

AGAPE (UNCONDITIONAL UNIVERSAL LOVE) AS EVOLUTIONARY
A TRANSPERSONAL EXPLORATION INTO THE SPIRITUAL AND PHYSICAL
EVOLUTION OF HUMANITY

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The survival of the human race and all life on planet earth is endangered by the technological advancements of modern civilization such as weapons of mass destruction and the global climate crisis. In the 1960's and 1970's movements began in the academic field of psychology that radically opposed the paradigm believed to have created this dire situation. Tranpersonal Psychology is an integrated field that approaches the future of humanity with hope as it explores the highest evolutionary potentials of our race as conveyed by comparative religious scholarship, psychological literature, scientific investigations, psychosomatic analysis, and case studies. The problem identified in the old paradigm is a disconnected duality of the reductive model that promotes separation, fear, and conflict. Universal unconditional love (agape) is the proposed trait that when implemented into the new paradigm of integration will dissolve the duality into the unity of a spiritual and physical evolution of humanity.

The research herein suggests not only a continuity to this proposition that can be found amongst the world's religious and spiritual traditions, but also a physiological exploration into a scientific understanding of extraordinary levels of human functionality. The suggested physiological transformation of the human body, as understood in the Taoist tradition through studies with a Tai Chi Chuan master, renders an individual invincible to any survival threat.

The agape trait in conjunction with the transpersonal movement promotes attitudes of selflessness, compassion, and empathy in order to facilitate an initiative to insure collective survival. Universal unconditional love aligns the collective survival interests with the individual survival interests, and may present an opportunity for humanity to evolve spiritually and physically beyond the threats of our modern day.

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INTRODUCTION

We live in a world of weapons of mass destruction, mass disease of body and mind, starvation, environmental crisis, and increasing numbers of murder, sexual and physical abuse, drug addiction, and suicides. In this world humanity as a species is extremely fragile, perhaps even endangered. If we are going to survive this dark period of our existence we will need to drastically change the way we function on this planet. There are many individuals, past and present, who have shown us other ways of being through their extraordinary lives and teachings. Jesus Christ, Buddha, Moses, Ghandi, Mother Theresa, and many more throughout the ages have displayed the highest potentials of humans and humanity. Since then many individuals have attained this higher level functioning through practice, and have successfully displayed extraordinary abilities that have been subjected to scientific analysis. I am talking about Tai Chi masters, Shamans, Yogins, Buddhist monks, Saints, Zen masters, ...etc who have displayed abilities such as healings, levitation, telepathy, teleportation, telekinesis, vital organ control, sustaining life without food or water for long periods of time, shape shifting, iron skin, heighten sensory perception...etc. If one had these abilities, then they in essence would be made impervious to the threats of the modern day. Siddhis (extraordinary abilities) are expressed by sages as simple indications that one is on the path of enlightenment, and subsequently they are often regarded as side effects that result from the merging and 'unitive' experience with all that is. This mystical union is often facilitated by a feeling of unconditional love for all things known in the Greek as agape. Therefore I am positing that agape is actually an evolutionary trait for the survival of humanity.

Transpersonal psychology, a developing field that uses integrative methods to study specifically the highest levels of transcendental human functioning, will be the methodological view for this exploration. Comparative religious scholarship will reveal unique archetypes that portray cosmologies of our divine origins, descent into earthly form, and ascendant back to our divinity. These stories are nothing but hopeful visions in the darkness of the present day. The reality of the challenges that face our species will make the case clear that we are in need of an evolution of the physical and spiritual kind. A historical account of the development of evolutionary theory will be outlined in order to give this spiritual evolution some intellectual creditability. The ancient texts of many traditions outline the exact processes that are needed to occur in order to bring about this transformation. Taoism, in particular, will be rigorously examined in order to determine the centrality of agape within the process. Experiences with my Tai Chi Chuan Master will be shared in order to present informant evidence of the extraordinary abilities and the importance of agape. In addition, a new physics will be presented that will explore possible explanations of Tai Chi Chuan skills and the siddhis. This new theory will demystify these abilities so that they can be understood as a physiological process. In so doing the evolutionary agape trait and its influence on humanity will be explored in order to reveal what our world would be like if humans evolved beyond their own material bodies.

The ‘unitive’ experience manifests abilities that place one outside of any survival threat, but it only does so to the fullest extent if the agape is maintained. Therefore, it is in the individual’s best interest to unconditionally love all things. This new forming collective of agape consciousness could end the fears and sadness that promotes the destructive behaviors of our species that is causing our potential endangerment. All the weapons, diseases of mind and body, murders, wars, and environmental disasters will dissolve away as we evolve beyond them

by loving all things and re-establishing our oneness with creation. Therefore, agape is an evolutionary trait that will enable individual and collective survival.

Transpersonal psychology stands at the forefront of this transformation, and yet it is widely unaccepted by the academic community. It is my hope that this research will inspire academics to seriously consider the phenomenon discussed as scientifically explainable phenomenon. If the academic community can accept transpersonal psychology, then it would be a first step towards its acceptance by the general public. The implications of the acceptance of the transpersonal movement and collective evolution would facilitate a completely new way of living on this planet. Not one dimension of human experience will be untouched by this movement towards a better sustainable future.

THE DIVINE HUMAN

In my cross-cultural research of the world's historical and present day religious/spiritual activity it seems evident, at least to me, that there exists an archetype about the original status of human beings. The stories in the Christian world talk about a Garden of Eden where the original man and woman, Adam and Eve, lived one with God. Jewish tradition goes further back to mention our spiritual and divine nature as Adam Kadmon, the primordial cosmic man created by God even before the angels (Scholem 1946 p. 215, 265, 267, 279, 400) Similarly, the Hindu Rg Veda scriptures tell of Purusha Sukta, a story about the divine cosmic man becoming the entirety of the universe through a sacrifice. The Taoist scriptures talk about the ancient Wu masters who lived in the mountains of China long ago and were completely one with the Tao (Gu 2006). If only it was just a few cultures that spoke of this history, then perhaps one would be resolved to think it is just a myth. However, almost every tradition in what scholars now consider the "world's great religions" recounts some aspect of this history. Many perennial philosophers, comparative religious scholars, and transpersonal theorists commonly hold this view. The perennial movement, popularized by Aldous Huxley's *The Perennial Philosophy*, propagated the notion that there exist historically a universal truth amongst the world's religions, traditions, and philosophies.

"The Perennial Philosophy is expressed most succinctly in the Sanskrit formula, tat tvam asi ('That thou art'); the Atman, or immanent eternal Self, is one with Brahman, the Absolute Principle of all existence; and the last end of every human being, is to discover the fact for himself, to find out who he really is." -Aldous Huxley-

Ken Wilber, an integral [former transpersonal] psychological theorist, has devoted an entire book entitled *Up From Eden* that recounts this synthesized story of human cosmological origin and essence.

Within this story there is a prevailing archetype that is common throughout various cultures and traditions. The psychologist Carl Gustav Jung was one of the first theorists to popularize the notion of patterned themes that can be found to reoccur within the cultures, traditions, and religions of the world. Joseph Campbell later elaborated on this work by looking more specifically to the world's mythological and cosmological stories in attempt to find common archetypal themes among them. In the various religions it seems as if the original state of human beings was one that existed in oneness with whatever is believed to be the higher being or divine power. This archetype presents a non-linear account of humanity's development by suggesting that humans have de-evolved from a super-advanced level of existence and involves some level of forgetting where we came from. Sufi wisdom suggests that all that will be has already been done, but we are now in the process of remembering it.

Dr. Long, a professor of comparative philosophy at Laney College in Oakland California wrote a synoptically oriented review on a soon to be published culmination of scholarly research on Sufi wisdom by Dr. Sabzevary, a professor of philosophy and religion also at Laney college, entitled *An Anthology of Sufi Sayings*. Long's *The path of remembrance and return: The circle of Sufi masters* not only reviews the Anthology, but also links Dr. Sabzevary's conclusions to several other academics, scholars, philosophers, and intellectuals in the past. In support of the Sufi nature of remembering and forgetting Long introduces the British Psychiatrist R. D. Laing whom "once defined 'Repression' very simply as 'Forgetting something and then forgetting that you forgot.'" We are all to be found in this state. Remembering that you forgot appears a

formidable task, but for those who are disposed to awaken from their dogmatic slumber the light of dawn will bring renewal and return” (Long 2008 p. 3). In conjunction with this the infamous Sufi poet Rumi once wrote “in forgetting God, we have forgotten ourselves. Remembering God is the beginning of remembering ourselves” (Rumi 2007 p. 2198).

Furthermore the Sufi writer and teacher Idries Shah, owner of the Octagon Press designed specifically to published Sufi poets like Rumi, once wrote in his book *The Sufis* a statement that not only comments on what this remembering might entail, but also supports the overall argumentation of this thesis. “Sufis believe that expressed in one way humanity is evolving to a certain destiny. We are all taking part in that internal evolution. Organs come into being as a result of the need for specific organs (Rumi). The human being's organism is producing a new complexity of organs in response to such a need. In this age of transcending of time and space, the complexity of organs is concerned with the transcending of time and space. What ordinary people regard as sporadic and the occasional outbursts of telepathic or prophetic power are seen by the Sufi as nothing less than the first stirrings of these same organs. The difference between all evolution up to date and the present need for evolution is that for the past ten thousand years or so we have been given the possibility of a conscious evolution. So essential is this more rarefied evolution that our future depends upon it” (Cecil 1996 p. 61). Many of Shah’s works have been criticized by the academic community for improper interpretation of the texts despite the support of the Sufi poets. In Shah’s defense 24 scholars and writers from the eastern and western traditions put together a Festschrift entitled *Sufi Studies, East and West* to honor his contributions to Sufi studies (Cecil 1996).

The involution and evolution circularity paradigm is maintained throughout Wilber’s work especially in the 17th chapter of *Up from Eden*. If one assumes the original state of

humanity to be a divine one, then what we are now must be some kind of de-evolution (involution) from that state. The circular paradigm, however, necessitates a perpetual causality by which each evolution brings about an involution in order to bring about another evolution ad infinitum. According to Wilber this would suggest that our perfected nature from the previous evolution has been driven into the unconscious because it has been forgotten through this period of involution. The utility of the involution is made evident by the potential storage and release of all levels of our perfected nature when we bring what is in the unconscious into the conscious realm. “Where involution proceeds by successive forgetting or amnesia, evolution proceeds by successive remembering or anamnesis (Plato’s ‘remembrance’, Sufi *zihir*, Hindu *smara*, Buddha’s ‘recollection’...etc)...In short, once involution is complete, evolution can begin...Evolution is holistic. Because “to evolve” is to re-member what was dis-membered” (Wilber 1981 p. 302-5). Evolution, therefore, becomes the act of integrating everything into the unity of oneness. Wilber attempts to align his paradigm with the scientific Big Bang by suggesting that the singularity before the bang was the resultant of the previous evolved unification of the energetic (non-material) realm. This notion is concurrent with the Kabbalistic paradigm of divine emanations leading to the physical manifestation of the universe (Scholem 1995). The involution was nothing more than the physical manifestation of unification that was then dis-membered so that it can unified again in its physical totality. This is also strikingly similar to the Purusha Sukta Hymn by which the Cosmic man is sacrificed and dis-membered for the creation of the universe. This potential enfolding of the unconscious into the conscious is supported in the Hindu tradition by the notion of the coiled up energy stored at the base of the spine known as Kundalini that will unravel and bring about one’s spiritual ascension. In any case, Wilber’s theory resulting from a comparative study of the religious traditions suggests that there

is a collective unconsciousness of our perfected nature that will become conscious and physically manifest in the next evolution.

Do you ever feel that you have already lived your life, and you are now looking back on it all? As if life was some kind of dream or reminiscent memory. Throughout the ages we have searched for higher meanings, for higher potentials, and for experiences that are beyond this realm. Retrospective analysis of cave dwelling reveals that the sensory deprivation of the caves may have induced hallucinations (McClenon 2002). This seems to suggest that mystical experiences were with us since the beginning. Could we be searching for something that once was? Could the stark similarities amongst the various religious traditions be the collective memory of who we once were? Several transpersonal theorists suggest that the collective unconsciousness of Jung might have provided the transmission platform for the integrated worldview of the perennial thinker. In Clarke's *Jung and Eastern thought: A dialogue with the Orient* there is an examination of this connection in more detail by comparing traditional Jungian analysis to the more contemporary views of Ken Wilber. Clarke brings one's attention to the fact that Jung's position on the matter certainly affirms this possibility: "the world of gods and spirits is truly 'nothing but' the collective unconscious within me" (Jung 1964 v. 11: p. 857). Although Clarke feels this may reduce this religious experience to some subjective activity he expounds upon this premise to show the interconnectedness of human experience through this 'collective memory'. Traditionally scholars attribute the interconnectedness of religious mythology and philosophic thought to ancient trade routes, but what if the commonality is also the collective memory of what existed in the beginning?

Perhaps many ages ago there stood beings not bound by the physical limitations that we have conceived of, but rather they stood naked in their purity. Their skin was radiant with the

whiteness of the snow reflecting the sun. They walked the earth, despite their ability to levitate, out of humility, and left no trace but stories told by medicine men, sages, yogis, monks, etc... In their radiance they were everything that we now strive for as a race: to be compassionate, loving, understanding, selfless, giving, etc... The pressing question is how did we get here? If we were once one with the divine, then why would we ever turn away? Good questions. All of them are governed by the assumption that time is linear in the psycho-spiritual world of religious phenomenon and allegory. Mercea Eliade in his *Sacred and the Profane* talks extensively about the circularity of sacred temporality like the beginning and end of the cosmos indicated by the cycles of calendars or seasons. The modern world tends to see a beginning, middle, and an end; but this is not always the case in the religious beliefs of many cultures. The 'fall of man' and the ascension of man into the cosmic human are not events that happen at a specific period in linear temporality, but they are rather always occurring.

