

COMPLETING EPISTEMOLOGY: THE UTILITY OF TRANSCENDENCE AS A TOOL IN SCIENTIFIC THEORY FORMATION

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I want to know God's thoughts ... the rest are details - *Albert Einstein*

1. INTRODUCTION

Human epistemology has steadily evolved from dark ages of superstition through enlightened periods of logical reason to the current pragmatic age of empiricism. Now another Galilean class revolution completing epistemology by integrating Science and Theology (S&T) utilizing transcendence seems immanent. S&T represent opposite ends of a long continuum of schools of thought rather than mutually exclusive disciplines as often believed. To implement the required paradigm shift an integrative noetic science must include an adequate understanding of Transcendence. Over 2,000 years ago the Greek philosopher Plato considered this type of noetic insight, paraphrased here as a corollary:

§ Noetic Insight

No matter how great ones intelligence or how vast ones wisdom, noetic insight is cosmic insight transcending the capacity of the self [1].

Human epistemology has come full circle to a time not only for another evolutionary step, but the final one completing the tools of epistemology through the use of transcendence.

For the first time since the Dark Ages, physicists Paul Ginsparg and Sheldon L. Glashow wrote 12 years ago, we can see how our noble search may end, with faith replacing science once again [2].

This condition is not what is advocated here because it seems that no matter how advanced tools of transcendence may become, empiricism leads directly to engineering which is an integral part of temporal existence. In some arenas current science has already reached, at least in terms of experimental design, the limits of empiricism; for example some experiments in particle physics require an accelerator the size of the universe and some calculations require a computation cycle with a duration the age of the universe. Only about 70 years ago Cosmology was not considered science. The universe was believed to be clock-like as described by Newtonian mechanics. Since

the advent of Quantum Theory the majority of scientists have considered the universe to be quantum.

But recent studies extending the standard models have allowed a growing number of scientists to embrace forms of an Anthropic Conscious Multiverse. The form utilized here in Noetic Theory has continuous-state properties with temporal reality cast as a virtual subspace of a higher dimensional eternity [3,4]. This new cosmology yields key elements pertinent to premises here (especially the periodic properties enabling introduction of an inherent spirit-based action or life principle); some of which are:

- The fabric of reality continuously cycles between classical, quantum and unitarity (continuous-state).
- Phenomenological reality is virtual; because of the arrow of time much of the underlying noumenon is ‘filtered’ out of perception.
- Dimensionality cycles continuously from spatial to temporal to energy.
- Matter by Einstein’s $E = mc^2$ is continuously created, annihilated and recreated (the well known wave-particle duality) forming the holographic backcloth of perceptual reality.

Inherent in these periodic properties is the unitary field or spirit of God, acting in governance as a higher dimensional de Broglie-Bohm super quantum potential [5,6]. Periodicity allows for the pervasive ubiquity of this supernumerary action principle. Since a conscious universe is implied the field is one of information. This is key to our idea of transcendence. In an Anthropic Holographic Anthropic Multiiverse (HAM) human beings are spiritual beings and a path to enlightenment is possible by following certain laws related to this condition. Because of the nonlocal (and because of the additional dimensionality – supralocal) character of the Holographic Principle individuals perceive themselves as separate entities in 3-space. But in Higher Dimensionality (HD) we are unitarily imbedded in the holographic backcloth, which because of its spiritual nature –

- Transcendence may occur and
- Information received in the process

The coming paradigm shift does not merely represent a significant intellectual breakthrough like Copernicus’ transformation of egocentricity into heliocentricity, the advent of quantum theory or Einstein’s theories of relativity; but a profound paradigm shift where Humanity will leave the so-called Modern Age behind and enter an Age of Consciousness.

An ‘empirical metaphysics’ [7] is under development that will violate the uncertainty principle and allow actualization of Plato’s noetic insights in a manner useful for scientific exploration. Noetics, the study of the cosmology of mind, comes from the Greek word *nous* meaning intellect. Noetic insight when used scientifically to complete epistemology is the highest form of knowing because it utilizes and integrates the pure logic of philosophical reason, the rigors of scientific empiricism and the absolute truth of theology.

