SEMIOTICS:

SYMBOLS AND CODES

SYMBOLS AND CODES

#25

TAOTECHING.WPD June 22, 2005

THE TAO THAT CAN BE EXPRESSED IS NOT THE ETERNAL TAO;
THE NAME THAT CAN BE DEFINED IS NOT THE UNCHANGING NAME.
—TAO TE CHING

On the other hand
et vv
every symbol has a
penumbra
open to more
than it represents
of Dante's

Every symbol truncates
Every articulation truncates
Every clarification truncates
Every explanation truncates

No Symbol Can Capture the Whole
of What it is Supposed to Represent

prefer

The world of symbols is but a faint echo of the world they claim to represent.

Thus, the
ineffable
protects itself

Yet
"SYMBOLS PARTICIPATE IN THE WORLD THEY REPRESENT"
—Paul Tillich

First, we create symbols to map the world of Tao, seeking to make our symbols isomorphic to their referents.

Second, we manipulate the symbols, creating macros and structures that have no counter parts in the antecedent world.

Third, we find that our ability to manipulate symbols gives us power to create whole new worlds out of our images and symbols. But soon our world of words and symbols no longer maps the real world.

Fourth, our symbol world invades the real world and we begin to act as though the symbol world were the real world and try to impose rules on the real world that we have created with our symbols.

When we find we can play God by creating symbol worlds, we become arrogant and create quasi realities in which those who must work in the real world suffer from the decisions of those in control of the symbol world. Workers who work in the real world are impoverished by financiers who shuffle monetary symbols in the symbol world. Soldiers die in wars in the real world that are created by the rivalries and greed of rulers in the symbol world. Rules and laws violating the basic principles which order the natural world are made by politicians in the symbol world. And reverence for the natural order is replaced by worship and allegiance to assorted religious and national symbols. But the world of nature can support erroneous and corrupt fabrications for only so long. Sooner or later the symbol worlds and their adherents are terminated.

SEM

APHSYMB.WPD June 20, 2006

APHORISMS RE SEMIOTICS

Symbols participate in the reality which they represent.
–Paul Tillich

but symbols also truncate

The symbol has meaning which transcends the object symbolized.
–Tobias Dantzig

i.e. isomorphism is impossible

Those societies which cannot combine reverence to their symbols with freedom of revision, must ultimately decay either from anarchy, or from the slow atrophy of a life stifled by useless Shadows. –Alfred North Whitehead

Words both express and condition thought. What we already know governs what we can think and both directs and limits what we can learn and discover.

Language by its nature tends to distort experience.
–Joyce Carol Oates

A word is the abstract symbol of a class, yet it also has the capacity to evoke an image, a concrete picture of some representative element of the class.
–Tobias Dantzig

Disparate objects can, by the use of abstraction, be seen to be visually related.
–Howard Steinberg

The affective structures of the human being, though unconscious, are expressed in words, fantasies, metaphors, dreams, and symptoms. Clearly these are not structures of behavior; they are closer to what others call cognitive structures or primitive beliefs.

In attempt to make experience intelligible, analogy [or metaphor] plays a fundamental role. By means of it what is already familiar or understood is appealed to in order to make clear the unfamiliar and unexplained. {This works because of the redundant and fractal and recursive nature of the world.) –Munitz

We begin to understand an inherent ethical catch in the new technical order in its obligation to rely on the misuse of symbols.

Articulation truncates.

There is a hopeful symbolism in the fact that flags will not wave in a vacuum.
–Arthur C.Clark re Space Flight

"I am looking for things to look for."
– Art Wilson

REPRESENTATIONS OF EXPERIENCE

There are four general categories by which we create representations for our experience. Each of the four communicate ideas, images and feelings, but the emphasis, precision, and comprehensiveness of each mode is different. And all truncate the experiential essences they attempt to symbolize.

I) LANGUAGE

The first category within language is **spoken language** which evolved so as to directly communicate our common experiences with each other. Over time spoken language, through alphabetizing, added **written language** which led to indirect communication and the keeping of records. Parallel to the alphabetizing of spoken language, and probably centuries before, sets of inscribed glyphs and icons were developed to communicate and keep records, creating a **symbolic language**. In all three forms the intent was to create a representation descriptive of, and as much as possible isomorphic with, common experience. And from these domains of communication, direct and indirect, spoken and written, arose the consensus that we now consider to be reality.

II) MATHEMATICS

A second category of representation arose from the **quantifying** of experience. Counting introduced number and arithmetic, measurement introduced dimension and geometry and from the marriage of arithmetic and geometry subsequent mathematics was born. Mathematics can claim a precision and specificity greater than other representations, but is limited in its ability to encompass non-quantified experience. Mathematical symbols are isomorphic to referents within many contexts of application. That is, a single equation may precisely represent the structure or behavior of many different systems. This is paradoxically not a one to one isomorphism but a one to many isomorphism.

