THE FRACTAL ORGANIZATION OF NATURE

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home page (page 1)
home page (page 2)

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Part 4. The Metaphysical Realm - Intuitive Section (4 Living Creatures x the Holy Trinity)

Preliminary Discussion: Evolution and Social Context of Religion (See: The Fractal Organization of Nature (Table))

For an organism that is divided into two sexes, nothing could be more natural than the concept of duality in Nature. We see many other natural forms of duality: the cycles of day and night, summer and winter, birth and death. The daily, seasonal, and lunar cycles have all been widely interpreted as analogs of the human cycle of life and death. For the intuitive, abstracting mind, it is but a small leap of faith to evolve in addition the duality of body-spirit, and all hominids we would care to classify as truly human have done so. What, after all, is the physical difference between the antelope which was alive and running a moment ago, and the one which now lies dead at our feet, impaled on a spear? Only an indefinable essence called life, a fleeting energy or spirit which animates the body and which can evidently be separated from it by violence in an event called "death".

The human foreknowledge of death, confronting the instinct for survival and the intense sense of personal identity developed by the

self-reflecting mind, provided powerful psychological motives to develop (from the observations above or their analogs) the duality of body-spirit, the afterlife, and the survival of individual identity (in the form of a "soul"). From this basis, the intuitive notion of the "spiritual" life of humanity (and the animals) was primitively evolved. This vision was enlarged to include the awesome forces of inanimate nature: storms, volcanoes, mountains, sea and Earth gods, and especially the overwhelming spectacle of the sky - the Sun, Moon, planets, and starry heavens. The spirits associated with these super-animate forces were presumed to control successively grander aspects of nature. We can indeed wonder what form human spirituality would have taken if our planet, like Venus, were permanently enshrouded in clouds, denying us a view of the "celestial realms".

(Note to readers: for a scholarly treatment of the intuitive section of the Metaphysical Realm, with an investigation of transpersonal psychology and the nature of reality (including a 40 page bibliography of pertinent literature), see the memorial webpage of Prof. J. C. Gowan (Sr.) and his book "Trance, Art, Creativity".)

Contents:

General Discussion

<u>Traditional Supernatural</u>

Level 13: Soul

Level 14: Angel

Level 15: Archangel level 16: Divine Being

The question of how morality and other aspects of human social behavior became associated with the spiritual realm is a separate issue, but in a world full of calamities, both natural and man-made, it is easy to see how troubles could be associated with "evil tempered" humans and animals (predators, poisonous snakes) and the spirits they presumably contained, and also with inanimate "trouble makers" such as storms and volcanoes. "Evil spirits" could be opposed by

"good" spirits, whose favor could be won by "good" behavior, gifts, or sacrifices. Through the evolution of such notions religion became the royal road to the social control of human behavior. The other contenders for this role, the chief, the secular lawmaking body ("parliament"), and the warrior group or military, would usually make common cause with the priesthood, and when all four united, that is, when the king was also the head of the church (or thought to be an actual god, or relative of the gods) as well as the commander of the army and the head of parliament, the social grip of this arrangement was generally unshakable. Society is at its most stable (and immobile) in this 4-square configuration.

Dissension within or between any of these four power centers risked loss of control and social instability, and when the rational mind began to question religious dogma the very foundations of the state were seen to be at risk. The influence of the rise of the rational mind has not been, could not be, restricted to religious authority alone. Because of the intimate connection between religion and government, the intrusion of the rational mind weakened the link between them and changed government forever. It is the weakening or actual loss of this powerful link to government that religion resists so mightily, for with the loss of this link its authority, security, and revenue is vastly reduced.

Government has evolved from the personal leadership of the Chief or Shaman, to the leadership of ruling and privileged families preserved through a genetic royal line and aristocratic class, to the control of society through elected officials (the "people's" government), and finally to international rule through the United Nations (an evolution still in progress). The rational mind and the rise of science has greatly influenced this progression, especially the shift from royal family to socially elected government, which may leave the church "out of the loop".