All scientific theory formation has at least low level metaphysical components. Without entering into a technical discussion of the nature of creativity, we assume here that this is what any creative process entails. The latter-day Mormon prophet Brigham Young went so far as to say “All scientific discovery comes as a revelation from God” [8]; while this may indeed be considered true in an Anthropic Universe, one would suspect the vast majority of scientists are currently neither generally interested in, aware of, nor even consider this possibility, especially since statistics have demonstrated that only about 20 to 30% of scientist believe in some form of god in contrast to 95% of the general population.

Does this mean that only few might be initially prepared to take advantage of the premises of noetic transcendence? An informal survey of my colleagues has revealed that some have already begun using transcendent abilities in various ways in scientific endeavor and daily routine with reasonable success. I know of no team efforts yet at this writing; although a five year budget for implementing bulk quantum computing approved in March 2007 will be used to test the premises here. As principle investigator I have chosen a question I believe, because of infinite possibilities, can only be answered by transcendence. Should we be successful certainly “the game will be afoot” as Sherlock Holmes would say at the beginning of a case. Hopefully preliminary results will be available before this volume appears in mid 2008. I think a result like this is required to create sufficient pause for engendering a Galilean class paradigm shift in epistemology. Since inception in the 1980’s all attempts have failed at implementing bulk quantum computing. I have been provided a unique approach by the *Zeitgeist*; that approach demands the development of what I have called “the Noetic Transform”[9].

The value of the high level addition of Transcendence as a tool of science in theory formation would be to accelerate progress by saving considerable time, energy and funds by optimizing both avenues for empirical research and efficiency in contemplating and defining fundamental new tenets of a model. For example, early in my career I sat in on a round table discussion by an august body of great thinkers of the age. They divided up a challenging problem into every logical possibility like spokes of a wheel. Each agreed to take a spoke or two, intending to spend the remainder of their careers working on their arena of interest of the problem. The utility of transcendence in cases like this would be to narrow the field to a spoke or two.

Currently all the standard models of science are Darwinian or naturalistic excluding any place for God or Spirit. For example Biological Mechanism, the basis for allopathic or scientific medicine and psychology states: *The laws of chemistry and physics are sufficient to describe all life; no additional life principle is required* [10-12]. The founding fathers of quantum theory stated it could not describe biological systems, Bigbang cosmology is also naturalistic; therefore something most assuredly must be missing in physical theory.

The noetic model for the integration of S&T is based on three premises:

- §1. That transcendence is a universal Anthropic Principle able to provide an interface or *common ground* between S&T.
- §2. Rigorous application of The Golden Rule (see below) spontaneously leads to transcendent abilities under certain optimal conditions because
- §3. Man is inherently a spiritual being (*The spirit and the body are the soul of man* [13]) imbedded in a conscious universe guided by a unitary field tantamount to this spirit.

A common ground [14] uniting S&T is required because traditionally scientific principles are not accepted by faith based theology; and religious dogma is generally considered an unacceptable anti-intellectual mode of epistemological inquiry by the common definition of scientific pragmatism in place since Galileo showed that reason, in the case of heavier objects falling faster, failed. Similarly today Hubble discovered redshift, not a Doppler expansion of the universe. Other interpretations are available [3,4] supporting HAM cosmology.

To achieve this integrative result a model of an Anthropic Continuous-state Holographic Anthropic Multiverse (HAM) [3,4] (and this volume) is utilized that includes an inherent basis for defining complex self-organized living systems in a manner that includes the physical basis of spirituality and therefore transcendence [15] (and this volume).

According to the Perennial Philosophy: *God exists and has revealed a path to find him* [16]. This perennial philosophy is not only universal to all theology but ultimately to all truth whether theological or scientific as we make the case for here. The HAM [3,4] an extension of Einstein's Static Universe model, is shown to naturally include a new action principle governing complex self-organized living systems. This HAM elucidates the physical basis of spirituality. All legitimate religions or life paths in principle provide avenues to transcendence. Achieving transcendence is not based on the superficial icons of the world's theologies. Superficial artifacts like phylacteries, crosses, rosaries or rituals like bowing east or genuflecting are not relevant.

