINGS OF ONE

All symbols are ambiguous. Semiotic representations – flags, seals, coats of arms, logos, signs—carry many meanings, sometimes conflicting ones. Even words, our most useful representations, are loaded with equivocal or multiple meanings. It was not the Vienna Circle, but Humpty Dumpty who got it right, when he claimed that “a word means just what I choose it to mean, nothing more, nothing less.” We cannot begin to communicate or understand one another unless we use the same “code book” to tell us which meaning a given symbol is supposed to have in each context. All of this is true, BUT when it comes to numbers, Ah, there we have precision, no ambiguities about meaning, one means one, two means two, 108 means 108. Everybody has the same code book. Even aliens on a remote galaxy must use the same numerical code book that we use. Else why would we send messages into space giving the prime numbers in their order unless we knew they would get the message that on Earth there is an intelligent species that also possesses the universal number code book. But are numbers really immune to the ambiguities that plagues other symbols? Consider the number, **one**. What does our code book say that **one** means? Let's see:

### I) THE ONE THAT IS NOTHING

When **one** is used to represent nothingness, **one** takes on the value **zero**.<sup>1</sup>

Centuries before Nagarjuna in India invented the symbol “0”, **zero**, to represent nothing (He required a symbol to formalize his world view that ultimate reality is nothingness), Pythagoras had recognized the need for a symbol for nothing. He came to the conclusion that since everything we experienced was multiple that multiplicity was a necessary condition for existence.<sup>2</sup> One of anything by itself could not exist. So Pythagoras proposed using **one** as the symbol for non-existence, i.e. nothingness. This theme was picked up in the 20<sup>th</sup> century by the astronomer-physicist Sir Arthur Eddington. He summarized the idea by stating: “Uniform sameness or oneness is philosophically indistinguishable from non-existence”<sup>3</sup>. Pythagoras and Eddington do have a point. A parameter that takes on only one value does not exist as a parameter. If there were but one color, we would not have conceptualized color; if there were but one temperature, we would not have a parameter called temperature.

<sup>1</sup> Not only can one represent nothing, but zero can sometimes represent one. Even in conventional mathematics there is some cross dressing between zero and one. for example,  $0^0 = 1$  and  $0! = 1$ ; if  $\log_b 1 = 0$ ,  $b^0 = 1$ , where b can be any number

<sup>2</sup> We can ask, do zero and one form a pair that provides the multiplicity Pythagoras requires for existence?

## II )

**THE ONE THAT IS ONE**

Sometimes, in fact most of the time, **one** takes on the value “**1**”. In this role one is the unit of counting. It is used to generate all the other integers. It has the additive property  $1 + 1 = 2$ , and with the help of “plus” can go on and on. Hence **1** is an essential ingredient in the creation of diversity. **1** is also a cloning operator.  $1 \times A = A$ , making a clone of any  $A$ . Hence **1** is an essential ingredient in effecting multiplicity.

## III )

**THE ONE THAT IS EVERYTHING**

Sometimes **one** represents the **infinite**.. The “**un**” in universe stands for both one and everything. That is, **one** can stand for the whole of anything,<sup>3</sup> and if the whole is infinite, then **one** represents everything. In Part I ) one was the symbol for nothing. Now in Part III ) one is the symbol for everything. Now, the reciprocal of everything [ $\infty$ ] is nothing [0]. Which is to say that **1** is the “fulcrum” that balances everything and nothing, the verge where somethingness meets nothingness. It is fulcrum of the large and the small  $5,000 / 1$  vs.  $1 / 5,000 = 0.0002$ ; and the fulcrum of the outer and the inner.

## IV )

**THE ONE THAT IS ANY NUMBER**

The mathematician Euler proved that **one** may be written as  $e^{2n\pi i}$ . In his equation,  $e^{2n\pi i} = 1$ ,  $n$  can be any positive or negative integer (or even zero). Hence **1** contains all the integers. This may be viewed as a sub-case of III ) since all the integers constitute an infinite set, but an infinity that is less than the universe. It may also be viewed as **1**'s repayment for having had to generate the natural numbers in the first place.

---

<sup>3</sup> Not only the Latin **UN**, as in universe, but the Greek **MON** as in monopoly or monotheism represent a whole, or species of everything.

## NUMBER AND NOTHINGNESS

When millennia ago it was found that there was no number that could represent the diagonal of a square, whatever the number that represented the side, a crisis in human cognition occurred. Evidently, number was more than could be represented by integers. The quantity that we represent today by  $\sqrt{2}$  was a bill of divorce, between the continuous and the discrete, between geometry and arithmetic, even between quality and quantity. The inferences that there were gaps between the numbers were overwhelming. Gaps? Gaps, so what? Gaps are nothing, we can ignore them. We don't ignore anything when we ignore nothing, do we? However in the centuries since the crisis at Croton, we have found what we discover in the gaps repeatedly liberates us from both our dogmas of perception and reason.