To achieve an ideal situation in the modern scientific world probably will require that religion find a new spiritual and ethical base which both the people and the government can endorse.

This possibility is actually being manifested today in the environmental movement, which all parties can embrace - even the military. Governments as well as the people have become very concerned about the environment: global warming, ozone depletion, pollution control, population control, endangered species and ecosystems, acid rain, clean water and air, erosion, deforestation, overfishing, resource depletion, ocean pollution, and a host of related environmental issues. The natural and physical sciences have already engaged the problem and "green" industries of many kinds are developing. Military technologies such as the GPS and "Earth Watch" satellites, Navy ships and ocean listening systems are being put to use for environmental monitoring. The Peace Corps, the Army Engineering Corps, and CCC-type paramilitary organizations in this and other countries are being used to protect endangered species and ecosystems, monitor pollution, and to otherwise protect, police, and restore the environment.

If religion will go back to its roots, embrace the "Spirit of the Earth", the animals and plants, life itself, and give up its exclusive focus on man, an environmental morality and ethics can arise which is both spiritual and scientific, which can save the Earth and humanity with it. Religion will have to face up to the painful issue of population control; the welfare of the Earth will have to be placed before the welfare of humankind - rather, they will have to be seen as indistinguishable. Religion can regain its link with government by leading the people in a new ethics, morality, and social behavior dedicated to developing an ecologically sensitive mutualism between humans and the natural world. If the traditional religions cannot do this, then the people will create a new one, as in fact they are busily doing today (new-age "green" religions). Chief Seattle would seem to be a natural role model, the ready-made legendary, semi-mythical leader for this new coalition and age.

(An attempt to map (some) of the most general features of the Metaphysical Realm in both its intuitive and rational modes in a single 4x4 table is presented in the <u>General Systems Combined Metaphysical Table</u>.)

Traditional Supernatural Religious Hierarchy

The metaphysical realm appears to have originated as the intuitive mind's attempt to discover the underlying ground of law which orders the natural world of physical phenomena. In recent times the rational mind, dissatisfied with the results of this intuitive effort, has through the agency of "science", taken over this quest. The intuitive mind, however, unwilling to deny the validity of thousands of years of its own accumulated wisdom, has reformulated its results in more purely spiritual terms. "My Kingdom is not of this World" says the intuitive mind, but it is real enough and the physical world is but a shadow, metaphor, projection, or product of ultimate spiritual reality. The rational mind has become inclined to believe just the reverse.

Having begun with a common goal (to gain power and control over the environment (including other humans)), a control gained either through the discovery of the physical laws of the Universe or by currying the favor of the gods, rational and intuitive thought in modern times have reached a compromise on their contributions to this quest: the rational mind is best for describing the physical Universe; the intuitive mind is best for giving life and the cosmos meaning and significance. As soon as science tries to give meaning to its findings, it collapses into philosophy, which is just the intuitive mind in a white lab coat; as soon as the intuitive mind tries to describe natural phenomena, it collapses into dogma and doctrine, which is just the rational mind in religious gowns. We need the "Copenhagen Solution" of quantum physics, which admits the simultaneous validity of two different descriptions of reality. Toward this end I offer both an intuitive and rational hierarchy of ordering principles in the Universe. One is a spiritual and the other a physical description, but they concern the same Universe. Both descriptions are equally metaphysical in that both are but the fabrications of our minds. The parallel construction of these realms is natural and spontaneous. This in itself is testimony to their common goal and ground. I find them mutually reinforcing, rather than destructive, with each enhancing the significance of the other.

Constructing the Table

The metaphysical realm encompasses an absolutely enormous range of human thought and experience, from individual psychic experiences to worldwide religions of ancient origin. In my attempt to organize such an immense data base I have had to adhere strictly to the goals of this project, and they are admittedly narrow: 1) can we demonstrate the operation of a 4x3 general system within human metaphysical thought? 2) Can a general hierarchical structure, similar in form to the 3 physical realms, be constructed in a natural way without doing violence to the data base? I believe the answer is yes to both questions and I will consider the problem of the hierarchy first.