Because human beings are inherently spiritual [13,15], transcendence can be achieved universally by practicing principles of love, service and charity; or adhering FAPP perfectly to what is called the Golden Rule - Do unto others, as you would have them do unto you [17-24]. The Golden Rule is the most fundamental moral or ethical principle; it is the basis for the theology of virtually all world religions, the basis of social order, interpersonal relations, sound business practices and international diplomacy. The Golden Rule has many similarities to the Hindu belief in karma.

2. THE GOLDEN RULE SUBSIDIARY TO LOVE FOR GOD – THE GREAT COMMANDMENT

For simplicity we will argue our case only from the point of view of Judeo-Christianity but the reader is asked to keep in mind that as illustrated in fig 16.2 the premises here are postulated to apply to all legitimate theologies. The monotheistic religions Judaism and Christianity teach that the Golden Rule and other moral commands for human relations are subsidiary to the Great Commandment relating to God, e.g., Jehovah, Emmanuel or Jesus The Christ explicitly identified the Great Commandment as supreme love for God, as affirmed in the Hebrew Torah and Christian Bible [25]. In contrast to the ancient 'an eye for an eye', Jesus gave a new command - "Love one another as I have loved you" [26]. By categorizing 'Love your neighbor as yourself' as the Second command like unto the first, Jesus placed the Golden Rule and human relationships as not subsidiary but tantamount to one's ideal relationship with God the father. The paramount statement relating to our purpose here is Christ's teaching regarding the two great commands, specifically as stated in the last sentence:

Master, which is the great commandment in the law? Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great commandment. And the second is like unto it, Thou shalt love thy neighbor as thyself. On these two commandments hang all the law and the prophets [27].

Prophets are seers and revelators – users of transcendent abilities. The requirements for transcendence may be further clarified in terms of a three-level pyramid (Figure 16.1). The base represents crimes or sins of action like murder, theft or adultery for example. The middle of the hierarchy is represented by sins of word like lies or insults, which under extreme conditions could lead to another's harm or death. Goethe's 1774 classic *Sorrows of Young Werther* [28] is purported to have produced a rash of suicides on its publication; whereas a statement like 'where'd you get that stupid shirt' may or may not only hurt ones feelings. The top of the pyramid represents sins of thought. Thought by nature is fleeting. As long as an *evil* thought is not dwelt on; it can be forgiven as quickly as contemplated. At this level of living the limitations of being human come into play. Deity can expect no more of a mortal being than trying to manage ones thoughts.

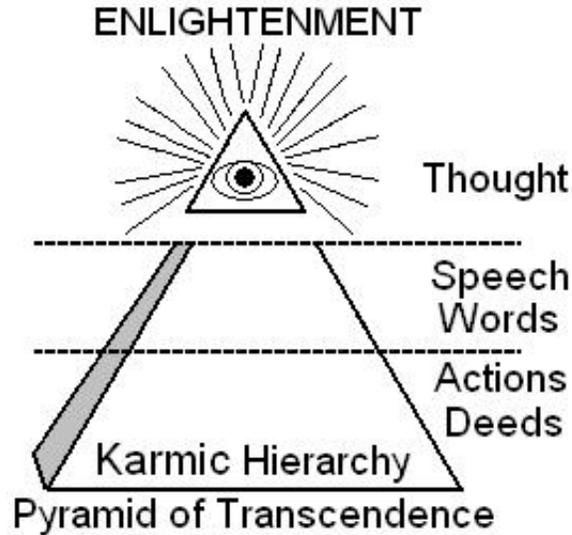


Figure 1. Pyramid of Transcendence / enlightenment. Individuals ‘Living’ operationally at the top of this ‘karmic pyramid’ spontaneously develop transcendent abilities. ‘Sin’ or violation of ethical principles, commandments or Karmic law can be classified into three weighted categories of decreasing severity: 1. Actions, 2. Speech, 3. Thoughts.