III) MUSIC

The third category of representation, unlike language and mathematics, communicates **feeling** rather than ideas. The creator of music may have no specific image or message in mine. What the music evokes or communicates may be quite different for each player and each listener.

IV) FORM

The fourth category of representation, like music, is public in media but private in message. By form as representation we mean such creations as architecture, sculpture, landscapes, gardens, etc. These creations, aside from their utilitarian aspects, are images that communicate **feelings** and are therefore representations of various private mental and spiritual experiences. Art is a creation that either seeks to isolate and emphasize some aspect of what it represents, or render its referent to be but one aspect of some larger abstract entity. Every form transmits many messages. Whatever the intent of the artist's form, the receiver selects a message and interprets it according to his/her own code book. Thus a form, like a mathematical equation, is a one symbol to many experiences representation. But unlike the equation, it is neither specific nor isomorphic.

PRONOUS.WPD October 30, 2004
May 13, 2005

PRONOUNS AND SETS

Over millennia of human experience most languages have come to use the same six interrogative pronouns –who, what, how, where, when, and why. The questions implied by these pronouns lead to the most common links which we perceive to connect the events of our experience. These six pronouns are not only basic to how we organize our experience, but also direct and limit the way we perceive the world and think about it. They govern how we assign facts, people and events to different sets and categories; they govern how we project order onto the world and create order in our lives.

Each pronoun refers to parameters that occur repeatedly in our experience. For example, **where** seeks the values of parameters defining location in space;. **when,** the values for the parameter time; **what** attempts to locate a specific event in a common class or set of events; **who,** a specific agent in a class or set of human agents; **how**, in a class of tools or processes. Finally, **Why** is a "catch-all" pronoun, not relating to any given set but rather inaugurates a search for a set whose intersects with some common sets might reveal links to other events. That is to say, find links which would give the event meaning, locate it with respect to its contexts.

We might ask ***why*** have our languages settled on these six interrogations? While they have been modified and supplemented with other words, such as, where is —, when will —, how much is—, etc, why are there not more single word interrogative pronouns referencing additional specific sets and categories? Does the cut off at five imply some boundary to what is commonly experienced or is it a consequence of some limit to human information processing capacity? Or did the catch-all **why** pronoun make additional pronouns unnecessary? With the rapid increase in the diversity of human experience in the past two centuries, are the traditional pronouns still sufficient? Today, many of the most important errors in our thinking arise from our inability to discriminate between elements, sub-sets, and sets and between their multiple intersects. Perhaps we now need new pronouns or verbal devices for correctly locating events in the hierarchy of the **intersects** of the who, what, how, where, and when sets. And perhaps pronouns or devices for realizing entirely new categories and sets

In summary, interrogative pronouns are tools our language uses to assign events to sets or categories. These sets or categories are the entities we use to construct reality. Although they simplify and truncate our experience, they do allow

us to create order and find meaning.. But has the time now arrived when we must add new basic interrogations in order to keep pace with the world we are recreating?

add which
whence
whither

Retoric.wpd both power and semiotics

I give you my favorite quotation from the Bush administration, put forward by the proverbial "unnamed Administration official" and published in the New York Times Magazine by the fine journalist Ron Suskind in October 2004. Here, in Suskind's recounting, is what that "unnamed Administration official" told him:

> 1. "The aide said that guys like me were 'in what we call the reality-based community,' which he defined as people who 'believe that solutions emerge from your judicious study of discernible reality.' I nodded and murmured something about enlightenment principles and empiricism. He cut me off. 'That's not the way the world really works anymore,' he continued. 'We're an empire now, and when we act, we create our own reality. And while you're studying that reality - judiciously, as you will - we'll act again, creating other new realities, which you can study too, and that's how things will sort out. We're history's actors.... and you, all of you, will be left to just study what we do.'"

I must admit to you that I love that quotation; indeed, with your permission, I would like hereby to nominate it for inscription over the door of the Rhetoric Department, akin to Dante's welcome above the gates of Hell, "Abandon hope, all ye who enter here."

SEMIOTICS SETSETS

{ATTRIBUTES} and {{ATTRIBUTES}}

The symbol {---} is here introduced to mean a set, a collection of items. The title of this essay is thus {ATTRIBUTES} = "A set of attributes" and {{ATTRIBUTES}} = "A set of sets of attributes" or more simply, "Sets of sets of attributes".

PART I.

With those preliminaries out of the way, in Part I we are going to discuss THINGS, SIGNS, SYMBOLS, AND IDOLS. In order to do this we shall need to discriminate between sets of attributes, that is {{ATTRIBUTES}}. First, we shall need the set of sensory attributes, which we shall designate by {S-ATTRIBUTES}, or for brevity {S-a}. Second, the set of subjective or mental attributes, which we shall designate with {M-a}. And third, the set of injunctive or proclaimed attributes, which we shall designate with {I-a}.