This view is also congruent with the notion of Jungian synchronicity whereby the cause and effect of any phenomenon occur within the same moment. The circularity of the causal relationship in this case is such that the ascension of humanity maybe simultaneously the effect and cause of the fall. In addition this unity of the fall and ascension within each moment is in concurrence with the Jungian concept of the 'co-incidence of opposites' which follows the work of Nicholas of Cusa (Grof 1988 p.36-7). This Neo-platonic who lived during the 15th century attributed the unity of opposite due to God's infinite nature as suggested in his work *The Vision of God*. Thomas J. Mcfarlane, a trained mathematician from University of Washington with a Masters in Integral Studies, recounts the historical development of the infinite in the western world as it relates to Nicholas's philosophic use of it. "Based on the paradoxes of the infinite discovered by Zeno and others, Aristotle rejected the notion that the infinite could be in any way

actual, and proposed instead that the Infinite could only be a potential. Aristotle, in other words, rejected the Infinite as an actual existing reality” (Mcfarlane 1999). This rejection of an actual infinity may have cleared up many of the paradoxes and subsequently led to the development of Calculus, but unfortunately many other paradoxes were still present such as the notion of an infinite continuum in geometry. Nicholas’s philosophic thoughts on this manner are unintentionally aligned with Taoism, non-dualistic Hinduism, and Jewish mysticism by postulating the unity of opposites as suggested by the notion that “In God we must not conceive of distinction and indistinction, for example, as two contradictories, but we must conceive of them as antecedently existing in their own most simple beginning, where distinction is not other than indistinction” (Bond 1997 p.29).

Jung’s theory was developed in the 1920’s but it wasn’t until the 1950’s that he published *Synchronicity: An Acausal Connecting Principle*. In the 1930’s he gained the support of the theoretical physicist and Nobel winner Wolfgang Pauli who is most famous for his work on spin theory and the exclusion principle which built the foundation for the entire field of chemistry. (Enz 2002) This suggests that spiritual understanding of circular temporality might have some physical implications if we are to understand the religious texts as presenting some kind of historical account of human existence.

Many religious traditions make this view more or less evident in their scriptures; however the Judeo-Christian tradition requires a sufficient amount of scholarly work in order to uncover this meaning. Jewish mysticism, being composed of an esoteric tradition that involves the oral teachings of the Torah that were handed down through the rabbinic line, might help in this investigation. These mystical teachings have been written down and categorized as Kabbalistic or non-Kabbalistic, The Zohar, which in Hebrew means light, is a Kabbalistic text that was

written by Rabbi Moses de Leon in the later part of the 13th century as a commentary on the Torah. The verse “Male and Female” in the Zohar was categorized and translated by Daniel Matt, and reveals a deeper understanding of the Torah’s usage of the word Adam; more particularly how it reflects the human emanation of the divine creation concerning the male and female principles that are united as Adam and later how they were separated (The evolution and involution). Through close readings and secondary source referencing it will be shown that according to these verses of the Zohar humans were originally spiritual beings that reflected the nature of the divine, and furthermore that the distinctions between male and female were manifested physically reflecting the divine creation.

The Zohar’s interpretation of the creation of Adam and Eve reflects the divine creation by rectifying some of the obscurities found in the chapters of Genesis. The first chapter of Genesis portrays the creation of Adam to be in the image of God (male and female) and coming after the creatures:

“And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them”(KJV Gen 1: 26-27).

In the second chapter of Genesis the creation of man is portrayed to precede the creation of Eve and come before the creation of the creatures:

“And the LORD God said, It is not good that the man should be alone; I will make him an help meet for him. And out of the ground the LORD God formed every beast of the

field, and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof. And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul...And the Lord God caused a deep sleep to fall upon Adam, and he slept; and he took one of his ribs, and closed up the flesh instead thereof; And the rib, which the LORD God had taken from man, made he a woman, and brought her unto the man...And Adam said, This is now bone of my bones, and flesh of my flesh: she shall be called Woman, because she was taken out of Man. Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh”(KJV Gen 2:18-19, 21-24).

Eve, which in Hebrew literally means ‘life-giver’, is shown to come from the rib of Adam. Since ‘Adam’ in Hebrew means ‘humanity’ this passage becomes puzzling, because its usage portrays it be male. There also seems to be this aspect of unity of male and female within chapter 1 that is further elaborated on in the 5th chapter of Genesis:

“This is the book of the generations of Adam. On the day that God created Adam, in the likeness of God He created him; male and female He created them. He blessed them and called their name Adam on the day they were created” (KJV Genesis 5:1-2).

At first it might seem that these chapters contradict one another, because the 1st chapter portrays the creation of Adam to be after the creatures, while the 2nd chapter portrays the creation of Adam to precede the creation of the creatures. Also, the 2nd chapter of Genesis can be interpreted to portray the female creation deriving itself from man; while the 5th chapter can be understood as a simultaneous creation of male and female as ‘Adam’. The interpretation of man preceding

woman has been understood through the centuries to portray a patriarchal attitude in Judaism. This view clearly contradicts the passages in the 1st and 5th chapter about uniting male and female. The section “Male and Female” in the Zohar clarifies the obscurities in these chapters by revealing a deeper understanding of ‘Adam’ (humanity) that reflects the divine.

The contradiction of these chapters arises when one attempts to compare the two usages of Adam within the texts. In chapter two of Genesis it seems that ‘Adam’ is being used to denote ‘male’ gender, and from this interpretation a superiority of men over women can be derived. The notion is challenged by the Kabbalistic understanding of this text. The first two lines of “Male and Female” refer to the verses of chapter five of Genesis: “High mysteries are revealed in these two verses. ‘Male and female He created them’” (Matt 1983 p. 55). In his analysis Matt already sets the stage for a deeper understanding of ‘Adam’ when he reveals that “‘The book of the generations’ (found in chapter 5 of Genesis) was taken to mean ‘the book of human character and fate’” (Matt 1983 p. 216). The next few lines, according to Kabbalists, reveal the true meaning of ‘Adam’: “to make known the Glory on high, the mystery of faith. Out of this mystery, Adam was created” (Matt 1983 p. 55). The Kabbalistic interpretation of ‘Adam’ is that “the human being mirrors the structure of divinity, the ten sefirot, in which masculine and feminine are balanced” (Matt 1983 p. 216).

The sefirot are the theosophical structure of the Kabbalistic emanation of the divine which consists of ten attributes that can be thought of as the structure (body) of the divine. The male and female nature of the sefirot is thought to be androgynous, because the divine creation, according to Kabbalists, required God to impregnate itself. According to the 1st and 5th chapters of Genesis ‘Adam’ is made ‘in the likeness of God’, and so it is believed by Kabbalists that ‘Adam’ reflects this nature of male and female unity that is present during the divine creation.

The next verses of “Male and Female” add to this deeper understanding of Adam: “Come and see: With the mystery by which heaven and earth were created. Adam was created. Of them it is written: ‘These are generations of heaven and earth’ (KJV Genesis 2:4). Of Adam it is written: ‘This is the book of the generations of Adam.’ Of them it is written: ‘when they were created.’ Of Adam it is written” ‘on the day they were created.’ ...’Male and female He created them.’” (Matt 55). ‘Adam’ reflects not only the nature of the divine creator (the sefirot), but also the creation itself (heaven and earth). This true nature of Adam, according to Kabbalists, is discussed by other scholars of Jewish mysticism, and is seen through out many other mystic texts as Adam Kadmon (the primordial man). Gershom Scholem, comments on this by stating that “God the Creator, is capable of being visualized under the image of man created. From this it follows that the limbs of the human body, to repeat the instance I have already given, are nothing but images of a certain spiritual mode of existence which manifest itself in the symbolic figure of Adam Kadmon, the primordial man” (Scholem 1946 p. 215). In another commentary on Spanish kabbalah Scholem refers to the original state of man, “Man, as he was before his fall, is conceived as a cosmic being which contains the whole world itself and whose station is superior even to Meta-tron , the first of angels. Adam Ha-Rishon, the Adam of the Bible corresponds on the anthropological plane to Adam Kadmon, the ontological primary man. Evidently the human and the metaphysical man are closely related to each other; their structure is the same” (Scholem 1946 p. 279). These academic claims about the original state of man are backed up by Midrash literature, which are collections of exegesis by Rabbis on the Torah. “Rabbi Berakhya said: When God wished to create the world, he began his Creation with nothing other than man and made him as a golem. When he prepared to cast a soul into him, he said: If I set him down now, it will be said that he was my companion in the work of Creation; so I will leave him as a golem

{in a crude, unfinished state}, until I have created everything else. When he had created everything, the angels said to him; Aren't you going to make the man you spoke of? He replied: I made him long ago, only his soul is missing. Then he cast the soul in him and set him down and concentrated the whole world in him. With him he began, with him he concluded [The Alpha and The Omega] as it is written: 'Thou hast formed me before and behind.' God said: 'Behold, man is become like one of us'" (Idel 1988 p. 117-118). This passage refers back to the creation of Adam in Genesis chapters, and therefore it can be seen how the true nature of 'Adam', according to Jewish mysticism, reflects the divine.

The beliefs of Kabbalists portray a unique story of the Genesis chapters. It seems that the original Adam was Adam Kadmon, who can be equated with the Adam in the bible. This Adam Kadmon, primordial man, has been shown to reflect the form and creation of the divine, which changes drastically the understanding of the Genesis chapters. Since the usage of Adam in the genesis chapters has been equated with the primordial man and this primordial man reflects the divine creation, it therefore can be concluded that these chapters of genesis refer to the divine creation. The last verses of "Male and Female" demonstrate this new understanding of Genesis: "From here we learn: Any image that does not embrace male and female is not a high and true image. We have established this in the mystery of our Mishnah. Come and see: The blessed Holy One does not place His abode in any place where male and female are not found together. Blessings are found only in a place where male and female are found, as it is written: 'He blessed them and called their name Adam on the day they were created.' It is not written: 'He blessed him and called his name Adam.' A human being is only called Adam when male and female are as one" (Matt 1983 p. 55-56). These last passages indicate not only a union of male and female, but also a unique progression of 'Adam' that can found in another Kabbalistic text called *The*

Secret of Du-parzufim by R. Abraham ben David of Posquieres. Moshe Idel comments on this text by stating that “It seems that the two divine attributes are regarded as corresponding to the bisexual nature of primordial man, who was later divided into masculine and feminine entities. Thus, implicitly we find a three-stage process taking place ... The first androgynous stage is obvious in the biblical story; these two attributes seem to have existed on a higher level or on the divine level prior to their separation” [Unity of energetic evolution/pre-involutionary state]. “Second, these divine attributes were separated, as Eve was from [taken out of] Adam” [dismemberment/involution of the great forgetting/the unity made separate by physicality]. “Third, the activities both of the attributes and of human beings thereafter reflect an essential cooperation of opposite factors” [Post-involution/evolution in oneness/the coincidence of opposites/ the oneness manifested physically] (Idel 1988 p. 129).

It can be seen from this analysis of the last lines of “Male and Female” that the superiority of man due to Adam’s initial creation is completely fallacious, according to Jewish mysticism, by understanding the true meaning of these chapters in Genesis. The creation of this Adam Kadmon before all other creation clarifies the contradictions of the creation of man before or after the animals seen in the first and second chapters of Genesis. The second chapter of Genesis has been shown to refer to Adam Kadmon, and therefore is a story about Eve being taken out of this androgynous being which also reflects the divine emanation of the Shekhinah which is the female essence of God in the Sefirot, and is responsible for the physical manifestation of creation and the holy presence. The first and fifth chapters of Genesis have been shown to refer to the oneness of male and female before separation and imply their needed union after separation. Thus, according to Kabbalists these chapters of Genesis do not actually

contradict one another, but instead present a unique story of the cosmic nature of man by referring to two different Adams.

The Zohar's "Male and Female" is a Kabbalistic commentary that reveals the true meaning of 'Adam' within Genesis to be a cosmic story about the divine nature of man. The story of humanity is not one of male superiority over female, but of a cosmic being of male and female that is second only to God, and even helped God in creation. Adam Kadmon was then given physical form and separated into two entities that reflect the male and female aspects of the divine. This separation was done in the divine so that the universe could exist, and likewise it was done in Adam Kadmon so humanity could exist. According to this story, humans must now unite with their polar energy (not necessarily the opposite sex) in order to end the duality and become one with the divine. Thus, according to Jewish mysticism, human beings are actually divine beings that reflect the cosmic and divine creation, the duality and unity of male and female, and the structure of the divine. In end of this brief analysis of the Zohar it is hopefully clear that Adam Kadmon was the perfected evolution that was then manifested into the physical form as the anthropological Adam and through involution female was separated from male so that the physical unity of the next evolution could occur.