According to metaphysical law of the perennial philosophy as applied to HAM cosmology, one is virtually guaranteed attainment of a degree of transcendence when ones ‘moral crimes’ hover at the apex of the pyramid (Figure 16.1); provided one has sufficiently good karma or repaired any karmic debt or made restitution for negative conditions of the past.

Noetic Cosmology suggests that by routinely living at this apex a universal Anthropic Principle of Transcendence comes into play whereby anyone maintaining this mode will spontaneously achieve a state of transcendence. If the premise for this noetic Principle of Transcendence is correct, any team of scientists whether comprised of any combination of Jew, Christian or Shinto for example will be able to utilize Transcendence as a tool in scientific theory formation (Figure 16.2). Likewise any dialogue between scientists and theologians could achieve similar fruition. Based on the fundamental premise that Men are spiritual beings [13,15] living in an Anthropic Multiverse; the following postulate is said to hold true:

Postulate 1

Any individual or group of individuals living by the Golden Rule, to the extent where those individual’s moral offenses¹ occur generally only at the level of thought, will spontaneously develop transcendent abilities.

Two conditions apply. The past history of the individual must be relatively free of serious offense. The postulate may not apply to those guilty of unpardonable offenses like murder or blasphemy against God². The activity of thought is at the limit of human control. Human beings cannot be expected to have perfect control of their thoughts. The karmic rule is satisfied if one does not dwell on negative thoughts.

¹ Moral offense – We wish to skip for the most part a detailed delineation of what constitutes moral offense. For our purpose here we chose to simply state that good has a tendency to bring people together and moral offense has a tendency to separate or harm.

² Unpardonable Blasphemy – This is not a condition of swearing or cursing of the general kind; but a rare occurrence of a fully transfigured person who has beheld God like a Moses who then turn against God.

A power factor exists. Christian doctrine states: Charity covereth a multitude of sins [30]. This charity or good works, (charity of time or substance) provides a power factor for eliminating residual or negative Karma enabling the time to be shortened in reaching the apex of the pyramid or the transcendent state. The basic needs of all life on Earth is optimized by ‘The Golden Rule’- treating other entities and the environment holistically in the same manner as we would like to be treated. This perennial philosophy is an absolute truth that relates to all sentient consciousness universally throughout the Holographic Multiiverse where intelligent life is the rule not the exception. Transcendence can be achieved by a high level adherence to the universal tenets of the Golden Rule. Empiricism has been an impossible challenge for theology; and scientists have historically denigrated any dialogue utilizing religious dogma based on faith-based logic put forth by theologians as merely a product of pre-Galilean imagination. Therefore only by developing a common basis for utilizing transcendence as a universal epistemological tool can S&T be united pragmatically. Producing a universal framework for transcendence seems of grave import because such a completion of human epistemology could have broad impact ultimately leading to world peace, higher quality of life and amelioration of environmental concerns.