Now what do we mean by a THING? An automobile, a bush, a cup of coffee, are all things. In general, a THING is an object of the senses. It has a location, size, shape, weight, color, etc. all revealed to us by our senses (or their instrumental enhancements). In other words a THING is a set of sensory attributes:

THING = {S-a}

Next, what is a SIGN? A SIGN is usually a THING, but in addition to having sensory attributes it also has a specific meaning assigned to it. This meaning is usually a collectively agreed upon message. For example, a circle with a bar means 'forbidden', a red octagon means 'stop', the figure of a man means 'men's toilet'. The braces in this essay are a SIGN because they are given one specificly defined meaning. Thus a SIGN, being a THING, is a set of sensory attributes but in addition is associated with a specific assigned message or subjective attribute. We will write this as:

SIGN = {S-a} + M-I

The M stands for a subjective or mental attribute. It is connected with an I to indicate that there is an injunctive element present. You are told what the associated mental attribute is to be, no alternatives allowed. Note that here the M-I stands alone and is not enclosed in braces because the SIGN carries one specific meaning, not a set of meanings.

Third, we come to SYMBOL. As with SIGN a SYMBOL is also a THING. It is therefore a set of sensory attributes, but in addition a SYMBOL carries a set of associated subjective attributes. This set in the case of a SYMBOL does not have injunctive connotations. The mental associations with a SYMBOL may be common to a great many people but there is no consensus on the set. The set is neither delimited nor static. It may change from individual to individual and within an individual from time to time.
Thus, we may write:

SYMBOL = {S-a} + {M-a}

Finally, we turn to IDOL. What is an IDOL? Again, an IDOL is a THING, made of matter and conveying sensory data. Unlike a SIGN, a <u>set</u> of proscriptive and prescriptive

subjective attributes are linked to an IDOL. This distinction is minor, the real difference lies in the nature of the injunctive-subjective set, in the {M-I-a}. While there is no trouble in a single M-I, a totally new level strikes {M-a} when the number of specified meanings increases. Injunctive-subjective attributes become injunctive attitudes.
these spill over into injunctive actions.
PART II.
In this part we are going to extend the ideas developed in Part I to include PERSONS, GROUPS, ICONS, and ABSTRACTIONS.

SET SETS p2

SYMBDOM..WPD October 30, 1998

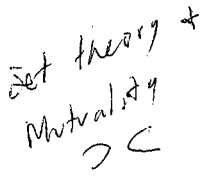
SYMBOLIC DOMAINS

Humans attempt to understand their experiences by representing them symbolically. These symbols are the inhabitants of a mental world designed to behave in the same way that the worlds of experience behave. The most immediate world of our experience is the cultural world in which we interact with other humans, and the most immediate of our symbolic domains is that of language, a symbol set of words designed to perform coherently with our cultural operations and views. When we attempt to extend this cultural symbolic set in attempts to understand other worlds of our experience we find words are inadequate. We have found that a symbolic set we call mathematics is most useful for representing our trans-cultural experiences with the physical world, the world of nature. We have found useful representations of our experiences with spiritual and psychological worlds in sets of deities and sets of symbolic activities called rituals. For each world of experience we develop a domain of symbols, but for cultural purposes tie these domains together with language. To truly explore non-cultural worlds such as nature or spirit, we must thoroughly transcend dependence on those symbols fabricated for operating in our cultural world. Although mystics have long understood this, scientists have discovered it only in the present century, when the understanding of experiences in the physical world cannot be grasped by words but can be represented by equations.

Mathematics appears to be a symbolic domain isomorphic to the physical world. Language is a symbolic domain being continually updated in order to be isomorphic to our changing cultural world. The representations of the worlds of spiritual experience, however, have not been so successful. First of all, this may be because there are many worlds of spirit, not just one as we have so far found to be the case for nature. But be that as it may, religion repeatedly returns to cultural symbols for understanding. Not only has it not developed an adequate symbolic domain to sustain understanding of worlds of the spirit, but has instead substituted cultural scriptures for the spirit worlds whose exploration is its task to explore. For these reasons we can conclude that religion is not dedicated to its task of understanding the spirit, but has opted for being a cultural facade which in effect obstructs this task. The religions of the aborigines, the shamans, the pagans, were far more advanced in their approach to the spirit than the institutionalized religions of our times. This is not to say that within the heritages of our religions there are no useful symbols, for there are many. This is especially true of the complex structures of interacting deity symbols in those religions of Vedic lineage, especially Hinduism and Buddhism. In the West the rich spiritual and psychological symbols represented by the gods and goddesses of the Mediterranean, of Egypt, Greece, Rome have been discarded in favor of a symbol for a single, (though important), spiritual fact: The unity of all things. [The desiccation created by this choice could not sustain itself. It had to be augmented with threefold aspects, with Satan, with the Virgin, with countless angels and saints. Monotheism is a lock on the gate to spiritual worlds.]