Continuity and contiguity are the illusions we embrace to enable us to ignore the gaps and relegate to meaninglessness the domains of Nagarjuna: shunyata, nothingness, emptiness, void. It has always proved easier to banish from thought something without a name than something with a name. But nothingness proved too powerful to ignore so it was finally felt better to corral it than to let it run namelessly wild. To facilitate our stance against nothingness, we finally found it useful to give it a symbol, "0", zero. But along with the symbol came walls and fences to enclose it. Since "0" was really not a number like the others, to dignify this "no-thing" as a number was totally inappropriate. So there were rules to be strictly followed in handling this deformed alien, such as never allow it to be a divisor! But it turned out, once this no-thing was safely confined, it proved useful in our synchronic pursuits. It became a 'place holder' allowing us to design a system for representing numbers of all sizes. It became a watershed for our bottom lines discriminating profit from loss. But don't be fooled. Never let this no-thing out of its cage.

But Zero still leers at us threateningly from the bars of its cage. We know its power since it can send any quantity directly to an arithmetic trash bin, by a simple multiplicative operation,

$$0 \times A = 0.$$

It challenges us with examples like this: "What is the solution of the equation,"

$$1) \quad X + 1 = 1$$

No problem, that's were we will let you temporarily out of your cage, answer  $X = 0$ .

"OK, what then is the solution of the equation,"

$$2) \quad X + 1 = X$$

There is no solution, stay in your cage, there is no answer.

Oh? Alright, what is the difference between the nothing "0" in equation 1) and the 'no-solution' in equation 2)? Both are a form of nothing.

Hey, you try to squeeze all my meanings into one symbol. Look at it this way:  $N_0 + 1 = N_0$  an equation you accept. Is this not a solution to 2)?" "Well, yes."

"Then why not allow  $A/0 = N_0$ ? Or better  $A/0_0 = N_0, A/0_1 = N_1, \dots A/0_n = N_n$ ?

You see, there are as many species of nothingness as there are of thingness, or everythingness. Yeah, but if we went along with this nonsense we would have to revise all our concepts from the law of the excluded middle to null sets. No way. Get back in your cage.

### SOME THOUGHTS ABOUT HUMAN LIMITATIONS

The world we know through our physical sense perceptions appears to be continuous in time and contiguous in space. But continuity and contiguity may be illusions, and their logical offspring, consistency, may limit our view of reality to but a small portion of the real nature of the cosmos. Freud once said that a measure of maturity is the ability to live with ambiguity, which involves both uncertainty and inconsistency. If we accept this measure then we are all still very immature. But perhaps the time has come for us to grow up and begin to accept that the world is far richer than the one delimited by the restrictions we choose to impose on it.

A beginning in this direction was made by Kurt Gödel when he demonstrated that the propositions which can be proved within an axiomatic system were only a portion of what was valid within that system. While this may be true of any axiomatic system it is also true for a set of axiomatic systems. In other words, no single approach to describing the world will ever produce an isomorphic model. And all approaches together will not produce a homomorphic model. Granting Gödel's incompleteness theorems are true, what strategy should be adopted by science, philosophy, theology , and other "self-consistent" approaches, to optimize their models?

Perhaps we might first attempt to construct as many additional self-consistent approaches [axiomatic systems] as possible, recognizing that they will all probably be inconsistent with each other. [We have already witnessed this in the inconsistency of science and theology ]. Then we naturally would try to build bridges between the different inconsistent approaches in order in some manner to unify them, that is to create a coherent picture .But what logical bridges are there that can unify the inconsistent? We already know that the answer is none. Our way of organizing thinking called logical won't bridge.

We might note here that philosophy likes to think of itself as the approach that can bridge all approaches. But philosophy has long since abandoned consistency. ["On the other hand"] It has achieved a sense of "unity" by giving diverse and inconsistent aggregates of ideas a common name. That is, the unity in philosophy is not in consistency, the unity is in the label philosophy.

The word coherent has popped up. Does coherent differ from consistent, if so in what way? Can the world be inconsistent yet coherent? Perhaps so, consistency is a restriction imposed by our logic. Everything in the world could be connected and operate coherently but not in a way we would perceive as logical or consistent. This means that a self-consistent approach to reality, such as the scientific method, won't work. And as to the word picture. A picture is a pattern that resembles something we have encountered in our experience. If we recognize the pattern as something familiar we can call it a picture. But there is no assurance that the larger patterns of the universe have much to do with our special brand of experience. [But we must assume that they do].

In summary: We try to encapsulate the world in the net of our particular human way of experiencing it. This results in our insisting on its being consistent with our logical criteria of consistency. We require that it must in some way be a unity, whether describable by a "theory of everything" or unified under the direction of a monotheistic