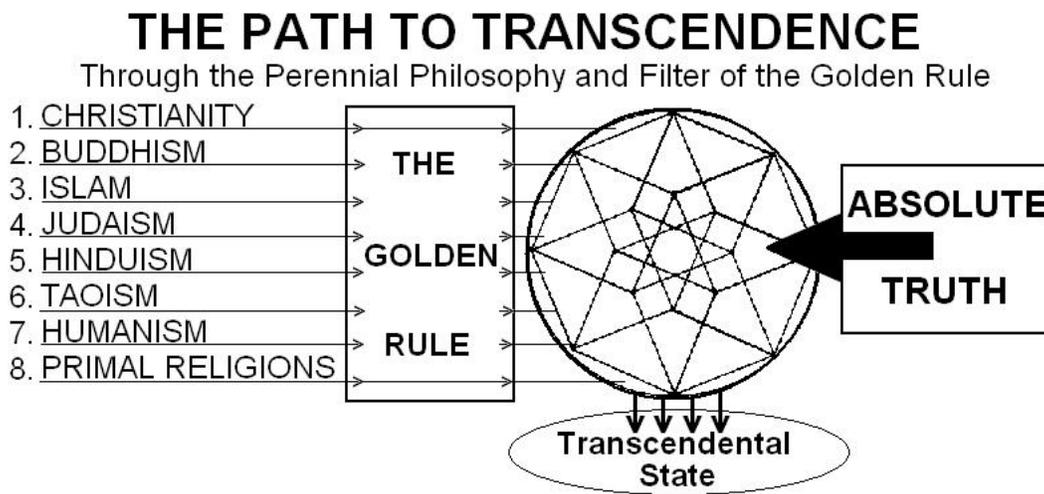


Figure 2. Because of the inherent spiritual nature of mankind as part of an Anthropic Cosmology with an inherent teleological life principle and the concomitant existence of ‘Absolute Truth’ in regard to spiritual matters, the Golden Rule, as a universal principle of the Perennial Philosophy provides a path to both find God and spontaneously develop transcendence.

13. TRANSCENDENCE AS A TOOL IN SCIENTIFIC THEORY FORMATION

Since there are about 10,000 religious sects or spiritual paths in the world today, most of which have conflicting teachings or dogmas; how could developing an empirical metaphysics be possible? Whatever ones spiritual path - the dance of a twirling Dervish, fasting, meditation, charity, chanting, prayer or peyote, it is achieving the resulting pure transcendental state that is of paramount importance.

As done here for Noetic Cosmology a team of investigators attempting to utilize transcendence might also utilize the historical tracts or scriptures pertinent to their individual path as a starting point to help guide the questions posed to the universe. We realize the extent of this challenge; one must have sufficient faith in the veracity of a scriptural tract to use it as a starting point. The spirit of truth gained from entering the state of transcendence is then used in the Platonic sense [1] for verification. Noetic insight is received through diligent study after sufficiently following ones individual path to perfection (fig 16.1) in

conjunction with prayerful meditation. Alternatively when one comfortably ‘hovers’ at the apex of the pyramid if one is studying a mathematical physics manuscript a passage on the Bessel function may leap out while reading or later while pondering as a transcendent suggestion that the Bessel function is pertinent to the engineering or otherwise problem at hand

We wish to make it clear that receiving such ‘revelations from God’ need not interfere with experimental verification; because as we mentioned earlier all theory formation has a metaphysical element when initially formulated in the creative mind(s) of its inventor(s). Therefore the metaphysical act of theory formation is independent of the pragmatic demands of hard science which is the second step or companion step in theory testing. There is already a growing movement for integrating science and theology.

Examples of noetic insight from history are Friedrich Kekule’s dream of a snake joining head to tail in the discovery of the benzene ring, or perhaps more pertinent to our interest in the nature of consciousness here, Descartes claim of receiving a revelation from God designating to the distinction between mind and body [31]. Descartes ‘vision’ has remained controversial for over 400 years and is only now about to be tested by the methods of noetic theory. Science, if my work here has been successful, has finally progressed to the point where this is possible.

The great value of developing an integrative discipline of science and spirituality is that potentially 10’s, 100’s, or even 1,000’s of years could be saved, along with the resources expended on spurious research paths that could alternatively be used to alleviate human suffering or maintain the environment etc. The timing in the Zeitgeist seems on target as history already suggests an asymptotic increase of technical information; so to keep pace transcendence seems timely.

As an example of a test question, for example noetic theory considers the Bigbang an erroneous interpretation of astrophysical data (Hubble discovered redshift not a Doppler expansion); more horrific at the time of this writing when a Nobel Prize has just been given out for the Bigbang’s discovery touted as one of the most profound discoveries of the last century. If this noetic premise is proven true, some of the best minds in astrophysics could have more efficiently expended hundreds of thousands of man-hours over the last 75 years. Science by definition is satisfied only by empirical evidence and theology by quietly submitting to faith. Francis Crick believes that the concept of a soul is a myth and that modern neurobiologists (except notably the late sir John Eccles [32] see no need for a religious concept to explain the interaction of nerve cells [33]. He calls this an astonishing hypothesis since over ninety percent of the earth’s population believes in the soul.