When we consider the success of mathematics as a symbolic domain representing the physical world, we naturally inquire, can mathematics serve as a model for the design of other symbolic domains? This does not mean that mathematics itself should be taken as the symbolic domain, but that there are certain aspects contained in the organization of mathematics that could prove useful in the design of other domains. Certainly the concepts of elements, types of elements, operations, and types of operations seem to be applicable to other domain of symbols. These concepts appear in language in the form of nouns, their modifiers, verbs and their modifiers. Where can we start in the design of a symbolic domain for the worlds of the psyche and spirit?

One of the most advanced symbolic domains, having many parallels to mathematics, for representing psychological and spiritual ontologies is that of Mahayana and Vajrayana Buddhism. The various buddhas, tathagatas, bodhisattvas, along with skandas, kayas, cittis, etc. provide a rich vocabulary and grammar for representing spiritual experiences. What is lacking that is found in mathematics is some form of overall organization. It is suggested that the structures contained in Vajrayana and Tantra be put in juxtaposition with not only the spiritual symbols of other heritages, but with the structures of mathematics and investigate whatever parallels that might appear.



SYMBOLS1.P51 DISK:THEO July 18, 1991

ON SYMBOLS AND MYSTERIES

Sir Fred Hoyle once remarked in reply to the question, 'for what purpose was Stone Henge built?', "We cannot know what purpose the builders of Stone Henge had in mind when they built it, but we do know what we can do with it. We can use it to predict eclipses."

So it is with many monuments, artifacts, devices, and, indeed with the world itself. We are not sure what their creators had in mind, but we have discovered, what we can do with them.
at least in part

I take two examples from my own experience. I do not understand the properties that the purveyors of the eneagram claim for it, but I do know one very important attribute contained in the structure of the eneagram. This is that there exist two causal paths, the outer, visible or peri-path and the inner, hidden, or dia-path. The outer sequence of the arcs may represent the causality of the physical world as it appears to us, while the inner sequence of the chords may represent a deeper cosmic causality connecting the same events. Ordinary time revolves around the circumference, but some other kind of time, one which violates all notions of past, present, and future operates cutting across the interior to connect the same events.

A second example for me lies in the Sephirothic Tree of the Qabbalah. This tree is one of the great symbols of Jewish mysticism and it provides the infrastructure for many Talmudic concepts. Again, I possess no knowledge of what the designers of the Sephirothic Tree had in mind, nor how they used it symbolically, but I can use it as an infrastructure to display symbolically the relations in the three great events of Christian teaching: the Crucifixion, the Transfiguration, and the Resurrection.

Many monuments, artifacts, and devices are thus seen to be *mysteries*, which is to say they are receptacles capable of containing many constructs and projections. Thus a mystery is a special kind of symbol which is capable of containing many meanings, each of which may be but a facet of some great meaning which is in some way the quintessence of symbol. In the same manner many of the equations of mathematics are capable of representing widely diverse phenomena. They too may be said to be mysteries.

Semiotics must be abandoned
at the gate to the garden of MYSTERY

Semiotics is the vessel we use when
returning from an exploration

but neo-logisms are required

THE SEARCH IS OPEN
Retrieval of what is encountered
truncates

An existing reality limits what
can be retrieved from
Contextual MYSTERY

Question
What is the MYSTERY's code book?

CHANNEL1.WP6 August 16, 1997

ON CHANNELING

While in English it is common to say 'I think', in several other languages the direction is reversed, coming out when translated as 'it thinks in me'. And even in English we sometimes say 'it occurred to me'. All of which suggests that there is some confusion on the location of the source of thought. We honestly may ask, 'Does thought originate in us or are we merely channels bringing the thought from some unidentified source into our heads and out of our mouths?' Perhaps both. Most of our thoughts 'we think', that is we originate them, we are the source. But there seems to be another species of thought that really does come to us from elsewhere.

This second species of thought usually has to do with creativity. It may come in words or in images, or in what we call inspiration, breathing in, so to speak. Remember, the Greeks felt that the source of creativity, in art, poetry, music, dance,... resided in communications from the muses, who were external to our heads. And even the great genius Isaac Newton, in an uncharacteristic lapse into humility, seemed to credit externals when he said: "If I have seen able to see farther than others, it is because I stood on the shoulders of giants."

The New Age has brought into our midst a group of 'professionals' who not only acknowledge an external source in their thinking, but boast of it and charge for it. These so called 'channelers' even assign @ names to their sources. Usually some ancient Egyptian or Medieval sage. When we compare the depth of the channeled message with the ordinary capabilities of the channeler, we begin to suspect that there may really be something channelled from an external source. I have to admit that many times when I have some sort of insight, it must come from some external source. With my background, I couldn't have possibly come upon the idea myself.

All of this leads to the category of thought process I call 'recognition'. Such recognized thoughts do not arise from sensory experience, nor are they contained in memory. To attribute them to Egyptian sages or past lives seems too simplistic. I feel they come to us when we have established access to MIND. And what is MIND? It is not the everyday pool of mental noise we call mind. It exists on a different level and is reached only as a consequence of some disciplined practice. It is reached by persistant attention or focus on some question or activity. It is the result of replacing the filters @ built by our egos with an undedicated openness.