The texts then state that humans are supposed to be the stewards of the world, instead of resource depleting and environmental crisis causing agents that many feel we have become. On face value of the scripture this is not exactly at all obvious as it states in Genesis 1:28 "And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth."(KJV) The work of many scholars such as J.K. Wright, G. H. T. Kimble, C. J. Glaken, Y.F. Tuan, and J. Kay has pioneered a new field of study called

biblical geography whereby the Judeo-Christian scripture and practices are analyzed in terms of their attitudes towards the environment. It turns out that a closer etymological investigation on the Hebrew words involved reveals the meaning of the verse to be the exact opposite of what can be taken on a surface reading of the translation. The Hebrew language is not as straightforward as the English language and often times phrases have double meanings, metaphorical allegory, and a play on pronunciations. In conjunction with Rabbi Jacob of Kjar Hanan and Rashi(Solomon ben Issac) “R[abbi] Hanina said: If he merits it, [God says] ‘uredo’ (have dominion), while if he does not merit, [God says] ‘yerdu’ (let him descend)” (Freedman and Simon 1961 p. 62) In addition Jan Joosten, a professor of the Old Testament at Palais with a Doctorate in Semitic Languages and Doctorate in Theology, has found that the word for dominion is sometimes better understood as servitude (Joosten 2001 p.552-5). The terminology of the phrase therefore suggests if humans properly serve the earth and ‘replenish it’, then they will rise above it as opposed to descending lower than it. This also could refer to the human nature going beyond its animal nature by embracing it with servitude, compassion, and love while living in harmony with the earth rather than being ruled by it with the traits of fear, anger, and greed.

In other translations of the text the word master is used instead of subdue. Ellen Bernstein, an accomplished biblical ecological writer, comments in her book *The Splendor of Creation: A Biblical Ecology* that “the root of the Hebrew word for mastery, kvs, comes from the Aramaic "to tread down" or "make a path." In the book of Zechariah, the root kvs is interchangeable with the root ak1, the word for "eat." Although kvs is often translated as "subdue" or "master," it appears to have agricultural implications.” (Beerstein 2005 ch. 3) This further suggests that the originally verse not only meant servitude, but also mastery of using nature for human survival

that is not intrusive but in harmony with the earth. In addition it clearly states in the KJV of Genesis 2:15, “And the LORD God took the man and put him into the Garden of Eden to dress it and to keep it.” It is truly unfortunate that many do not see this positive environmental attitude within the scriptures, but surely that is not the cause of our lack of stewardship since we have been mistreating the earth and ourselves long before these texts were translated into English.

Daniel Quinn offers a very interesting interpretation as he reviews in detail the ‘fall of man’ as understood in the Christian tradition in his book *Ishmael*. Eating of the tree of knowledge of good and evil meant, to Quinn, that Adam and Eve wished to obtain the knowledge that only God had, because God being beyond Good and Evil understands them fully. Unfortunately human arrogance led us to believe that we have attained this knowledge, and therefore could rule over the earth, take whatever we want, and decide what lives and what dies. This theory is similar to Wilber’s work, but also very different in the sense that Wilber does not attribute our fall to arrogance. Keep in mind that Wilber’s theory of evolution and involution is cyclical so the fall was actually a step towards our ascension. The serpent (which is responsible for persuading Eve to bite the apple), in a cross-cultural symbolic view represents “the self” as in self-knowledge, but also it can mean darkness within the self. Often times the serpent can stand for both poison (venom) and symbol for vitality and medicine (caduceus). The attainment of self-knowledge is associated with the light, while the darkness is associated with chaos. Neither light nor dark are good or evil, but nevertheless the serpent has been referred to as being both good and evil. Wilber comments on this by noting the importance of the position of the serpent in regard to its meaning.

It seems that whenever the serpent is coiled up (involution of the kundalini/unconsciousness), horizontal on the ground, and/or is depicted in the lower portions of

the body where it would govern 'food, sex, blood, and death' then it comes to represent lower consciousness i.e. darkness, and then finally evil. However, when the serpent is found in an ascendant or vertical position near higher portions of the body, then it comes to represent enlightenment, goodness, and the manifestation of kundalini (evolution/consciousness). Both symbols have been depicted throughout the ages mainly in Egyptian imagery from the subduing of the horizontal serpent to the headdress of the Pharaohs where the serpent is perched at the forehead to signify that the king has attained some divine ability. Even in the bible it states "And Yahweh said to Moses, 'Make a fiery serpent, and set it on a pole; and every one who is bitten, when he sees it, shall live'" (KJV Numbers 21:8). Thus it seems that Serpent in the story is neither good nor evil, but rather it is humanity's thirst for knowledge and how such knowledge is used that will influence which position the Serpent takes. (Wilber 1981 p. 33-5, p.142-6)

The first humans turned to themselves for knowledge, but ended up creating duality, by judging what is good and what is evil. "The eating from the Tree of knowledge, then, was not itself Original Sin. It represented the acquisition of self-consciousness and of true mental reflection, and with that evolutionary knowledge men and women then had to face their prior isolation" (Wilber 1981 p. 298). The theory that Wilber proposes takes a different turn as he suggests that eating of the Tree of Knowledge made humans aware of the fact that they were already separated from God. The physicality of Adam in the involution brought about amnesia of the previous evolution in the sense that humanity forgot their divine purpose. According to Wilber the blissful paradise of Eden was nothing more than the ignorance of the involution. The eating of the Tree of Knowledge brought about the divine remembrance, and in a sense 'they [Adam and Eve] grew up and walked out' in order to fulfill the divine evolution (Wilber 1981 p.298). The actual existence of a physically manifested divine humanity in the Garden of Eden

is not confirmed by Wilber, but what is asserted is that our perfection existed on some kind of pre-physical, energetic, or spiritual level. .

Wilber's theory is thorough, but theologically it makes little sense. God's nature as infinite, being beyond good and evil as Nicholas suggests, is such that its omnipresence does not allow for a totality of separation. God's nature being beyond the duality can of course accommodate perceptions of separation and unification. A synopsis of the passages tells of God's creation of the trees for food, The Tree of Life, and The Tree of Knowledge. God gives humanity a warning that eating from the Tree of Knowledge will surely led to one's death, but the Serpent says that it will enable them to become as gods knowing Good and Evil. In support of Wilber's theory of human ignorance in the Garden of Eden, Adam and Eve became ashamed of their nakedness after eating from the Tree of Knowledge, and thus suggesting some kind of gained awareness of their situation. God states that he will make the birthing process much more painful, that man will rule over women, and that humans will return to the earth in death. This suggests, however, that humans existed in a superior egalitarian state that was some how unaffected by the harsh conditions of the nature that we face now (KJV Genesis 2:17, 3:5, 3:16, 3:19). Finally, "God said, Behold, the man is become as one of us, to know good and evil: and now, lest he put forth his hand, and take also of the tree of life, and eat, and live forever" (KJV Genesis 3:22). The Tree of Life in the Kabbalistic tradition represents the ten divine emanations known as the Sephiroth that are embodied in the human form as the image of God that will lead humanity back to its divinity (Scholem 1995 p. 205-220; see also Falcon, T. & Blatner, D. 2001 p. 78). In addition, the Tree of Life is also a cross- cultural symbol of immortality or the attainment of Godhead. Scholars have even traced the origin of the Judeo-Christian Tree of Life through the Egyptian and Mesopotamian cultures where it was originally known as the Sacred

Tree (James 1968 p. 241-9: also see Parpola 1993 p.161-208). The leaving of the Garden of Eden is (the present tense is used because it is still going on since the Eden might be more of state than a time period or place), as Wilber suggests, a choice, but not necessarily a response to the dissolving of the ignorance that blinded Adam and Eve from their separation from God, because it seems that they lived more in accord with the divine nature during this state. It is the thirst for transformative knowledge that provoked Adam and Eve to eat from the Tree of Knowledge and their disobedience was necessary in order to eat from the Tree of Life so that they may become immortal.

‘The fall’ is, therefore, an owning up to the journey that God has set forth for Adam and Eve. The pressing theological issue is why would God allow creation to undergo such pain and disconnection? Adam and Eve immediately after they had eaten of the Tree of Knowledge were ashamed to be naked. This seems to suggest that they no longer felt a part of God’s natural world. The judgment that they made at this crucial juncture was one of distinction, separation, and duality. In seeking the knowledge of good and evil Adam and Eve found the duality, and subsequently manifested their own separation. How and why did this happen? How and why does God, being beyond Good and Evil, allow his creation to judge good and evil, and take part in a duality that will separate themselves from their creator? Many would say Freewill.

According to Dr. Tamar Frankiel, a professor of comparative religions, the manifestation of the duality and the separation is necessitated by the search for true understanding of Good and Evil. It seems that prior to this point Adam and Eve experienced goodness in their egalitarian state that was free from suffering, but their thirst for knowledge required them to experience the other side of what they perceived to be a polarity. This perception resulted in an illusion of separation, but since God is beyond good and evil this was required in order to fully transcend the duality

(Frankiel 2003). In a way it could be said, in accord with Origen's beliefs, that God had never abandoned humanity, but rather we have simply turned away. God with the utmost compassion created the material world so that those who have 'fallen' may turn back to their creator. In addition Origen, an early 2nd century Christian teacher, suggests that this process will not be complete until the Devil turns back to God, and therefore ending the duality creating a singularity of divinity of 'all in all' (Oshitelu 2002: for further reference also see Armstrong and R. A. Markus 1960: Baner p. 56-60: Bigg 1913, Boer 1976 p. 92-4: Chadwick 1965). Is it perhaps no different than a child that fearfully goes off to school? To willingly choose to take part in the duality, in the separation, so that one day we may move beyond such things. We may move beyond the physical separation, beyond the judgment, and beyond all that we could ever think or feel so that one day we may experience a oneness that is beyond all imagination. Is it not beautiful?

Yes, it is filled with sadness and fear, but is there not everlasting joy? There is a joy to be a part of something that is so unique-to be alive. To be given this chance to be all that you can be. The fall of man was not a mistake or an error, but perhaps a conscious choice to learn what we could only learn on our own. To Quinn and Wilber, the fall of man wasn't an exact period in time, but rather a process that is in some ways occurring right now. Every time someone becomes isolated and disconnected we call it depression, but in this way it could be understood as turning away from the source.

The archetypal story of our journey does not necessarily have a definitive beginning, middle, and end. It is rather a circular experience that contains both polarities within any given moment. Joseph Campbell talked extensively about the archetypal structure of the spiritual journey being composed of the searching for, the finding of, and the re-integration with society.

When one, however, abandons the linear structure of temporality and accepts a circular structure as proposed by Eliade, then these three aspects are found to be inherent within the any given moment (Campbell 2003). In the individual journey there are many things that you will still have to search for, while other things that you have already found but have not yet integrated. Similarly the same is also true with the spiritual journey of humanity. On the one hand we can see a paradigm of de-evolution as the cosmic man ‘falls’ and becomes materially trapped, but on the other hand we see an evolution as the material becomes spiritual again. Perhaps the structure of this journey is better likened to a spiral that is seeking its center point. Each de-evolution (involution) and evolution brings us closer to some point or apex of some supreme being. However, no such point can be definitively made in the realm of geometry, but rather an infinitesimally small spiral that continues forever. The process is constant and eternal, and yet it contains no temporal limitations. Every moment contains within it the highest and lowest potentials of our being, and so right now in this moment such natures are being expressed.

THE PRESENT CHAOS: AGE OF KALI YUGA

In the Hindu tradition the Age of Kali is one of chaos and the greatest disconnection from the divine source. The humanists and the transpersonal theorists have been aware of the fragility of humanity for quite sometime during this Age, and therefore it is a synthesis of their views that will be expressed in this chapter. In our modern world it isn't solely malnutrition, weather climate, or lack of water that threatens our survival as a species, but rather complete global climate change making earth not suitable for human life in addition to many weapons of mass destruction. It is us who has created these threats through our capitalistic desires and ultimately our fears. The environment will be deteriorating very soon unless we do something about it. Behind this declaration there stands a committee of hundreds of scientists that have dedicated their lives to this study (Union of Concerned Scientists 1993: also see IPCC 1996). There are hundreds and thousands of nuclear weapons owned by the USA and Russia, and it only takes one to do so much damage (see Norris and Kristensen Jan/Feb 2006: *ibid.* March/April 2006: *ibid.* March/April 2008). Technology has gone so far that our growth as a species can only lag behind its leaps and bounds. The human race is in danger, and extinction can be done with the tap of a button (Walsh 1988 p. 1-2: White 1988 p. 119: Pilisuk and Joy 2001 p.101: Grof 2001).

We find ourselves in a world full of isolation, of fear, of suffering, and of hatred. We constantly fight each other over religious issues, over resources, over political ideologies, and in the mean time we have ruined much of our lands. I am no environmental extremist, but I know that an international group of hundreds of scientists have verified the looming environmental crisis. I know that we have a problem when Bees are dying off because of pesticides, air pollution, and viruses that we may have played a hand in creating. One day the Bees will no

longer be around to pollinate plants, fruits, and any other kinds of vegetation. Goodbye to natural food (PSUCAS 2007: French CST 2003: Russell 2007). We will be eating synthetic food created for outer space. Not to say that this is definitely going to happen, but our world is definitely in a tough spot right now. Not to mention the up and coming weapons of mass destruction. Nuclear bombs are not nearly the worst of military technology. There are weapons that can kill without damaging land or resources, which is the perfect dream for the imperial capitalist (Brunderman 1999: see also FEFSS 1983).

Theologians talk a lot about Heaven and Hell, but what shall we call it when our skies are filled with radiation, when massive floods eradicate cities, when famines roar throughout the human race, when we no longer have natural foods, when our skin becomes poisoned by the sun, when weapons fall into the wrong hands or even the right hands? Should we not call it Hell? Will it not be a place of eternal suffering? We have not been the stewards, but rather we have raped the earth out of everything it had. The ecosystem will become unstable, and the earth will do everything it can to restore the balance. We are an endangered species, and sadly the earth might have compassion on the few who do survive, but human greed and fear will most likely finish the job (Pilisuk 2001 p.121: Pilisuk and Joy 2001 p. 107: Grof 2001).