4. ABSOLUTE TRUTH IN THEOLOGY

The philosophical or theological concept of absolute truth is something has been argued for centuries; whether there is such a thing, what form it takes, can it be proven, and what are the implications if any. A very simple perspective is taken here: Absolute truth indeed exists, it is independent of opinion or even what some kinds of empirical tests might show; because sometimes interpretation can be ambiguous. Absolute Truth can only be verified through transcendence. For example in near history the Earth was considered flat (as can be seen from any mountain top or the seashore) and the center of the universe. Although we might be interested in forms of theological Absolute Truth like ‘the Gods organized the Earth and gave life to man’ [34]; some theological elements will not easily lend themselves to standard experiential-experimental forms of ‘empirical metaphysics’ and will have to be ‘confirmed’ by mutual verification by teams of noeticists experiencing the same transcendent “facts” or remain faith-based until a viable experimental protocol can be designed. Critics might consider the “divinations” of a particular group a form of group hysteria, which might be dispelled if disparate groups are causally separated.

If we consider God to be the Great Physicist, it is physical truths that science would be most interested in and also most readily verified by standard empiricism after transcendent discovery. It is difficult to predict what the world might do when it realizes that the path to transcendence is formulaic and while not necessarily a cake-walk so to speak but certainly no more difficult than learning to play the piano proficiently. And the earlier one began the easier the journey. This is not unreasonable considering that most scientists undergo an average of 22 years of study in preparing for an academic life, plus the lifelong study to keep abreast of developments in one's field(s).

5. ABSOLUTE TRUTH IN SCIENCE

Interestingly there exists a concept of absolute or immutable truth in science:

A truth that represents a permanent and final grasp of some limited aspect of nature. Most people would say this is incompatible with the expectation that our theories will be falsified. I adhere to the expectation that our theories will be falsified, and look for the immutable truth only in those theories that have already been falsified. Newtonian mechanics...is an example of the most certain and permanent truth man has ever achieved. Its only failing is its scope; it does not cover everything [35].

Now that it has been falsified it is an 'absolute truth' in the domain it describes.

6. THE PATH TO TRANSCENDENCE

Consciousness is an ubiquitous cosmological principle of the universe; and the human mind is a complex system imbedded in this universe. Inherent in the nature of the human mind is a fundamental spiritual component; that allows absolute truth to be perceived from any valid perennial path. Transcendent abilities seem to derive from three main avenues:

- 1) A specific type of innate personality structure, which comprises our psychological makeup, level of intelligence, knowledge and wisdom, all of which occupies the spacetime structure of the individual psychosphere [36].
- 2) Special gifts that the universe bestows upon us for its own purposes, or more likely through modification of number 1 above or that we have developed by certain forms of psychological stress or earned as in 3 below.
- 3) Personal preparedness; which seems to equate in direct proportion to living life by the golden rule and any other ethical principles.

There are exceptions to the ascension of the basic karmic pyramid and more details beyond the scope of the discussion here, but as a simple generalization as one climbs the Karmic pyramid of perfection the threshold of spiritual enlightenment or reaching the transcendent state occurs when our imperfections become limited to misdeeds of thought only. There is a motivational factor also, and wisdom can also relate to mastery of the principles related to the chosen path that might enhance or vary this threshold. It helps to be actively engaged in a worthy cause or service to humanity. Idleness would be a detractor to spiritual awareness. One must at least be involved in meditation or prayer.