[There exists an openness<>ego dialectic]

DIAPERI1.WP6 MAY 5, 1998

ON ~~MESSAGING~~ Messages

CDMA

A recent arcticle in Science News [Hiding secret data in plain view SN May 2, 1998 p286] tells how embedding a message within another message allows confidential communication without encryption.

> "The sender breaks the confidential digital message into packets and tags each packet with a short string of digits known as a message authentication code. The message packets can then be inter mingled with fake packets bearing bogus authentication codes to create a plausible missive. Because the sender and receiver share a secret method for authenticating the origin and contents of each packet, the receiver can readily distinguish between the legitimate information (wheat) and the gibberish (chaff). The individual packets are not encrypted."

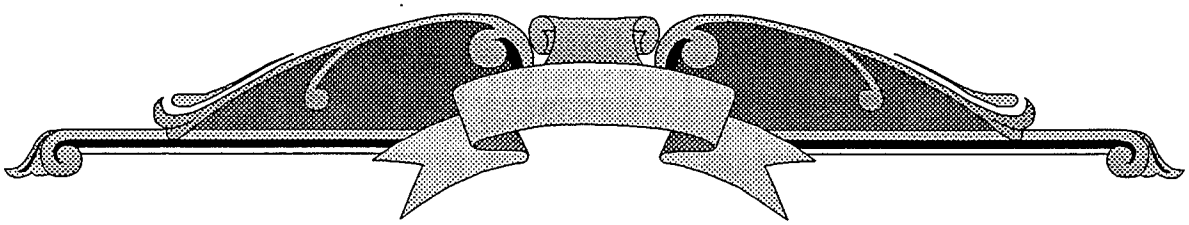
This of course is essentially the CDMA [Code Division Multiple Access] mode of communication that is now being employed by increasing numbers of wireless, telephone and data transmission companies.

While these embedding methods claim to be innovative developments in communication technology, they are in fact but updated versions of modes of messaging that go back to ancient times. The Holy Scriptures are said to contain many messages of this sort. Not only Gematria type messages, in which each letter of the alphabet has numerial associations, but messages extracted by reading, for example, every seventh letter or word. And then there are the parables, which may be read on many levels, each level containing a different message. And there is the enneagram which illustrates the embedding of one sequence within another: The "peri" sequence around the circumference of the circle, according to the progression of time, and the "dia" sequence following chords connecting nine points on the circumference giving an alternate causal or developmental sequence. And there are the "Camelots", moments of similar quality embedded in history at widely separate times.

We note here the following four modes of ~~messaging:~~ transmitting message

- The direct mode, all wheat no chaff
- The CDMA mode, embedding packets of one message within another. This would include examples like the enneagram and Camelots. And embedding the code book itself
- The parable mode, an open message that can be understood on several levels.
- The Gematria or encryption mode, which would include a plethora of different schemes.

What each of these modes have in common is that they all require code books. In the direct mode the code book is public available to all. The CDMA and Gematria modes require that the sender and receiver each have possession of the same private code book. The parable mode requires that the receiver must develop or derive for himself the code books that decipher the different levels of the message.



LANGUAGE AND META-LANGUAGE

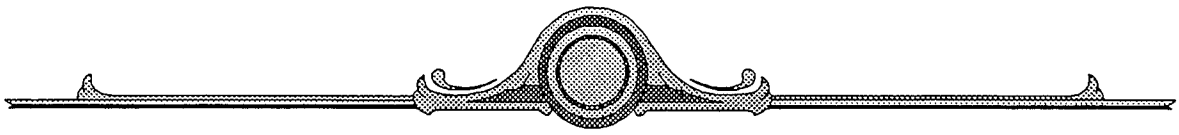
He who would gain wisdom must first master all languages, then overcome and transcend them.

To know one language too well is to mistake a single view of the world for its totality.

Each language and meta-language is a different mirror reflecting a different aspect of reality. Some, like mathematics, give a sharp but skeletal view; others, like poetry, afford a fuzzy but fulfilling view. Perhaps music, of all languages, comes closest to capturing the quintessence of reality in its net. But music also possesses the highest degree of isolation of all languages and is the most difficult to translate into other languages. We must conclude that music possesses some self-referential element that affords it an existence at once both part of and independent of all realities. Music is thus a meta-language.

In writing, if not in speaking, we come to some realization of the extent to which truth is truncated by the process of casting it in those verbal frameworks necessary for communicating with others. What can be caught in the nets of words is but a bare suggestion of those portions that elude articulation.

The success of human communication infers a large degree of redundancy in the world, a redundancy that renders mere hints effective in conveying keys of recognition from one person to another. Yet words have an imperative of their own, forcing thoughts into forms that ultimately become their prison.



WESTLANG.WP6 APRIL 12, 1998

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.

also openness to imports and neologisms

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.

penalizes

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.