What is it that propels this reality? What is it that keeps the wheels of destruction turning? We live in a world that is propelled by money. Each country's economic potential is determined by the production and distribution of its commodities. Countries are no more than super-companies that compete with one another for business. Competitive forces enable supply and demand and hence free trade. It is the basis of our capitalistic system and I challenge those who disbelieve to try to find a place in this society where humans are not in competition. It is extremely hard. In the work place we compete for positions, in school we compete for grades, and even in

relationships we compete for attention, affection, and validation. I am not a radical that is urging for communism, but I am simply saying that it shouldn't be a surprise how we got here. In this world each and every person is against everyone else. Almost everyone is looking out for themselves, and maybe if we are lucky a few others. This is not to say that there aren't those that look out for the good of mankind, but that the system isn't set up for them. It is set up so that humans will be in conflict instead of working together. Why? Simply put, the state of conflict is a reflection from our fears. If everyone worked together, then it would not be possible to have a system where the richest one percent of the population owns 90% of the resources. Working together would enable a sense of trust of our fellow kind and of nature whereby survival needs would be taken care of. There would be no need to own more than what one needed, because we would trust in the collective that one would allow to be provided for. Something happened a long time ago that caused us to become afraid of getting hurt. Perhaps it was the perception of duality and our perceived separation from the divine. It is like a child that is sent to school, but we see it as being abandoned. The human soul coils up in pain and suffering, and withdraws from the oneness and refuses to trust any other. I am pretty sure we have all been there at some point and know that it is out of fear of getting hurt again. Needless to say we lost this trust (Parenti 2001: Zimmerman 1988 p. 192-200: Grof 1988 p. 73-5: Grof 2001: Walsh 1984: also see Mishlove 1985).

We no longer worked together, but rather we have been conditioned by past failures to only be concerned about oneself, and this attitude has perpetuated a world of isolation, disconnection, fear, suffering, and hatred. People fear what they do not understand, and how can they understand anything when everything and everybody is stranger? Those who have acquired great amounts of resources perpetuate the system, because they seek to control the

economy in order to maintain their resources. The control that they assert temporally alleviates some of their fears and feelings of abandonment by giving one a sense of independence, security, and importance. This control turns into power, and becomes the main driving force. It is just like the child that throws a temper tantrum on the first day of school, because they don't want to go. The child reacts to the perceived sense of abandonment and attempts to assert the only control a child has on an adult. Even at school the child may attempt to assert control over other students or declare ownership over certain toys. All gestures of control are usually a result and reaction to feelings of fear and abandonment. By no means am I saying that all rich people are greedy and bad, but rather that if we all worked together there would be no need for anyone person to have more wealth than another. The competition is simply a reaction to our fears of isolation and disconnection. The feeling of abandonment and the fear that nobody cares is something that we as a race have been experiencing for a very long time. It is almost as if we as a collective have been in a depression, and we have learned to only think about ourselves. It is sad to say that in this depression we will very soon be committing collective suicide by allowing this fear to consume us (Parenti 2001: Walsh 1984: Grof 2001: Grof 1988 [also see introduction p. vii]).

Our perceived separation from the divine may have propelled us into this state of fear, but how do we get out of it? How do we become the stewards that we know we can be? What would the world look like if every Christian lived like Christ and if every Buddhist lived like Buddha? How would things be different if each and every human being thought of not only him/her self, but of the entirety of creation, and if we treated each other as brothers and sisters? What if we worked together like the family that we truly are? Some would call me an idealist to even ask such questions. And surely not only would I be an idealist, but also ignorant if I expected every

last human being to agree with this way of living. I will say, however, that the dreams of today tend to be reality of tomorrow. I see it as a pragmatic choice. We either change or become extinct. To me, it is a bit idealistic to think that we can continue our ways, and the human race is not headed for danger. How it is that what started with self-discovery could lead to this world of mass destruction? How could we forget that we chose this path, that separation is an illusion, and that this is our chance to be all that we can be? (White 1988 p.125: Kornfield 1988: Grof 2001: Walsh 1984)

THE TRANSPERSONAL MOVEMENT, EVOLUTION, AND THE RETURN TO THE SOURCE

In the 1970's a movement in psychology developed around this vision of our fullest human potential, and it was called Humanism. A field devoted to researching the highest functional potential of human beings in performance and experience revealed that we are so much more than what we ever thought it to be. Scriptures foretell us that "He that believeth in me, the works that I do shall he do also; and greater works than these shall he do"(KJV John 14:12); "ye shall say unto this mountain, Remove hence to yonder place; and it shall remove; and nothing shall be impossible unto you"(KJV Matthew 17:20); "You are that(Tat Tvam Asi)" [you are that which is everything] (*Chandogya Upanishad* 6.8.7) ; "Namaste"(acknowledging the divine nature within), but what instead have we become? Disconnected from the source, from ourselves, and from each other. The humanistic movement took the first steps toward our return to the source by rejecting the cold, sterile, and apathetic view of humanity that the sciences and even psychology maintained in the past (Taylor and Martin 2001: Szasz 2001: Greening 2001: Privette 2001: Aanstoos 2001: Rowan 2001: Bugental, Pierson, and Schneider 2001: Kopp 1971 p.12-20: also see Maslow 1971).

Maybe the source isn't God. It could be anything. It could be optimism, ambition, adventure, creativity, art, music, dance, poetry, love or even hope. Often times, even as bad as life gets, it isn't that the world has turned its back on us, but rather we have turned our back on what energizes us. The typical student faces the challenges of continuing his/her education in what he/she is passionate in or going out into the working world to pay for rent, food, and fun. In the beginning it seems liberating to be self-sufficient, but over time there is no sense of adventure that is usually so vital in young adults. In the poem "Foot Prints" by Margaret Powers

(or maybe Mary Stevenson) a troubled soul reflects on their walk with Jesus throughout life and questions why in their toughest times of life there is only one set of foot prints. “It was then that I carried you”, Jesus replies (Foot Prints 2008 p. 1). So, it seems that we all too often forget what is here right now, and how amazing it is. Given the chance to be alive is a gift. Many people wake up in the morning dreading their day, but really you are given the chance to do it all over again. To perfect whatever you didn’t get the day before. To resolve that fight between your friends, to say hello to that stranger you silently walk by every morning, to help somebody in need when you just didn’t have the time before, and even to tell that somebody that you really like them. The progression of our lives is a continual chance to break through our fears, and to rise to the occasion of what we know we can truly be (Hendricks and Weinhold 1982, Arons and Richards 2001: Bradford 2001: Donaldson 2001: also see Kopp 1971 p.19).

To turn away from god is impossible since god is all that is, and so the ‘fall of man’ is perhaps our investment in loss that will enable an even more perfected being. Mistakes are made so we can grow and learn from them. It is the same with bodybuilding. The muscle must be broken down, so that it can grow back stronger. Our turn away from God is only the dying of the old and the birthing of the new. This is the cyclic progression of humanity that spirals for perfection so that we may have the chance to be all that we dream of. To wake up every day, and to be invigorated by life, by the opportunities that we are given to learn how to be a perfected being; to be fully human (Wilber 1981 ch. 17: Oshitelu 2002: Privette 2001: Grof 2001: Maslow 1971).

In the journey and development of our species there came a time when humans wished to study themselves, and we now call it psychology. The journey began with ‘psyche’ meaning ‘soul’ not mind, and thus it was an ‘art’ that combined philosophy and spirituality. This was long

before the time of Freud when psychology was practiced (without the name) internally within the individual. For thousands of years indigenous cultures around the world had developed philosophies and spiritualities that explored the depths of the human being. They embedded their thoughts in their practices, rituals, stories, music, dance, survival skills, medicines, and general way of life. The simple act of making a bow or starting a fire came to represent the entirety of their philosophies and cosmologies. This was the time when human beings lived in almost complete harmony with nature, and by embedding their philosophies into their way of life they experienced the depths of their beings (Kopp 1971 p. 27-38).

Time passed through the agricultural era, and humanity discovered how useful their intellect can be as they developed new survival technologies that kept them safe from the forces of nature. Eventually, in the west, the intellect came to be idealized in the modern era as the Age of Enlightenment, and gave birth to a new understanding of the world through logic, reasoning, and mathematics. The analytic method dominated this era as it was often believed that there existed one objective truth that can be understood through rigorous systematic logical inquiry. The modern approach was applied to all aspects of life, and there began Freudian analytic psychology. This was one of the first steps towards a formalized and systematic study of the human soul in the western world that met the methodological requirements of the modern era. Up until this point in history the study of the human soul was often left to the individual or the religiously/spiritually inclined, but now at this crucial juncture the study of the human soul gained official status as something that could be done 'objectively' with conclusions that would hold true for all of humanity (Szasz 2001: Wertz 2001 p. 231-233).

It is during this period that psychology became categorized as a natural science. Freud developed his method of psychoanalysis that allowed logic to analyze the human soul through

the 'reductive' model. Freud felt, as he developed his psychosexual stages of development, that human behaviors were purely motivated by the factors of sex and aggression. Later, the behaviorists (namely Watson and Skinner), elaborated on the factors of human motivation by reducing the human being to an algorithm of behaviors that can be programmed and conditioned. This view "succeeded" so well that these two psychologists were able to condition a child known as 'Little Albert' at the age of two to be deathly afraid of fuzzy white things. Of course the barbaric nature of these studies was not at the time considered unethical, but nevertheless it shows us that this view considered the human being to be reducible to a machine that can be programmed (Moss 1999 p. 13-20; Kopp 1971 p. 172-182).

Eventually scientists came to know the complexity of human thought, and the field of cognitive study began to emerge with behaviorism. The development of Neuroscience furthered this investigation into the psycho-physiological study of the human being by treating the soul mechanistically and thus capable of exact diagnoses that were treatable with their respective prognoses. This is not to say that these methods weren't effective, because they were to an extent, but simply that psychologists often just treated the diagnoses and not the whole person. Often times their clients tended to feel neglected as a person through the cold lens of analytic reduction, and subsequently these two forces encountered many failures with patients (Kopp 1971 p. 15-18; Wertz and Aanstoos 1999 p.287-300).

Within the mid 1950's continuing into 1960's and 1970's a movement developed that radically opposed this 'reductionist' paradigm of humanity. These individuals, calling themselves the Humanists, believed that people should not be reduced, but rather taken in their totality as human beings. Carl Rogers, Rollo May, Wilhelm Reich, Roberto Assagioli, Gordon Allport, Medard Boss, Martin Buber, R. D. Laing, Fritz Perls, Anthony Sutich, Erich Fromm,

Kurt Goldstein, Clark Moustakas, Lewis Mumford and James Bugental led a movement so strong that it shook the foundations of all academic endeavors (Moss 1999 p. 21: Kopp 1971 p. 18-20, p. 183-194: Taylor and Martin 2001 p. 21-7: Wertz 2001 p.242).

Among the most popular is Abraham Maslow, who developed the notion of self-actualized individuals that reach peak-performance and peak experiences through what he called 'being-cognition'. The details concerning 'being-cognition' can be found in Maslow's The Farther Reach of Human Nature, but in essence it is a state by which one experiences pure being without the clutter of unneeded cognition. It is, therefore, a complete awareness of existence that enables a fulfillment of one's highest physical and/or metaphysical/spiritual potential. (Wertz 2001 p.237-9: Privette 2001: Arons 1999) Using person-centered therapy, whereby the patient is no longer a set of diagnoses but a fellow human being, the humanists incorporate various styles, philosophies, and traditions as they approach therapy with an open heart of empathic compassion that does not disregard or invalidate the client's experiences (Moss 1999 p. 41-48). While searching for the ultimate highest human potential the humanists began to realize that there exists a dimension of human experience that transcends our humanness. It is here that transpersonal psychology (meaning beyond the persona) was born (Moss 1991 p. 24-34: Daniels 2005 p. 21; also see chap. 6).

The Transpersonal perspective is an extension of the humanistic movement and began in the 1970's by studying all aspects of human expression through a multi-dimensional integrative approach. Specifically Transpersonal theorists search for the experiences that are transcendent or beyond the personal or individual identity of any particular being. Humanistic psychology, led by Abraham Maslow, prefaced the transpersonal approach by researching the highest forms of human potential and functionality in the most general sense. This newly developing field of

what one might call a 'spiritual psychology' approaches all higher level functioning, derived from spiritual or religious experiences, as setting the bar even higher for the potential of individual humans and humanity. The movement combines all disciplines of study that both differentiate and integrate, and even all forms of human expression like art, poetry, music, and dance (Boorstein 1996 10-40, Daniels 2005 p. 13-16, p.24-37: Vaughan 1988 p. 9-10: Hastings 1999 p.198-9).