Within the Judao-Christian-Islamic religions there exists for the most part (and we are interested here only in general tendencies, as being the most reliable) a simple 4-level hierarchy of spiritual beings, with the human soul at the bottom and the Supreme Being at the top. Between these extremes lie two intermediate levels, angels, of which there are many, and archangels, of which there are few. We discern in this hierarchy a pyramid of numbers, with humankind in its billions at the bottom, a heavenly host of angles above humanity, a few archangels (7) above that, and the single Supreme Being at the apex. This 4-part spiritual hierarchy is easily and naturally related to that of the material astrophysical realm: man, at the bottom of the spiritual realm, inhabits Earth, also at the bottom of the astrophysical realm. God, at the top of the spiritual realm, inhabits the entire Universe (or Multiverse), the top of the astrophysical realm. This leaves the solar system for the angelic order and the galaxy for the archangels, an intuitively reasonable fit, and accessible to the naked-eye observations of the ancients.

This correspondence is not coincidence: mankind has always equated celestial bodies with gods; the heavens are the traditional abode of mankind's deities. Hence we have a simple and meaningful basis for constructing a metaphysical hierarchy of spiritual beings that is by its own tradition correlated to the astrophysical hierarchy of celestial bodies. I accept this internal correlation between the intuitive

metaphysical system and the rational astrophysical system as a sufficient justification for the parallel construction of their hierarchies. Accordingly, all metaphysical entities which by tradition or fact inhabit the Earth, including its interior regions (Hades), are of the 1st order: humans, their souls, demons, giants, earth spirits, nature spirits, ghosts, etc. All spiritual entities associated with the extraterrestrial solar system (Sun, Moon, planetary gods, and angels), are of the second order; all entities associated with the fixed stars and constellations of the galaxy are of the third order (signs of the zodiac, archangels); God(s) associated with the Universe in its entirety are of the 4th and highest order.

The structure of the hierarchy being established, the next task is to fill in the positions of duality and 4x3 group function for each level with appropriate examples. The examples I have chosen come from a data base which I have purposely narrowed to include only the major metaphysical traditions: the Judao-Christian-Islamic faiths; Hinduism, Buddhism, and Taoism; the Greco-Roman and Teutonic mythologies, the astrological tradition, and the I-Ching of Confucius and ancient China. I do not doubt that examples can be found from many other sources, but I prefer to err conservatively by choosing familiar examples from established, ancient, widely held, and thus "successful" belief systems.

Level 13: Soul

Level 13 is that of the Earth and all things living on (or in the case of Hades and the "Underworld"), in it. While my focus here is on mankind and the human soul, this is the level of all Earth-dwelling deities, whether they be human heroes or saints, nature spirits, giants, demons, or deities of wind, water, mountains, etc. One of the difficulties in assigning deities to this level is that some heroes and prophets begin life on Earth but are elevated at death to higher levels, while others seem to have a dual residence (the Olympic gods), and still others (Lucifer and his angelic host) have moved downward to Earth from higher levels. Such incongruities only serve to illustrate the important notion that movement within the hierarchy is possible;

indeed upward evolutionary motion within the hierarchy is the promise and goal of almost every religion and spiritual practice. All levels of the hierarchy communicate with each other through the spiritual medium (the Holy Ghost; messenger angels; prophets; visions & revelations). The hierarchy itself is a unity of motion, evolution, "karma", and communication. (Light, gravitation, neutrinos, and historic spacetime serve similar communicative and causal linking functions in physical spacetime.)

On this 1st level the human soul is born and developed. The general scheme is that awareness of the soul begins with the development of a "conscience", (good me, bad me), goes through extensive development during mature life (the labors of Hercules), and either matriculates at death to the angelic level (enlightenment) or is recycled (reincarnated) through level 13 (possibly with a Karmic load of misdeeds) for another try at salvation.