VERBMODS.WP1 DISK: EPIONTOLOGY 04/24/87 AGW

The moods of verbs may be used as a template for exploring relationships among certain traditional Western ontological concepts. At some point in the development of a language the various types of reality recognized by the users of the language must by some device be made accessible to discourse. Whereas the temporal relations obtaining within the physical world were organized through the **tenses** of verbs, the ontological relations between worlds or realities seems to have been organized through the **moods** of verbs. Consequently the properties of the moods provide clues to historical (and pre-historical) notions of the metaphysical structure of the world. Curiously the moods appear to map a broader spectrum of realities than our current worldviews support, except for the recent contributions to ontology by quantum mechanics and importations from some traditional Eastern views. For reference, the usual moods assigned to verbs in most Western languages are given in the table.

MOOD NAME	**ASPECT OF REFERENCE**
INDICATIVE	The objective and the factual
SUBJUNCTIVE	The contingent and the possible
OPTATIVE	The desired and the hoped for
IMPERATIVE or INJUNCTIVE	Commands, entreaties, exhortations Algorithms
INFINITIVE	Reflexive, self referential
EXCLAMATORY	Interjective, interruptive

The indicative mood governs the material world, the world of physical existence. It is descriptive of what is, and to the extent that deterministic causality is the governing principle, it is descriptive of what was and what will be.

The subjunctive mood governs alternative worlds. Worlds that could be, should be, or even might be. It also speaks to the past and future of such worlds, what might have been, what might yet be. A sub-class of the subjunctive is the optative which focuses on hopes and preferences, what we desire and wish for. It is most interesting that in modern times the subjunctive is disappearing from usage. This is not so much from people no longer having hopes or desires, but from increasing inability to discriminate the is from the ought. Translated into cybernetic terminology, the error signal is lost and navigation becomes impossible.

If the indicative mood governs the domain of is, and the subjunctive mood governs the domain of ought, then we may say that the imperative or injunctive mood governs the domain of do and make and the negative commands don't and unmake. These are the domains of process and algorithm, the domains of becoming and creation. "Let there be light". These are the domains of conversion of ought into is, of the possible into the actual, and the transformation of 'subjunctive worlds' into the 'indicative world'.

The infinitive mood is much more subtle. It appears to retain but a vestige of a metaphysical view that has all but disappeared from the Western way of thinking and perceiving. But its very name suggests that it was once concerned with much more than we now assign to it. Today, the only remaining use of the infinitive is the transformation of a verb into a noun, but in a deeper sense this reflects the transformation of the world of process into the world of things. The infinitive and the gerund thus allow us to give the same concreteness to processes that we customarily project onto rocks and tables. If we think of the material or physical level as horizontal, then the infinitive introduces us to the vertical. It affords us access to other levels by a special type of self-referencing. Becoming may be brought down and substituted for being, world-lines replacing objects and events replacing places.

Finally, no schema should be considered complete without a means of breaking out of it. Every system must have an escape hatch, some way to interrupt it and reset it. We must be able to laugh at it, to mock it, as well as to operate it and maintain it. It is known that transformation and innovation for any system must come from its context, from outside the system. The interjective or exclamatory mood allow us not only escape, but allow us to affirm that there is an outside, a context. No matter how great our system of worlds, there is always an "other" lying beyond on the outside--I'll be damned!

THE SUBJUNCTIVE CREATES POTENTIALITY
THE INJUNCTIVE CREATES REALITY
THE INDICATIVE DESCRIBES REALITY
THE INFINITIVE ENTIFIES PROCESS

Infinitive verb: walk → noun walk or to walk

The inverse noun → verb add "ize"

final finalize

words that are both nouns and verbs

table

God

PLENUM AND PEACE

In several languages there is an interesting use of the same word for both totality and peace:

In Hebrew the word, שלם ,depending on what vowels are inserted, means either **whole,** shalem, or **peace,** shalom. The Russian word, МИР , (Meer) means both the **world** and **peace.**

What are the roots of this homonymous association of totality, the universal, the cosmic, with peace, tranquility, repose? It appears that there is some linguistic vestige of an ancient wisdom which recognized that peace is never to be found in a part, only in the whole; never in exclusion, only in inclusion. 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?

Upon reflection, this equivalence of totality and peace seems obvious. Strife and conflict occur between parts, usually parts that deny the whole to which they belong. Strife within the family, within the community, within the state, within the global community, comes from emphasizing the part, ignoring the whole. And so it is even within ourselves. We are not internally at peace until our competing desires and revulsions are subordinated to the wholeness of our being. We are body, mind, spirit, and perhaps much more, but until there is harmony among these parts, there is no repose.

Only in the Oneness of the whole is there peace. We have glimpsed this in the message of the Christmas angels, in the submission to the Will of Allah, in the vow of the Bodhisattva for the enlightenment of **all** sentient beings.