The term 'transpersonal' was originally used by Carl Jung, and referred to his theory of the 'collective unconscious' whereby all of humanity is connected by a network of shared life experiences that could provide us with information enabling a more efficient species. Key proponents of the field include Jean Houston, Stanislav Grof, Ken Wilber, Michael Washburn, Frances Vaughan, Roger Walsh, Stanley Krippner, Michael Murphy, Charles Tart, David Lukoff, Vasily Nalimov and Stuart Sovatsky. Many of the leaders of the humanistic movement also shared in creating the transpersonal field and for a long time there was no separation between the two fields. Some argue that one is better than another, but truthfully it seems that the fulfillment of one is fulfillment of the other (Boorstein 1996 p. 200-250). To be transpersonal is to be trans-human, that is to say, going beyond but also inclusive of personal experiences and reaching out towards the trans-cultural, the trans-gendered, the trans-linguistical, the trans-historical, the trans-intellectual,...etc. Michael Murphy, founder of the Esalen institute in California, wrote the book The Future of the Body: Explorations into the Further Evolution of Human Nature and published it in 1992. The book is a detailed compilation of personal and eye-witness accounts of extraordinary feats. The book presents no scientific theory of explanation, but rather was intended to spark research interest, and to that end it succeeded (Hastings 1999 p. 192-207: Vaughan 1988 p.11-18: Daniels 2005 p. 39-49).

When one takes on the serious search for the highest potential of humanity they are forced to look at the accounts of various individuals from the various traditions of the world. Christ, Buddha, Gandhi, Mohammad, Mother Theresa, Nanak, Moses....etc are the subjects of study that raise the bar on the potential of possible higher level human functioning. To go even further then becoming fully human is to transcend and transform with divine-like qualities like the siddhis. Transpersonal psychology integrates all aspects of study including various religions and spiritualities. Many of the pathologies of traditional psychology can be explained as premature spiritual experiences, and thus it is through this means that transpersonal psychology makes its argument for the need of a paradigm shift (White 1988 p. 133: Daniel 2005 p. 49-62: Boorstein 1996).

This movement, which is still going on today, uses all the faculties of the modern world to study something that is so ancient. It is through this integrative approach that I will explore the physiology of tai chi and the role of agape in human evolution. Transpersonal theorists, unlike perennial philosophers, do not assert that all religions are one or not one, but rather seek the experiences for themselves. The transpersonal therapist becomes the modern guru through the study of sacred practices in psychosomatic (mind-body) training and understanding profound connections like those explored in eco-psychology (Bloomfield 2001: Deatherage 2001: Fehmi and Selzer 2001: Moss and Stone 1999: Moss 1999 p. 145-163: Criswell 2001).

It seems that the psychoanalyst, the behaviorist, and the cognitive neuroscientist have replaced the role of the guru, as the dispeller of darkness and the guide to the spiritual world. Lifetimes of spiritual training, hardships, and sacrifices have been replaced by 4-8 years of academic study. Degrees such as PH.D, Psych D., and MSW come to represent one's academic achievements, but how do letters come to be measurements of personal growth? Truly the

therapist can only take their client as far as he/she has gone. The therapist should surely be more than just a well-organized mental textbook that can swiftly analyze and assess not even individuals but diagnoses. Yet, how many are like this? How many psychoanalysts and cognitive-behaviorists have explain all of life's wonders away as to make it bland and gray, and how many social workers become so tinted by the world that they treat cases not humans? (Kopp 1971 p. 14-16).

Sheldon B. Kopp's *Guru* stands, even to this day, as a radical piece of psycho-spiritual literature that pushes the envelope on this very issue. Almost 40 years have passed since the beginning of the humanist and transpersonal movements, and yet they find themselves still in contention with a mainstream of psychology that is filled with academic prestige, but is empty of spiritual wisdom. This is not to say that there aren't those who have walked the spiritual path and continue to guide others, but simply that the ancient wisdom derivable from spiritual experiences are no longer acceptable in this modern world. The obsession with objectivity has driven psychology towards rigid disciplines that often times limit one's ability to access the endless compassion and empathy for all mankind that lies dormant within all of us. To quote Kopp "Psychotherapy is merely today's name for an activity that has been going on among men since someone first discovered that one man could care enough about the suffering of another that he would be willing to open himself to the agony of the other in order to try to be of aid and comfort" (Kopp 1971 p 16). How few achieve this?

In our modern world we treat symptoms not humans, and we rarely think about the suffering of others. Yes, we watch the news and are saddened by the terrible stories of rape and murder, but do we take the time to really feel the suffering of the murderer or the rapist? I would say most of us become filled with anger or fear for such individuals, and more likely than not we

tend to focus our sorrow towards the victims. How cold and disconnected has this world become? How many times do you feel afraid among fellow human beings? The very fact that we call them strangers is a commentary on our modern world. Of course terrible things happen like war, rape, and murder, but is this a justification to close one's heart to the world-to mankind?

Should we simply believe that fellow humans are not to be trusted and that it is everyone for him/her self? It is so strange how so many are willing to die, fight, and kill for their religion, but how few are willing to live for it. To live for freedom, equality, love, peace, and justice. To trust those that are not trustworthy, and to love those who hate you. How many people these days are willing to turn the other cheek so one may slap it? How many are willing to suffer with the suffering so that they won't be alone, and maybe one day we can work through it together?

The old paradigm, at least in the world of psychology, was cold and disconnected. It was rationale, critical, precise, objective, and extraordinarily efficient in treating symptoms. Symptom after symptom, diagnosis after diagnosis, they analyze, hypothesize, test, and test, and re-test, and calculate, then correlate, and then test some more to confirm and reaffirm their hypothesis. Problem to solution, symptom treated with prescription, behavior and then re-condition, and then it's incurable but tolerable with a medicated life that costs \$60 per pill. But don't worry insurance will cover the bill that could be as much as one million dollars per person over the course of their lifetime. This is not to say that medications are bad, but only to note that large amounts of money are being made in the old paradigm that deems certain illnesses incurable. At what point does the problem-solving become more important than the actual living human being that sits patiently while holding a \$200 check and reading old magazines waiting to just be comforted-to know that they are not alone? Again to quote Kopp, "Humanistic

Psychologists answer Psychoanalysis by fore-going head-shrinking for mind-expanding” (Kopp 1971 p.19).

The new paradigm is one of integration. The therapist does nothing more than help one help themselves. In this view, Siddhartha isn't the only one to attain Buddhahood and Jesus isn't the only one to reach Christ consciousness. This is the potential for each and every human being to achieve their divinity, but the path is very difficult. So few in the history of humanity have shown their true colors-so few have shed their skins and revealed their divinity. Why? Why so few? 'It's not possible,' the skeptics would say. Only Christ can be Christ, and this may be true; yet surely Christians can be as the word suggest "Christ-like." What about the greeting of 'namaste', the mantra 'tat tvam asi', the Upanishadic wisdom (philosophic works on the Rg Veda in the Hindu tradition) of Brahman (supreme ultimate reality) being equal to Atman (one's true inner self), the stories of the Eight Taoist Immortals, the kundalini rising, and Adam Kadmon? What if the actuality for divinity is already within the individual, but fear keeps one's heart closed? The fear of letting others in is essentially the fear of getting hurt, the fear of pain, and the fear of change. It is also the fear of becoming one with the divine again. This is the duality that we have been challenged with since the time of the "fall". We are presented with a chance to overcome it, but that can only be done with unconditional universal love. The move from duality to unity will take everything that we as humans have to give. It is the ultimate lesson. It is, however, the only way to move beyond the duality of our world. It is for this reason that agape (universal unconditional love) is still maintained as a principle that can facilitate the emergence of a global consciousness that will move beyond the attributes of fear, anger, hatred, violence, racism, sexism, greed, jealousy, arrogance, ignorance, and egoism. The humanist and transpersonal movements are extremely important in facilitating this global

awakening by integrating into every dimension of the human experience. The humanists sought the highest functional potential for human capacity, and in the end they found the traces of our evolution (Franz 198: Metzger 1988: Wilber 1981 ch. 17: Moss 1999 p.211-226: Ibid. p.227-245).

EVOLUTION

Darwinian evolution has been widely accepted in the academic world, but I do not think that it is not necessary to believe in Darwinian evolution in order to understand my use of it. Many of us may be inclined to believe that the idea of evolution began with the Darwinian concept of natural selection, but there were many individuals before Darwin's times who have given these matters serious thought. Well-known among the philosophers of the ancients was a man who may be considered the western predecessor of evolutionary thought. "The 3rd century Roman writer Censorinus reports that 'Anaximander of Miletus (610 BCE-546 BCE) considered that from warmed up water and earth emerged either fish or entirely fishlike animals. Inside these animals, men took form and embryos were held prisoners until puberty; only then, after these animals burst open, could men and women come out, now able to feed themselves'" (Parker 2007 IV p.7).

Empedocles(490-430 BCE) was one of the first to propagate the notion that mutations which weren't suitable for survival would not be adapted by the species. He presented this in what is now considered to be a mythical account of the development of organisms whereby a mixture of the attributes of various creatures is done until the correct attributes were attained. Empedocles also believed in the notion of reincarnation whereby animal, plants, and humans exist on the same spiritual plane. Furthermore Empedocles gives strong support that evolution

can exist beyond the physical world by stating that “wise people, who have learned the secret of life, are next to the divine” (Butterworth 1919: Roberts-Donaldson 2001 iv. 23.150).

Titus Lucretius Carus (99 BC- ca. 55 BC), a roman poet and author of the famous *On the Nature of Things*, introduced the idea that development of the entire physical world could have emerged from the interactions of atoms. His bleak picture of reality was completely divorced from the spiritual, but was accompanied by an inspiring notion that a few enlightened individuals could escape their own physical suffering, and thereby help others to do the same. (Leonard 2000 chap. III)

Ibn Maskawayh, a Persian philosopher and scientist during the 10th century CE, developed many of the ideas that are thought to have heavily influenced the development of Darwinism. He talked extensively about a progression of life evolving from plants to vegetation to animals to apes, and then to humans. He then goes on to proclaim a spiritual evolution of humanity by stating that “he [referring to humanity] then became a superior human being. Man becomes a saint, a prophet. He evolves into a higher stage and becomes an angel. The one higher to angels is indeed none but God. Everything begins from Him and everything returns to Him” [Alpha and Omega] (Hamidullah and Iqbal 1993 p.143-4).

Erasmus Darwin, the grandfather of Charles Darwin, laid much of the ground work for his grandson by introducing the idea of generational changes. “Would it be too bold to imagine that, in the great length of time since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind would it be too bold to imagine that all warm-blooded animals have arisen from one living filament, which the great First Cause endued with animality, with the power of acquiring new parts, attended with new propensities, directed by irritations, sensations, volitions and associations, and thus possessing the faculty of continuing to improve

by its own inherent activity, and of delivering down these improvements by generation to its posterity, world without end!” (E. Darwin 2008, Zoonomia Vol I). In addition to this suggestion that evolution continues limitlessly, Darwin also wrote evolution theories in the *Temple of Nature* on many other topics such as the progression the universe, the mind, and even good and evil. To this end he concluded the progression of our universe was the result of ‘single living filament’. In addition he affirms the original state of man by addressing the story of Adam and Eve: “Egyptian philosophers, showing their opinion that Mankind was originally of both sexes united, and was afterwards divided into males and females: an opinion in later times held by Plato, and I believe by Aristotle, and which must have arisen from profound inquiries into the original state of animal existence” (E. Darwin 2008 Temple of Nature, Additional Notes X).

In analyzing the precursors of Darwinian’s theory one finds a common trend that refers to a spiritual evolution whereby humans will transcend their human-ness to return to their original god-like state. The support for this claim is made evident by the statements of these individuals, but the etymology of the word ‘evolution’ might reveal even more about its original usage and meaning. To evolve is from the latin, *evolvere*, which means to unfold, open out, and expand. *Evolvere* comes from *ex* (out) +*volvere*(to turn, twist, roll, revolve). *Volvere* originated from *vulva* or *volva*, which is the womb or female sex organ (Harper 2008). A synthesis of these roots would reveal that the word evolution involved something about the female unraveling in some sort of twisting motion. This new meaning is strikingly similar to the eastern notion of the Kundalini, which is believed to be latent female energy stored in a coil at the base of the spine near the sex organs. When awoken the energy will unravel up the spine, and will transform the human body into its divine potential. It is interesting to think that nothing that I am positing is

new, but rather it was the original intention of those who first conceived of the concept of evolution.

Charles Darwin's theory on natural selection added that specific traits that were more not adaptable for survival became more prevalent in the population than those traits that were adaptable for survival. With a lot of evidence supporting this claim, the theory quickly became popularized despite its ability to explain how specific traits were passed down heretically. Studies in genetics have explained many of these mysteries, but there are still areas of evolution that were left unexplored until recently (C. Darwin 1859). The evolution of ecosystems and studies in collective evolution (co-evolution) present a different paradigm whereby the individual survival interests can be aligned with the collective survival interests of that species, and other possible ecosystems. (Futuym and Slatkin 1983: also see Thompson 1994) Daniel Quinn emphasized in his book the idea that humans are commonly under the misconception that evolution has reached its pinnacle with the human species. Pioneers from various fields have done nothing but affirm, in congruence with Darwin's grandfather, the continuing evolution of all life forms, including the earth at large and the human species.

In addition the work of the Pierre Teilhard de Chardin presents an entirely new perspective of the evolutionary paradigm that suggests that a point of unity and interconnectedness will emerge from the chaos of evolution. This theory was one of the first of its kind to be conceived by a trained scientist that postulated evolution of the entire universe as one organism. The Omega point is presented as a singularity that begot the universe, and continues to bring forth a collective interconnectedness amongst the many parts of the whole. The point pervades all of existence through its unification of creation. The Omega point is from where the universe came, and where it shall return. All of creation will again be unified in the

singularity that is transcendent of time and space, and suggested by Pierre Teilhard de Chardin to be God (Teilhard de Chardin 1975).