The body-soul is the natural dyad of level 13, the soul being the necessary link with all higher spiritual levels. Without the soul, the remainder of the intuitive hierarchy is meaningless to human life as no opportunity for communication with or growth into the upper levels of spiritual life would be possible. The same principle is seen in physics: the electron shells of atoms can interact with light only because both are electrical in character. This pairing is essentially a manifest-unmanifest dyad, a characteristic which reappears in one form or another at all higher dyad levels. Again, in physics we find a similarity between the manifest-unmanifest body-soul pair of the metaphysical realm, the lepton-neutrino pairs of the microphysical realm, the particle-wave duality of light, the gravitational field of matter, and the electric-magnetic duality. Psychologically, the good me/bad me pairing may represent the dawn of soul-awareness ("conscience") within the individual. It is a type of constructivedestructive pairing which is again related to the manifest-unmanifest motif.

For the group position of level 13, I suggest the 12 apostles, the 12 labors of Hercules, the 12 houses of Israel, the twelve stations of the

Cross, and the twelve houses of astrology. All have been interpreted as developmental stages or attributes of the soul. In Buddhism 12 causal states of the individual are recognized. In Hinduism the 3 upper casts (casts in Hinduism are considered Divinely ordained) are thought to pass through 4 developmental stages. This is the developmental experience of the soul, culminating (at death) in either ascension to the angelic level, or recycling through level 13.

Level 14: Angel

Level 14 is the abode of angels, and all deities and spiritual entities associated with the extra-terrestrial solar system - Sun, Moon, and planetary gods. The Greco-Roman pantheon of planetary deities (the Olympic gods) belong here as do most of the angelic host of the Judao-Christian-Islamic faiths. These spirits have broad powers over earthly events (consider the influence of the Sun & Moon) and spiritually represent the next evolutionary stage of the human soul. Being only 1 level removed from human life (and as members of our own solar system), these deities are more familiar to humans than the higher powers, visit us more often, and share (according to classical tradition) some human characteristics including foibles. The notion of angelic or godly failings at level 14 may derive from observations of the wandering motion of the planets, the phases of the Moon, and seasonal motions and eclipses of the Sun. It is a reasonable assumption that most spiritual visions and "muses" perceived by humans originate from this secondary level, although a celebrated few seem to have come from the archangelic and even Divine level.

Several types of pairings can be suggested for the dyad position of this level. Perhaps the most appropriate is the spirit-soul pairing, in which the individual soul is seen as a "specification" of the larger and more general "spiritual sea", or "Spirit of Man" (in the human case). This is also the classic anima-animus duality, the spirit the animus, the soul the anima, converted in personality theory to a male-female pairing within the individual psyche. Astrology is replete with pairings at the planetary level. Co-rulerships, negative-positive and male-female characteristics of the planets are all featured.

Angel/demon pairings continue the good/bad theme.

For the group position of the angelic level we find the Biblical vision of New Jerusalem, the angelic city surrounded by 4 walls each with 3 gates. The ancient "Altar of Heaven" in Peking consists of a hierarchy of 3 concentric platforms with 4 stairways oriented in the cardinal directions, expressing this same 4x3 form, an Eastern commentary on the structural pattern appropriate to the higher realms. The Greco-Roman pantheon of the 12 Olympic gods also belongs here, since they were generally recognized as planetary deities of our solar system (including the solar deity). Many of the Norse gods can also be placed at this level, but I am only trying to sketch a plausible framework here, not attempting a complete survey.