CODEBOOK.WP6 MARCH 21, 1998

See 1998 #21

ON CODEBOOKS

Experiences, feelings, thoughts, exist in a space of more dimensions than can be linearized in language. The consequence of articulation is truncation. Whatever is put into words is but a downsized portion of its organic whole. Nonetheless, there remains the hope that the part excised to paper may in some way grow again to its fullness in the heart and mind of a reader. The hope that what has been reduced to a set of symbols may yet convey the essences of that symbolized, or still better, inspire some reader to an experience going beyond the initial gropings. Success, however, depends on both the writer and the receiver possessing the same "code book". For without a shared codebook all communication is in vain. Indeed, in the worst case, use of the wrong codebook will give a message that is both meaningful and erroneous. This fact puts at risk not only all communication but all experience (which is basically some form ~~or forms~~ of communication). We may ask, How much understanding of the world has been distorted or lost by our use of the wrong codebooks.

The deeper purpose of education is to equip our children with an essential "cultural codebook", a codebook that is the key to survival in a given culture: The key to living and making a living, the guide to what is important and what is useful inside a particular cultural context. In these times of rapid change it turns out that our cultural codebook needs almost continuous updating. This not only from technological innovations and their economic consequences, but from the evolution of societal values and of language itself. In addition, within the cultural plenum there are many sub-cultures, the legal, the political, the business, the entertainment, ... each having its own codebook, and each immersed in a milieu of rapid change. To survive in a surfboard society such as ours, it is not only necessary to have an up to date cultural codebook, but to have sizeable portions of some of these sub-cultural codebooks.

But there is more regarding codebooks. Perhaps most important of all the codebooks is one which is not available in school, the work place, or in a professional career, but is nonetheless available to everyone. It is the codebook that allows us to receive and interpret the deeper meanings in the messages of experience, undistorted by cultural and temporal filters. This is the codebook that tells us when we receive a message, "Hey. I have known that all along". [According to Shannon's definition such a message contains no information.] This is the "deja vu" codebook. We know we are using it when we become aware of something that is already in us, not recalled but **recognized.** It is as though we are in touch, not with our own personal mind and its memories, but with some "cosmic mind" of which we all are a part and to which we may all gain access when we wish to move beyond the facades and illusions of our self-created concerns.

CODEBK02.WP6 APRIL 20, 1998

See 1998#6

MORE ON CODE BOOKS

In English, and I suppose in almost all human languages, ofttimes a single word stands for many things. This obstructs our making important discriminations and leads to misunderstandings in communicating. For example, take these three words:

Consciousness LOVE
Suffering DEPRESSION
Thought

What does each mean? Ask and you will get many answers. Each is a bundle of multiple meanings that dictionary definitions fail to display. But more seriously, the packaging of diverse meanings in a single word creates associations that shackle our thoughts to particular patterns. Language both enables and entraps a perception of reality.

Each language packages concepts and meanings differently. While the packages are pretty much the same for most common things, such as water, window, wine, a fact that makes translation possible, when it comes to concepts less tied to sensory inputs, the packaging varies, making translation error prone. Thus a dictionary, which is a "level I code book" works only for shared packages. Eastern metaphysical writings cannot be translated into a western language using a level I code book. Only if the experiences are shared can the words for a proper "joint packaging" be found. Or a level II code book is required. Likewise, the language of modern physics cannot be translated into vernaculars since it is based on experiences with particle phenomena that most of us have never had. A level II code book is required.

Question: Is all thought carried on with words? Perhaps it would be better to ask, Is all thought carried on with symbols? This generalization because we are also able to think in terms of mathematical symbols, in some cases without any supplementary words. We also have "feelings", which seem to exist without words, many times it being impossible to articulate them. Feelings vs. thoughts? Maybe it would be proper to say that the class of feelings contains the class of thoughts as a subclass; the thought subclass consisting of those feelings having finer discriminations and consequently being representable by specific symbols. But we have seen that even the thought class at time requires a level II code book, what level code book is required to communicate feeling? And here feeling includes spiritual and mystical experience, frequently spoken of as ineffable, meaning without a code book.

Heart
∋ intellect

Sometimes we are not even aware that there is communication taking place, that there is a message. We might say it takes a "level 0 code book" just to know that there is a message, regardless of whether a meaning can be extracted or not.

OK so we are aware there is a message. What is it saying? If the sender has experiences, feelings, thoughts, packaged the way we package them, then evolving a "level I code book" or dictionary should be possible. Certain messages can then be exchanged. But there may be parts of the message we either do not understand or misinterpret. Either we have not had the experiences or have packaged them differently. What do we do? Usually downgrade the message to make it fit our level I experiences and understanding.

This is a very real problem, not just speculation on how to communicate with aliens from star system 61 Cygni. It involves the messages given to us by history's great teachers, by bodhisattvas, saints, and mystics. We have taken their messages and translated them with our level I code books, distorting and omitting in order to make them fit our with our experience and understanding. However, these messages come with their own code book, the only code book that will reveal the true meaning of the message. **The code book is part of the message, it is contained in the message.** Now that is a challenge for us!