The Omega point theory sparked a lot of interest in the scientific community as time went by. Dr. Frank J. Tipler aligned the theory with the notion of the big crunch whereby the expanding universe would stop and begin to shrink into itself. The crunch would re-create the singularity that existed in the beginning of the universe whereby all parts would be made one and the same. The transcendence of all time and space would allow for infinite computational capacity of information. If life forms existed in this state, then the knowledge and ability would be unthinkable and only comparable to what we have postulated as God. Although modern scientific research suggests that this is very unlikely due to certain positive cosmological constant, Tipler has provided a theoretical technological means by which we could facilitate the process (Tipler 1994). This theory, in concurrence with cyclic paradigm of evolution, suggests that the purpose of the big bang (separation/duality) was to collect information (experience) so that it can be integrated into singularity at the omega point (oneness/unity).

Finally several theoretical scientists and futurists talk about the omega point in terms of our exponentially growing technological achievements, and postulate a point (the singularity) whereby our technology will enable this collective cohesion. The work of Raymund Kurz, an MIT graduate with 14 separate Doctorate degrees in the sciences and arts, suggests a transhumanistic or posthumanistic state of technological achievement using biotechnology and nanotechnology whereby there is no need for external technologies. The availability of this cybernetic nano-biotechnology could be as early as 2045. The collective cohesion will result from the internetwork of our thoughts, and the singularity will lead to the creation of a new being. Transhumanists believe in a posthumanistic era where we no longer will be limited by the sustenance

limitations, and/or time and space limitations of the human body. It has often been suggested by these theorists that humans think they are here to worship god, but they might actually be here to create god (Kurzweil 2005).

The notion of the omega point and/or singularity bringing about a trans-humanistic or post-human era is concurrent with the philosophic thought that has been shown constantly throughout the development of idea of evolution. In addition, the entirety of the evolutionary paradigm including trans-humanism is also in concurrence with the humanistic and transpersonal notion of the divine potential of humanity and the journey from duality to unity. Omega point theory and trans-humanism look to technological advancements as the means by which this evolution will take place, however the humanistic and transpersonal fields suggest an internal spiritual technology that is latent within the human body. Agape (unconditional universal love) is seen in this paradigm as the principle that can move humanity beyond the duality into the unity that is required for our survival. It is through this developing theory that I will work agape into the evolutionary paradigm by demonstrating first its physiological survival advantage, and then its ability to align individual and collective interests. However, before this can be done it is important to understand how agape (universal unconditional love) is understood cross-culturally in the traditions.

AGAPE WITHIN TAOISM : A TRANSPERSONAL EXPLORATION INTO THE INNER PILGRIMAGE OF TAOIST ALCHEMY

Taoism is often portrayed as an enigmatic philosophy or simply misunderstood in the western world. Scholars have sometimes referred to it as more of a way of life than a religion, and Taoists are mostly thought to be seekers of immortality. Tai Chi Chuan, an ancient Taoist martial art, has in recent times become popularized as a stress releasing exercise that seems to follow in the foot steps of Yoga. It is rare that one finds Tai Chi (or even Yoga) taught as a spiritual practice that can unite one with the divine.

The Taoist alchemy is a process of spiritual and physical evolution by which the practitioner travels back to the source of all existence: No-thingness. Western scholars often times struggle with Taoist philosophy, because it readily accepts and utilizes paradoxes and contradictions. In this chapter one will hopefully begin to realize that the misapplication of western logic is the main cause for such misunderstandings of the Taoist tradition. Furthermore, this issue of misapplication maybe broadened in order to explain the formulation of the academic criticisms and scholarly rejections of Perennial philosophy. It will be shown that integrative fields, like Transpersonal psychology, may remedy the problem for western scholars in the future by incorporating all dimensions of being. Ultimately, it will be shown by addressing this issue of misapplication that the internal pilgrimage of Taoism (a return to the source of nothingness) could be understood as the ecstatic/oneness/unconditional love experience that was called agape by the Greeks. The alignment of these two experiences will enable the archetype of the heart energy to become the central theme of the internal journey of oneness with the divine, also

known as divinization or ‘theosis’. In the end one will hopefully get the sense that the heart centre or the agape/oneness/unconditional love experience is the main key in activating the process of becoming one with the divine.

The historicity of religious studies is hesitant to condone the study of aligning various cultures and traditions upon a center of commonality, but the discipline does affirm a cross-cultural comparison of similarities within the traditions. That is to say, that religious scholars are comfortable talking about similarities among various disciplines, but are not comfortable claiming that those similarities confirm a singularity, namely that the various traditions are talking about the same thing. This hesitation comes from the apparent differences that are found among the traditions even in spite of their similarities, and moreover to accept that the traditions are confirming a singularity, namely that they are all one, would lead to a contradiction; because one would conclude that the traditions are both talking about the same things, and not talking about the same things.

Perhaps one would make the ecumenical or perennial move to claim that there is indeed one singularity of eternal truth that manifests differently throughout the various cultures of the world. However, positing such a claim of one eternal truth is just as problematic as the contradiction. Claiming that there is one eternal truth that manifests in different ways is an assumption that would surely come in great conflict with the relative subjectivity of postmodern thought that rejects the postulation of one objective truth. Indeed, perennial thinkers have often been criticized for rejecting experiences or traditions that do not confirm this eidetic singularity of truth manifesting in various traditions. The only move left, for the perennial thinker, is to declare that all religions are neither one nor not one, and furthermore that they are also all one and at the same time they are not one. To many this statement is at the least confusing, if not

meaningless, and is a complete contradiction of terms that is false on all accounts. This assessment is derived from the principles of logic, namely the law of the excluded middle by which the before-mentioned statement violates quite a few times.

Western logic, the tool for systematic thought, developed during the time of the ancient Greeks during the 4th century BCE by Aristotle, and has developed into a near complete perfected system of formality that is used in the sciences, in law, and even in psychology. The Indian culture began their development of logic also during the 4th century BCE as evidence suggests by the classical writings of the Vedas. In addition, it is not surprising that the law oriented peoples of Judea had a working logic system that was officially recorded in the 1st or 2nd century BC during the development of the Mishnah. In regards to the Jewish logic system one must keep in mind that much of Jewish tradition is passed down orally for many centuries before it is written down. Therefore, scholars believe that since the legal discussion in the Mishnah were continuations from the Mosaic and even earlier eras, then it is possible that the Judaic system of logic existed long before that of Greeks and even Sindhis (Hindus). The logic systems of both India and Judea understood the Greek system, but did not accept them as their own, because of their strict emphasis on the law of the excluded middle or rather the law of non-contradiction (Sion 1995 p. 2). Within Indian logic there are many assessments that one can make about any given statement. The tetralemma evaluation of any statement is said to originate from the Nasadiya Sukta hymn of the Rig Veda. In that system any statement can be true, false, both, or even neither; and thus it wasn't a complete rejection of Aristotelian logic, but rather they would have viewed the system in some sense incomplete (Kak 2004). Likewise, the Judaic system of logic was used for legal purposes, but was not at all elevated to the status of being capable of bringing knowledge into the world that wasn't already known through other

methods. Needless to say, the law of contradiction didn't hold much ground in that culture either. (Sion 1). It is thus clear, at least to me, that religious scholars made the move to adopt Aristotelian logic in their study of the world's religious and spiritual traditions. One would suppose that the utility of the western logic system had such a great reputation of success elsewhere that the move was quite a natural one, but unfortunately by the systems own principles it wasn't exactly the most logical move to make.

To study other cultures through the eyes of one's own culture without awareness of one's own assumptions is perhaps the most highly criticized action found within the fields of anthropology or sociology. Since it seems that some of the major cultures of the world have each developed their own system of logic, then to claim that one system is correct over the others is just an arbitrary assumption. Most would passionately argue that to disregard the law of the excluded middle would allow for any proposition to be proven true, and thus the concept of objective truth would lose its meaning. Well, this isn't exactly a problem for cultures in the East or other cultures throughout the world that didn't believe in objective truth in the first place. Furthermore to employ the two-value system of logic when studying cultures that don't adhere to it is completely an erroneous and illogical move to make given the precepts of the western system. It is clear, to me, that the problem that westerners have or even the hesitation that scholars have with the ecumenical and/or perennial approach is directly derived from their misapplication of the two-valued system of logic. It is, in my humble opinion, that integral approaches, like Transpersonal Psychology, would eliminate this problem by not only taking into account all the various logical systems, but also all dimensions of human experience.

On the outset one might get the impression that I am claiming that the inner traditions, namely the mystical traditions, are all equal across the traditions. Inevitably this would lead to a

sharp criticism that addresses the variations of mysticism that one could find in cross-cultural studies. To clear this up it is important that one understands that I am by no means making that claim, but rather addressing the logical assumptions that govern such claims and their respective criticisms. One might go as far to question the validity of Perennial philosophy in light of spiritual traditions that don't even believe in gods, or those like atheism, Satanism, and nihilism. It might seem to some that I am simply overlooking the differences by claiming that they are all one, but I am also claiming that they are all not one. The point of this discussion is to show that the foundations of western logic govern all the possible criticisms that one could have in regards to Perennial philosophy and Transpersonal Psychology.

As one approaches this gestalt/holistic/integrative view of humanity (and of all existence) certain themed patterns can readily be seen across the dimensions of existence. The flexible architecture of these themes was studied in the mythologies of the world by the infamous Joseph Campbell and was referred to as archetypes by Dr. Carl Jung (Biblio 2008). The archetype of the pilgrimage is found throughout various cultures and religions, and over the ages it has been studied cross-culturally. Typically the overall structure of pilgrimage involves physical places, namely leaving or journeying to a place for honor, respect, worship, or some meaningful activity, and then returning and reorienting oneself after what was sought for was found. However, there definitely seems to be a pilgrimage within one's self that is also archetypal in nature and seeks union and transformation into the divine. This process of theosis/enlightenment/ascension/mystical union has been cross culturally studied by individuals like Dr. Paper or William James, but more importantly one must understand that the internal pilgrimage can be found to be equally as universal as it can be found to be diverse among the traditions. The paths can be seen as one, but also they can be seen as being completely different from one another. It is perhaps better to

say that each path tends to reflect the others, that is to say, it tends to reflect the whole. Holographic theory of this nature is closely linked to the jeweled net of Indra (JNI 2008). whereby each jewel reflects every other. In Taoism this is exactly the case at hand, but even so there seems to be a drastic difference between the stillness/no-mindedness of Taoism, and the merging/unitive/ecstatic/unconditional love/oneness/agape experience of Christianity, Jewish Mysticism, Hindu Bhakti, Shamanic trance and perhaps many others. I am hoping, at this point, that one is conscious of the exact principles of western logic that govern and enable the formulation of such a seemingly drastic opposition. To say that one 'state' is opposed to the other is to impose the western system of thought on what are mostly non-western cultures. It is my hope to show at the end of this exploration that for Taoists, that is to say more specifically according to the Taoists that I have trained and studied with and seemingly in accord with the Taoist texts, the stillness/nothingness experience is the oneness/agape experience.

The internal pilgrimage in Taoism is typically understood as becoming one with the Tao. This sounds simple enough when one understands the Tao as 'the way', but when one understands the Tao as everything and nothing it can get a bit more complicated. The journey is one of becoming and dissolving. Many think Taoists are mostly oriented towards immortality, but it isn't so much to cheat death as much as it is to evolve beyond it. Taoism has its origins at Wu Mountain in China. On this mountain, many ages ago, it is said that beings lived who were one with the Tao (citation). They were called the Wu, and are often times compared to shamans, witch doctors, and medicine men. It is said that they had so many great abilities that they were like gods. They had no need for food or water and were unaffected by nature's conditions, because they embodied Tian Ren He (the oneness of humanity with the cosmos). They spent their time teaching others to achieve this level of being, and also healing those that are sick.

They achieved this state of god-like functioning by utilizing ancient technology within the human body. The character Wu depicts the four directions by which the Wu beings adopted to the human body and found a center of stillness within all movement. It is through this stillness that they are able to act as a conduit for the energies between heaven and earth (Gu 2006 p. 175-182).

One can readily see that the Taoist inner pilgrimage is a journey or rather a return to one's divine origin. The eternal Tao is the manifestation of the void/nothingness or otherwise known as 'wu' within the word wu-wei, which means void of action. Obviously another way to read the phrase in the transliteration is to say that that wu-wei actually refers to the action/way of the Wu masters. In either case, it is clear in Chinese philosophy that from the void came the Tao, and from the Tao came yin and yang. These polar extremes are actually unified in oneness within the Tao, but they can easily become out of balance. The journey is thus a balancing of one's yin-yang so that the Tao can be embodied, and a return to the source (void/nothingness) can be achieved. There are many practices to achieve this journey, and among them is Tai Chi Chuan. Many people see Tai Chi Chuan done in parks or maybe at the local fitness club, but few understand that this art is more than a lethal martial art or a relaxation tool. The Taoist practices prepare one's body for the necessary alignments through various exercises so that the journey can be made successfully, and the traveler unharmed (Paper 2004 p. 89-102).