One must also choose a viable spiritual path. It does not seem reasonable that one could pay singular homage to a stone, currency, psychotropic pharmacopoeia, or 'legal' forms of passion and expect a

significant degree of success while mentally occupying the top of the pyramid. Of the 10,000 spiritual paths existing on Earth today, one must use one that works. One's stage of personal growth limits the choice of perceived path. Some paths are significantly better; and it seems that there are relatively few that enable true enlightenment in a reasonable length of time. The path must therefore be chosen carefully. "It takes nearly a quarter century to become a great physician. Why, oh, why do people think they can fathom the most spiritual depths without the necessary experimental and laboratory work accompanied by compliance with the laws that govern it?" [34]. Kimball further states this expertise comes from personal righteousness followed by revelatory experience precept upon precept.

7. THE LAW OF HIERARCHIES AND NOETIC EPISTEMOLOGY

In applying Noetic Field Theory [37-39] to the quantization of the soul [40] and "The spirit in the body is the soul of man" [13]; how does the metaphor of the Karmic pyramid relate physically as a law of hierarchies as the means for reaching the transcendental state? Following the work of Plato we have defined noetic insight [1] as the highest form of knowing; and stated that transcendent communion operates because 'the spirit in the body is the soul of man' [15] and 'all spirit is matter' [15].

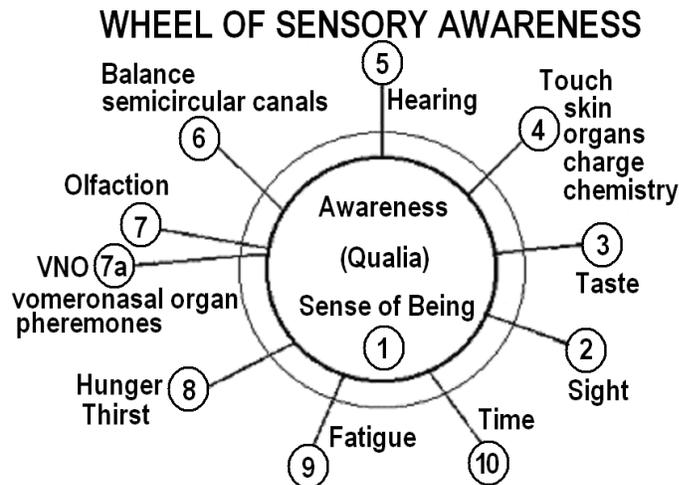


Figure 3. There are many more than the 5 common senses; all of which are connected to awareness. The term '6th sense' is a misconception. All of the senses are normally coupled to receive input from external sources but through a different orientation the mind can be coupled to higher dimensional spacetime to receive nonlocal input which is how 'paranormal' effects occur.

All matter is not spirit but can become so by perfection. But in the meantime in our temporal existence the human soul is comprised of earthy matter and spiritual matter in a complementarity of temporality and eternity. Our consciousness is imbedded in temporality and this is where our sensory apparatus is coupled to. It is a misconception that there is a 'sixth sense'. What actually happens is that the senses couple to higher dimensionality instead which is in closer proximity to the flux of the vital noetic field. This is what occurs when one achieves the transcendental state. In a crude metaphor this could be likened to an electron going to a higher orbit in an atom when it is energized. The confinement of the electron to the higher orbit is similar to the senses being coupled to a higher plane of spacetime.

Newtonian mechanics was cast in 3 dimensions. Einstein showed us that we live in 4 dimensions, which is the limit of our normal perceptual phenomenology; but God dwells in the complete hyperstructure of at least 12 dimensions because this is the minimum number to describe eternity – meaning being causally

free of temporal reality. Sins of deed and thought maintain a gulf from the 12D of perfection separating us from the full unity of the spirit and confining our matter to the 4D subspace.

Our goal should be to separate our being from the dross matter of imperfection and *precept-by-precept* climb the ladder of dimensions to the full 12D complement of light. Like the light in a laser reverberating between the mirrors of coherent reflection, a light explosion in all the 12 directions, not attenuated by any darkness that stops the light or makes it tarry into dissipation.

SPIRIT SONG OVER THE WATERS

*The soul of man
Resembleth water:
From heaven it cometh,
To heaven it soareth,
And then again,
To earth it descendeth,
Changing ever.*

- Goethe

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