CODEBK01.WPD JUNE 18, 2001

HUMAN CODE BOOKS

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

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

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

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[1] See Scrap 1996 # 39

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

EXPCOD.W52 DISK: January 20, 1994

DECODING AND RE-ENCODING

The product of human exploration of the world is an encoding of our interactions with the world in a code that attempts to be communicable to all humans. We call this encoding of experience: knowledge. From an anthropocentric view, the universe is already encoded and our task is to decode and re-encode it. This is particularly the task of science: the decoding of the world from its natural symbols into a new code consisting of a set of human created symbols (usually linguistic) that we hope will be isomorphic with the original. How faithful our recoding is to the original is an unknown, but it is the best we can do not having possession of the original code book. The fact that our encoded representation of the world seems successfully to reflect in large part the original code has encouraged us to adopt this process. However, we must be aware that from time to time we must revise our code book and on occasions scrap it.

But there are those who hold that this method of decoding and recoding will never give but a dim and approximate view of the original code. It is the mystics who will argue that we, as part of the world, have already been given a copy of the original code book. It resides within us. To observe the outer world, in order to decode it and then to re-encode in terms of an inadequate set of ad hoc symbols, is to the mystic a round-a-bout path to understanding, and one with low probability of coming to the correct code. Better to study and internalize the original code book itself which is in our possession. This would be a more direct path to understanding.

September 9, 1996

ON CODE BOOKS

The White House is sending a message to the Middle East encoded according to the code book of American politics, which Republicans, Democrats, and the public at large all share and all understand. But the message is received and decoded in Islamic lands by peoples having a different code-book. The message they receive is not the one the incompetents in the White House think they are sending. This is a form of egoism that has more than once been at the root of failures of American foreign policy, from the time of Woodrow Wilson to today. Assuming that our way of thinking is also how others think has cost thousands of lives of American service men in wars whose seeds were planted by our thinking locally and acting globally.

The compilers of messages proclaim, "There will be no mistaking the message we are sending", "The only thing so & so understands is force". These announcements are excuses for not taking the effort to translate what we want to say so that it can be understood in the language of cultures with different values and approaches to life. Ultimately, the usual message that gets across, one certainly not intended, is that the only thing Americans understand is force. Perhaps that message may contributed to how terrorists choose to communicate with us.

SHAMPHYS.WPD MAY 23, 2001

see also 1993 #6 1999 #3

SOME THOUGHTS ON THE 67TH ANNIVERSARY OF KRASNIK

THE PHYSICIST AND THE SHAMAN

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

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

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

length magnitude

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

But what about "width of here?

Now direction has entered Special relativity see Sept 2004 Scitex

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

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

SYMBLANG.WPD July 14, 2003

SYMBOLIC LANGUAGES

See also 2006 #31

All cultures have found the need for symbolic systems that can communicate beyond the power of verbal language. Vernaculars are limited in their ability to communicate the multiple nuances in the spectrum of human feelings, and are also limited in their capacity to convey the fullness of certain ideas. While everyday language may be adapted, primarily through poetry and certain forms of story telling, to convey many kinds of feelings, there remain feeling experiences beyond the verbal's reach to communicate. And while everyday language may develop macros to express profound ideas, there remain ideas beyond complete formulation in words [hence another need for mathematics].

In viewing the history of various cultures, there appear to be four "supplementary languages" that have been developed for the expression and communication of human feelings. These are the symbol systems we call music, architecture, garden, (landscape) and ritual. In the beginning the natural order spoke to us on a feeling or spiritual level, (but now mostly on a utilitarian and scientific level), and we felt the need for dialogue, to speak back to nature. and it is from this need that supplementary languages were crafted. We sought to converse with nature on nature's terms, in nature's language, and to do this we copied what we perceived in nature. We copied and extended its melodies in music, its forms in gardens and architecture, and its dynamics in ritual. But basically we emulated what nature itself does, we created. To speak with creation we became creators.

Every symbol system begins with what is present, the manifest, and from the manifest attempts to capture what is absent, the unmanifest. That is, the system begins with things, then seeks to derive the relationships between the things. For example, a sacred grove is an entity consisting of the trees which are manifest. But the relations among and between the trees are not manifest. Nor are the relations between the trees and the earth, the trees and the sky, the trees and those who enter the grove manifest. Nor is the sacred geometry that links the sacred grove to all other sacred groves manifest. We seek to discover these relations by copying or modeling what we observe. We begin to perceive and understand the relations in the grove by first experiencing them in our gardens that model the grove. We then return to the original, go back to the grove itself , to re-experience it. First testing, then enhancing our understanding. This is the path of a symbolic language.

But there are caveats: The symbol system replaces what it symbolizes. And every symbol system truncates what it represents. We must therefore, repeatedly return to the sacred grove itself, sit in silence, watch, listen, touch and feel. And if open, we may escape from the truncations we have imposed on the grove by our symbols.

Homomorphism is impossible, and isomorphisms are incomplete.

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