Tai Chi Chuan means 'grand ultimate boxing', but more specifically 'Tai Chi' refers to perfected chi/qi/ji. The concept of chi is often times misunderstood, and will be elaborated on much later, but essentially chi concerns the internal life force of the body that enables existence. Taiji is the perfect harmony of the duality of Yin-Yang that is achieved through the practice. Correct mind and body alignments one can channel chi from the void properly so that one's life

force is perfected. This is an eternal process, but the alchemy is embodied by the movements of a Tai Chi Chuan practitioner. The movements Embrace Tiger and Return to Mountain are perfect examples for what must go on with the human psyche in order for such a transformation to take place. The Embrace Tiger movement is very much like a hug, but don't be fooled it can be extremely lethal. The tiger represents one's aggressive/fear driven self, and ultimately the goal of this position is to embrace that aspect of oneself with compassion and understanding. Often times within the Tai Chi form the movements that are most beautiful, physically and spiritually, are the most deadly. To transcend one's fears and angers allows one to exist eternally within the stillness, and thus enabling one's return to the source/void as indicated by the movement Return to Mountain. This movement retracts the arms in a spiraling motion to embrace an imaginary ball on one's center, and thus returning to the stillness/void. The two movements together tell the story of returning to the void/source through embracing fears and aggression with empathy and compassion. It is in this way that agape/unconditional universal love/oneness enables the stillness of Taoist meditation, and vice versa (Huang 1973 p.50-2).

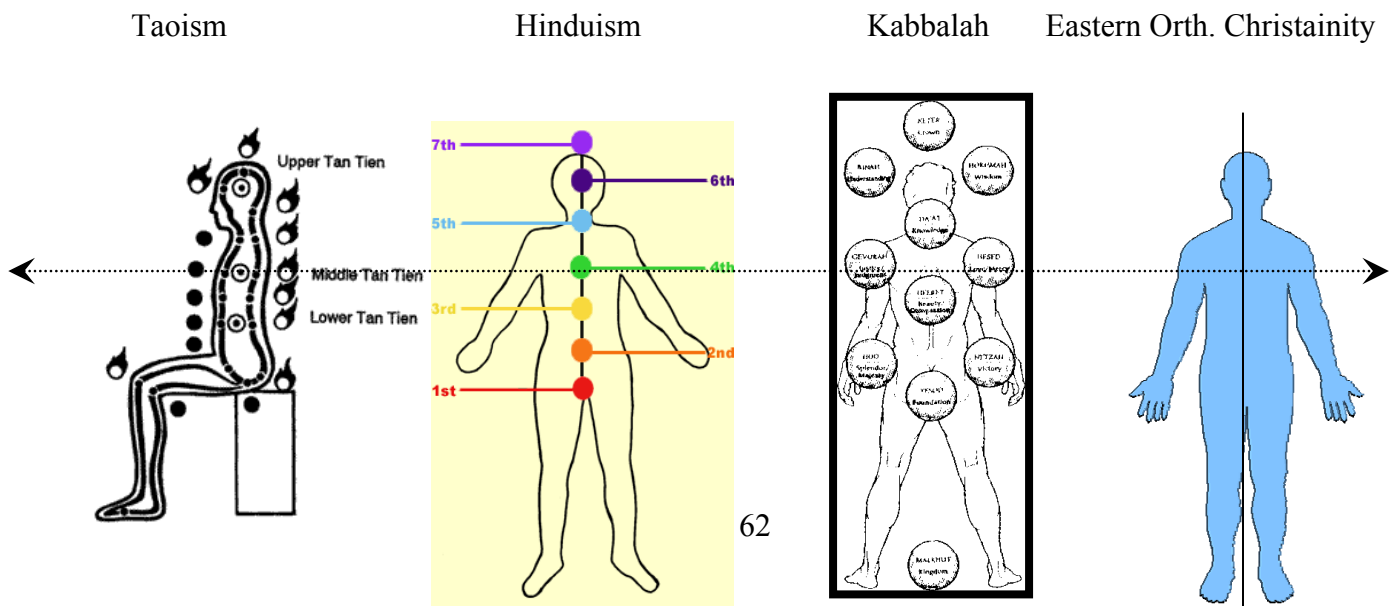
Agape is a word with such power that it has spread, throughout time, across lands, cultures, and peoples all over the world. The modern world may be so tempted to translate this Greek word as simply love, but in the Greek culture there were many kinds of love. There existed a love for a brother known as *philia*, or a love for a sexual partner known as *eros*, etc....and then there existed *agape*. According to our historians, *agape* is a universal unconditional love for all things. It is often times mentioned in worship of the Gods, and it is thus a divine love by which there exists oneness with the universe. Scholars cannot confirm that the Greek identified *agape* as this divine-kind of love, but they can confirm its greek usage with a perfected type of love. Since the time of the Greeks, Christians have adopted the term by

aligning it with Christ consciousness, and organizing Agape ministries (Templeton 1999). The concept is also very closely related to the Indian Bhakti movement by which devotees' attain oneness with the divine and all of creation through prayer, mantra, dance, music, etc. It is important to understand that agape is a unifying force that may begin as being directed towards one particular entity, but it quickly spreads to all things. For example, a Christian may direct all his/ her agape energy at Jesus for his divine sacrifice, but since Christ loves all beings, then it is only a matter of time until the Christian will become overcome by a love for all things. One might readily criticize my usage of agape because it is so culture specific, and even more so because it was developed from the same culture as the system of logic that I have been claiming is being misapplied to other cultures. It would seem that I am also misapplying the term agape to the other traditions, but the concept of unconditional universal love does exist in other traditions as well. To the Chinese it is known as Ai by Mohism, to the Jews it is Ahava, to the Hindus it is Bhakti, and so on and so forth (King 2006 p. 10-5). The usage of the Greek term agape predates the Aristotelian system of logic due to its usage in texts before Aristotle, and therefore to use the term doesn't imply that system of thought. In fact, before the formality of Aristotelian logic Greek philosophy was much more tolerant of arguments that utilized notions similar to the yin-yang philosophy of Taoism. The universal unconditional love experience is cross-culturally found, and thus the term agape can be loosely used to refer to such an experience.

The Taoist internal pilgrimage back to the void is an alchemy that transforms certain energies into others in such a way that they can be used for the journey. The Taoist paradigm being presented here reveals a structure of human evolution by which we actually de-evolved from an advanced state of being, and thus it is the goal to get back to that state. One of the first steps in returning to our original state is to be free from disease and illness. The Chinese

medicine system is extremely old, and radically different from the western way of treating illness. The system is preventive and utilizes the treatment of nerve points on the body, known as meridians. The chi of the body is often times thought to be just electrical energy, but the truth is that the chi is the entire process by which the body oxygenates the blood and produces electrical energy, and thus all processes that are related to enabling life are known as chi. The Chi flows through these meridian points throughout the body, and if certain points are blocked then illness forms. There are three major meridian points that have been understood as large concentrations of life force energy. These are the lower dan-tien (meaning little heaven), the middle dan-tien, and the upper dan-tien, and are located at 2 inches above the belly button, at the heart, and at the top of the head respectively (Liao 2000 p. 32-40). These energy centers are at the exact locations of energy centers portrayed in the Hindu chakras, Kabbalistic sefirot, and the Eastern Orthodox Christianity heart meditations. Each tradition also claims that by balancing these energies one is able to achieve, respective to each religion, unification with the divine. The energy of the heart center is most intriguing, despite the differences in the traditions, because it is always in the center of all the other energies as depicted by the pictures below.

(FIGURE 1)



The reoccurring theme or archetype within the traditions suggests certain energy centers within the body that can be activated and used as some kind of spiritual technology. It was a key part in my training with my Tai Chi master to study these various traditions, because is it thought that each tradition has something to add to the picture. To align the stillness/nothingness experience with the ecstatic/agape/unconditional love experience is not a problem for Taoism, because within the Tao all polarities are actually unified in oneness.

The Hindu chakra system was utilized in my study quite frequently, because of its drastic similarity to the Chinese system. Each chakra point in the Hindu system has some dimension of being associated with it. In the process of kundalini, which is of similar eidetic structure to the alchemy of Taoism, the energy of the goddess (shakti) lies dormant at the lowest chakra, while the energy of the Father Godhead (Shiva) exists at the third eye Chakra. It is believed that the kundalini can rise when awoken by special techniques, and thus unification of male and female can occur (John Woodroffe 2003).

This system of Chakras is a multi-dimensional approach that can render the human experience intelligible based on the attributes of seven major energy centers that are along spine. It is believed that these major energy centers are not only responsible for the manifestation of matter in their designated areas during development and healing, but are also responsible for the manifestation of certain attributes within the human psyche. Each chakra is represented by a flower, geometric shape(s), specific Sanskrit script(s), a mantra (sound frequency), and a color. The various attributes and symbols that represent these seven energy centers are ideographic in that they embody their esoteric meanings within the symbol. In addition, the frequencies of the color and sound (mantra) associated with each chakras provides a modality for stimulation and activation of that particular energy center. This chakra system is currently used by transpersonal

psychologists to make assessments of their clients based off of the various dimensions of their experiences as it pertains to the spiritual understandings of these energy centers. The paradigm is useful, because all the dimensions are extremely inter-related. This gives the therapist a very holistic view of the human being, while at the same time allowing for a reductive view (Woodroffe 2003: Nelson 1996).

The first chakra, *Muladhara*, lies near the genitals with a red four lotus and governs the dimension of earthly existence: survival, sexuality related to reproduction, and fear. The second chakra, *Swadhisthana*, lies near the hips with an orange six petal lotus that governs the dimension of emotions: happiness, sadness, sexual pleasure, general pleasure, the cycles of emotion, the creative force of art and music, and all the feelings in between with the element of water. The third chakra, *Manipura*, is located at the solar plexus with a yellow ten petal lotus and governs the dimension of one's will: determination, passion, ambition, and desire with element of fire. The fourth chakra, *Anahata*, is located at the heart with a green twelve petal lotus that governs with the element of air the attributes of compassion, love, selflessness, understanding, equilibrium, and wellbeing. The fifth chakra, *Vishuddha*, is located at the throat with a blue sixteen petal lotus that governs the dimension of vibration with the aetheric plane (an energetic blue print of reality) and enables the manifestation of matter. The sixth chakra, *Ajna*, is located in the middle of the two eyes with a purple two petal lotus and governs the dimension of insight: thinking, rationality, intuition, visions, and all forms of knowledge. Finally the seventh chakra, *Sahasrara*, is located above of the head with a thousand petal white lotus that is the integration of all the lower chakras, and all energies. There are several chakras in between the sixth and the seventh, many minor chakras throughout the body, and possibly many chakras even beyond the seventh. However, this is far too complicated to get into, and furthermore not

necessary in the illustration of my point. The rising of the kundalini occurs through practice, but also when the individual is ready. A premature awaking of that energy can cause very negative effects, and many transpersonal psychologists are arguing that many of the pathologies we have today are a result of premature spiritual experiences (Nelson 1996 p. 307-322).

With the awakening of the Kundalini the fears of survival disappear as the first chakra opens. The emotions become balanced and the will becomes focused as the second and third chakra are activated bring about a balance of water and fire. The heart chakra is the gateway to the higher chakras and is accessed by the delicate balance of the elements of the lower chakras that allows for the unification between the upper and lower realms. Physical manifestation begins as channeled by the will when the throat chakra opens, and insights are gained in the blooming of the third eye chakra as balance is maintained by the waters of one's emotional chakra. Shakti unites with Shiva as the thousand petal lotus unfolds (seventh chakra) and creates unification with the heavens. The process unites what is below (earth/first chakra) with what is above (heaven/seventh chakra). This notion is also very similar to the Taoist concept of Tian Ren He Yi (Heaven-Man-Earth) that represents the unity between all the realms. The heart chakra lies at the center while the other energies move around in a circle, and indeed chakra literally means a wheel of light. The completion of the process (which is actually eternal) enables the human body to become one with divine making earth and heaven one and the same (John Woodroffe 2003; Nelson 1996; New Brain New World 2008).

The Judaic Kabbalah system also emulates these basic centers, while portraying a similar paradigm as represented by the orientation of the divine emanations. There exists a sacred marriage between the Father of wisdom and the Mother of understanding, and each has a child of their own. The Son of the Father (Tiferet) is one of mercy, compassion, and love, and the

Daughter of the Mother (Shekhinah) is the manifestation of all that is. The physical presence of God (Shekhinah) is understood to be the created universe that has overtime become disconnected from the source, and is now embodied in the human form. Therefore, it is through the phallus (sexuality) that the Tiferet and the Shekhinah may unite enabling the divinization of matter (the divinization of humanity). The physical embodiment of love in the merging of two bodies is, again, the gateway to the divine. In this system there is even an energy that is beyond the seventh (Crown-union of Mother and Father), namely the Ein sof. In the Kabbalah system the Ein sof is understood as nothingness and the limitless; both infinity and void. It is the source of the ten Sefirot. This is perhaps the most important discovery of utilizing this archetype of energies latent within the body. The stillness of void can be the ecstasy of the infinite oneness (Ariel 2007 p.1: Hoffmann 1996: Scholem 1946).

In Eastern Orthodox Christianity there is also a similar system of understanding that places certain dimensions of energy within the body. The intersection of the cross reveals a horizontal axis of life and vertical axis of light. It is believed that the horizontal axis represents the physical presence of god, while the vertical axis represents the transcendental nature of god. The vertical axis of god is understood as a synergy by which man ascends to God and God descends to man. The intersection of life and light at the letter omega (the last letter of the Greek alphabet and perhaps the inspiration the name ‘omega point’) reveals that divinized life (matter) is the end process of what the Eastern Orthodox Christians believe to be theosis (the process of becoming divine). “Then spake Jesus again unto them, saying, I am the light of the world: he that followeth me shall not walk in darkness, but shall have the light of life”, John 8:12 (KJV). Eastern Orthodox Christianity focuses on passages such as this one because to them it is at the heart centre that life intersects with the light.