Level 15: Archangel

The level of archetype and archangels: here are placed all deities associated with the stars and constellations of our galaxy, those whose powers and purview are of the broadest scope, but not yet of the Divine level. Deities whose powers exceeded those of the Olympic gods belong here, such as the Fates, Destiny, or Norms of Teutonic legend, and possibly the "4 Horsemen of the Apocalypse". The signs of the zodiac, associated with the constellations, belong here, as do the 7 Christian archangels. Archetypical processes of inexorable domain, such as time, evolution, cycles of destruction and regeneration (the Hindu Goddess Shiva), the battle between good and evil, are of this level. The seven virtues and seven deadly sins are also placed here. It is traditionally upon this level that the archangel Michael overthrew the proud Lucifer, casting him into the infernal regions of Earth. Hence the common foibles of mankind may extend even into the archangelic ranks, a reminder that the hierarchy is a true evolutionary sequence, requiring work at all levels. Not only men, but angels and archangels as well are subject to temptation and failure, and all must continue to work to achieve a crystalline perfection and union with the Divine realm.

The dyad at the archangelic level is more abstract.

Constructive/destructive and causative/receptive force pairs seem appropriately placed here, as are manifest/unmanifest opposites. The good-evil duality represented by the combat between Lucifer and the archangel Michael is a prime feature of this level. The "evil" component of this pairing may simply represent the natural interplay between the manifest and unmanifest worlds. The transition from unmanifest symmetry, or grace, into manifest asymmetry, the world, is easily conceived as a destructive fall into damnation. The signs of the zodiac are divided into male/female, dynamic/receptive pairings, as well as complimentary opposites.

At the archangelic level the group position is occupied by the 12 signs of the zodiac, constellations of our galaxy. These are further arranged in a 4x3 pattern, comprising the combinations of the 4 elements and 3 qualities of astrology. The 3 Fates of classical mythology, and their counterparts, the 3 Norms of Teutonic legend and the 3 Gunas of Hindu tradition, also belong here, powers of destiny beyond the control of mere planetary gods. Christian theology recognizes 7 archangels. The seven virtues and seven deadly sins are placed here, continuing the good-evil theme and the battle between Michael and Lucifer. The seven virtues are divided into a classical set of four (prudence, temperance, justice, fortitude) and a Christian set of three (faith, hope, charity).

Level 16: Divine Being

Level 16 is the ultimate level of unity of the Supreme Being and its attributes and representations. Only symbols of the Universal Deity are recognized here, or of the creation and destruction of the Cosmos itself. The Cherubim and Seraphim are nevertheless placed here, as they are always represented as surrounding the throne of God. They evidently represent aspects of the Divine Nature, as does the Trinity.

In the dyad position of the Divine level we find again male-female pairings in the conception of the Divine Father-Mother, and manifest-unmanifest pairings in the Alpha-Omega symbols and the Yin-Yang symbols of Taoism (beginning and ending - at the cosmic level, the

Big Bang and Big Crunch). Cherubim and Seraphim, evidently Divine powers representing centrifugal and centripetal flows of force to and from the Celestial Throne itself (light and gravitation, positive and negative entropy drives, male and female energies) are also placed here.

The group position at the Divine level is represented as the Christian Trinity and the 4 Living Creatures surrounding the throne of God. This is a Biblical vision which seems to have penetrated to the highest level. The Creatures evidently represent aspects of Divine power. 7 Elohim (4 + 3, rather than 4 x 3), are also represented as modes of activity or spirits emanating from the Divine Being. The Cross and the Tetragrammaton (YHWH) are both 4-part representations of the Divinity. The Hindu Trinity (Trimurti) of Brahma, Siva, and Vishnu (creator, destroyer, preserver) also belong here.

In the I-Ching, the representation of the flow of Divine Order begins with a unitary state of First Principle. This is then divided into the male - female polarities of Yin-Yang, then further divided into two complete 4x3 representations of these male and female energies. These in turn are united, and from the fertile embrace of the resulting hexagrams flows the elaboration of Divine Order into the manifest world. A study of the Chinese "Book of Changes" (the "I Ching") and its relationship to the human genetic code has recently been brought to my attention, and is appended here. The I Ching is an important Eastern example of the 4x3 fractal pattern so abundantly expressed in Western human thought.

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