The practices of Eastern Orthodox Christianity consist of contemplations and prayers on the heart center that will enable theosis by descending the mind into the heart so as to still the mind so that the endless love of Christ consciousness will circulate the body. Once this occurs it is believed that the material body will become a spiritual body, and thus oneness with the divine will be attained. “The kingdom of heaven is within you” (Gospel of Thomas) and “God became man, so man can become God” (St. Athanasius) are sayings that are used by the mystics to refer to one’s true Christ nature within. Again, one can readily see the centrality of the heart center in the Eastern Orthodox Christian practice of theosis and the parallels to other traditions (Ware 1979 p. 55-57, 65-70, 84-87, 124-131).

In practicing Taoist alchemy one is always told to breathe from their lower dan-tien, and to circulate the energy throughout their whole body. There exists a Taoist text known as the “Secret of the Golden Flower” by which one is told to focus on the heavenly heart during this circulation for it has the ability to unite all things. In this text it seems that all aspects of spiritual growth depend upon the Heart (Lu Yen 1965). However, one might easily find the next few passages in the text contradictory with this theory, because it states that the heavenly heart is located in the head in between the eyes (sixth chakra area). It then goes on to proclaim that this heavenly heart in the head must govern the heart below. What this suggests, I believe, is that the heart centre must merge with the heavenly heart located in the head so that the heart can be guided by wisdom. The integration occurs simultaneously as the heart chakra is being opened. The heart chakra enables the access of selfless love and compassion and unity with the heavenly heart, whereby the wisdom is made one with love. This is the most important part of the process, because all too often there are those who have wisdom and no compassion to share it, and those

who have compassion and have no wisdom on how to use it. The opening of the heart centre is thus the catalyst of the integration process (Lu Yen 1965 p.24, 41).

The practitioner is taught how to reverse the flow of Chi so that it flows up the front of the body and down the back of the body. The front of the body being soft is understood as yin, while the back of the body being hard is understood as yang. Throughout one's whole life yang energy flows up the back, and yin energy flows down the front. This practice reverses the flow so that yang energy flows where it is yin, and yin energy flows where it is yang. This practice achieves harmony within the body so that it can return to the void, but it can only do so by utilizing the heart chakra. The heart chakra unifies the higher and lower energy centers (the yin and the yang) creating a circular flow of energy, and thus enabling the circuitry of the energy to be complete (Lu Yen 1965 p. 30-34, 51). One can achieve this circuitry without the full opening of the heart center, but the flow will be restricted, and thus limited in power. The heart center enables complete unification inside and out, and thus it creates the stillness/void. To be in stillness, according to Chinese philosophy, is to be one with all that is. When one achieves unification, then there comes a sense of universal unconditional compassion and understanding, namely agape. Likewise to achieve oneness from agape, let us say from the Eastern Christian Orthodox practice of heart meditation, will create a sense of stillness/void. The pilgrimage of the Taoist is, therefore, to return to the source/void through keeping one's 'heart as open as the sky' (Tsu 1997 v. 12).

Hopefully, through this exploration one has gotten the sense that the western approach to religious scholarship utilizes a system of logic that is being misapplied to cultures which don't adhere to its presuppositions. Integrative approaches, like Transpersonal Psychology, offer a multidimensional model by which the problems of Perennial claims with respect to comparative

studies are dissolved by the lack of adherence to one particular mode of thought. It is my belief that approaches such as these are paving the way for the future of religious studies, and possibly for the future of academia. The stillness/void/nothingness experience is understood by Taoists to be the oneness/agape/unconditional love experience, but for western scholars this is extremely hard to grasp. Therefore, it was necessary to not only address the system of thinking that governs the cognitive difficulties, but also to address an archetypal theme that supplies evidence for the centrality of the heart center extending itself beyond the particular instance of Taoism. The growing American pop culture of Tai Chi poses a challenge for the communication of this ancient knowledge, and thus it my hope this information may aid in that communication. Ultimately, the archetype of the heart center in the inner pilgrimage presents the theory of humanity's spiritual and physical evolution that very soon may become scientifically testable. In the age of weapons of mass destruction and looming environmental disaster; evolution maybe humanity's only hope for survival.

WHAT IS TAI CHI? EXPERIENCES WITH SIFU RANDOLPH: FEATS INVOLVING THE ROLE OF AGAPE

Every morning in Japan, Korea, and China hundreds of people practice the Taiji Quan slow form as the sun begins to rise. Throughout the western world one can find Taiji Quan classes at local gyms or by private instruction. A visit to park at the right time, and one might even find an old master doing their practice in seclusion. What is this mysterious art that has sweep across the globe, and where did it come from? Traditionally Taiji Quan, formally known as ‘grand ultimate boxing’, was designed as a martial art, but it has its origins in the ancient Chinese medicinal system of qigong. The qigong system emphasizes internal power by utilizing exercises that help develop one’s own internal ‘chi’ and prevent illnesses before they start. The complexity of ‘chi’ in this system will be discussed later, but it is important to understand that the slow movements of a Tai Chi Chuan (the Chinese spelling) can be used for lethal purposes or for healing purposes. With this in mind a superficial explanation of Tai Chi Chuan would reveal that it is a way of moving the body in a coordinated and continuous manner so that one begins to develop a flow of ‘chi’ throughout the body and center of gravity that can be utilized for martial purposes and health benefits.

Historically, the Tai Chi Chuan form was founded by Chang San-feng in 1200 CE, but one must understand that his discovery was a reaction to the already established external martial arts system. The Bodhidharma traveled to China around 475 CE to spread his religious teachings from India, and brought with him a specific set of exercises for his followers to help improve

their health. Over time these exercises became transformed into a martial arts system that allowed the monks to protect themselves against any threat. The martial arts, prior to Chang San-feng's time, was a system divorced from the philosophies of Chinese Taoism and the qigong system. In seclusion at Wu-tang mountain Chang San-feng noticed the perfect harmony between the battles of the Chinese crane and the snake. Legends have it that the traditional form that one sees to today came to him in a dream after seeing the balance of yin-yang embodied in the battle of these two animals (Liao 2000 p. 1-5).

Chang San-feng began to teach this art at a temple constructed at Wu-tang Mountain, and over time it is spread through lineages and adopted into different family styles. The Chinese used this system to build a powerful military that could not be defeated by any other martial system until the development of war technologies. In 1644 CE the Manchurians invaded the Chinese empire. They ruled the empire with force, and when hearing about the martial power of Tai Chi Chuan they demanded it be shown to them. Yang Lu-Chang was drafted into the royal court around the mid 19th century to teach them this ancient and most powerful art, but Yang couldn't hand over his ancient wisdom to his enemies. The Yang style already emphasizes smaller movements than any of the other styles, but when Yang slowed the form down to a gentle movement he was able to deceive the royal court into thinking it to be simply a dance for good health (Liao 2000 p. 5-10).

It is, historically, from that point on that Tai Chi Chuan spread as simply a health related exercise, but the martial aspects were secretly taught only to direct kin. The area of Manchuria acted as a gateway for the spread of this popularized slowed-down version of Tai Chi Chuan to countries like Korea and Japan. This isn't to say that the ancient masters of Tai Chi Chuan didn't

utilize slow movement practice, but rather that the popular understanding of Tai Chi Chuan was and in some ways still is completely unaware that the form was actually a martial art.

Martial arts became more popular and less secretive over time as advances in military technology made them essentially obsolete for defense. In the mid 20th century Cheng Man-Ching came to America and began teaching traditional Tai Chi Chuan. I believe that one will find that today's popularization of Tai Chi Chuan throughout the world is very heavily influenced by the popularization of martial arts in general during that same time period. This period is the beginning of the martial arts movies starring with actors and martial artists like Bruce Lee and Chuck Norris. The developments in military technology essentially enabled the spread of almost all martial arts to occur at an exponential rate. In both the West and the East one would find movies, books, schools, and tournaments becoming more and more prevalent (Liao 2000 p. 10-15).

Interestingly enough the popularization of martial arts during this era was mainly concerned with external styles and kungfu, and it seemed that the secrets of Tai Chi were still well kept. This is most likely a result of the rising success of modern science that at the time could not even begin to explain the physiological nature of Tai Chi Chuan. Even to this day the scientific community still disregards the great majority of claims made by Tai Chi masters, because they have no working theory to test those claims. However, recent studies on the health benefits of Tai Chi have validated its healing nature on the body. Studies by many scientists and institutions have shown that Tai Chi can improve one's immune system, lower one's blood pressure, treat sore bones and muscles, treat diabetes, lower cholesterol, and many other health benefits (Young 2008: Science Daily 2008: also see McCoy 2008).

The experiences that I am now going to share with you are those that I have seen, felt, and heard about. The masters of all traditions still exist, but have adapted to a changing world. They use their skills in martial situations when needed, but mostly in entertainment and in the working world. There is a state of being that I believe is common to them all. Through this exploration we will see if what is common to Master Randolph's abilities is that state of being. Keep in mind through this exploration the understanding that the stillness of the void/nothingness is also the oneness of agape/unification with everything.

Let me share one of my experiences that may help to better articulate the non-duality of the experience of nothingness and oneness. On one particular day I became very restless while sitting in my modern philosophy class. I began to tap my hand and my pencil on my notebook to a barely audible rhythm. I soon noticed that some of the movements of my classmates seemingly corresponded to my rhythm. My awareness became extremely heightened, and I was able to zoom in on specific sounds and movements. At first I noticed the flipping of pages, and then the motions of the way they wrote in their notebooks. The adjustments of people trying to get comfortable in their sits even corresponded with the movements of the professors chalk. After just a few moments the entire class was moving in one what seemed like a completely syncopated rhythm. I was no longer shifting from one stimulus to another, but rather I was taken back by the entirety of the whole experience. I was overwhelmed by the intensity of the rhythms, and very soon I began to lose my self in the chorus of these movements. In this experience my rhythmic oneness with the sounds and movements of the classroom was simultaneously accompanied by a feeling of stillness. I believe the overwhelming awareness from the unity of the rhythm allowed me to become so still, because I realized that I was just a part of something so much greater. Tai Chi Chuan, like drumming, is comparable to being in the eye of a hurricane

whereby the chaos becomes ordered by your centrality, and therefore you have become a part of it. In one moment you lose all sense of your identity while simultaneously you are becoming one with what is around you. Overcome by the immensity of the hurricane you are dissolved, and then reformed by the unity of your centrality.

On the first day of Tai chi class I walked down the hall talking about jazz to this relaxed Buddha bellied black dude who claimed to have dabbled in Tai Chi. We walked into the dance studio and sat down on the bleachers still talking about all kinds of issues. Abruptly he got up and began introducing himself as the Tai Chi Master as he sent a smirk on my face. On that day he broke the class up into two groups of ten and lined us up with our hands on each other backs. With our bodies completely lined up we continued to push in unison on just one of Eric's arms with the collective weight of at least 1,000 pounds. He never even budged. He broke into a deep laughter that filled the dance studio with magic as we all tried to wrap our minds around how this was possible. He then told us that we should prepare for the force to come back at us. With a great gentleness all ten bodies were thrown backward. This was the first of many feats that bewildered the class and myself.

A few weeks of training went by as we practiced standing mediation and the yang style form. Eric is honestly one of the most eccentric people I have ever met. He loved to challenge our concentration by talking complete non-sense, and therefore the class was often times very enjoyable and hilarious. It was a place and time where students could be themselves with no pressures or expectations. Paradoxically it was during these most hilarious moments where Eric would teach the most lethal applications of the Tai Chi Chuan form. There, of course, formed doubts on how such slow-relaxed movements could ever be damaging. On one occasion Eric agreed to demonstrate the kicks and strikes on a tree that stood 20ft high and at least 2ft thick.

Many students tried to kick the tree and each time Eric replied “are you comfortable with that?” Most of us kicked the tree with the classic form of Tae kwon do, but Eric stopped us and said “just kick it with no form and no thought”. The tree shook as his foot swept across the bark. Only a few of us stayed to see the rest of the demonstration. Eric continued to shake the tree with kicks and palm strikes, but then he decided to push it. We placed our hands on the opposite side of the tree and waited not knowing what would happen next. It was subtle at first, but then it became very clear as we felt the tree bulging toward us.

Later that month Eric began to teach us the skills of Iron armor whereby the skin can be made impervious to most physical attacks. Many of the students, including myself, have tried to hit Eric as hard as they can. Every time that we wailed our fists we would find that it is like hitting concrete. On one occasion I continued to throw my fists at him only to find that they were bouncing back at me with a force that sent me flying backward. It was settled that the fists could not harm Eric.

Eric eventually started a Tai Chi Club that would meet to practice at the Peterson Center in one of the lower rooms where there were punching bags and mats. It was here that Eric, with the touch of a feather, would send heavy weighted punching bags so high into the air that they would often come off the chains because they almost made full loops. He demonstrated sticky and following energy by raising the bags into the air without tensing any of his muscles.

Often times in the summer we would practice in Schenley Park by the lake whereby we would do the form along the lake’s edge for hours. On one particular afternoon we were practicing near a bridge where underneath was a man-made stream from the man-made lake that was at a certain point at least 6 feet wide across. It was the end of our practice, and we were about to make our way back to campus. All of us headed down the stream further where the gap

was smaller in order to cross over and go up the steps, but Eric decided to step across the 6 foot gap. To this day I still don't understand how he did it, but his one foot literally stuck to the side the other wall. Within seconds he had managed to get his other foot on the wall and he was safely across the gap. There was neither a running start nor a leap of any kind. Eric, a 230lb Buddha bellied man, literally took a step and managed to clear a 6 foot gap. None of this would prepare us for what he began to teach us later that summer.

We once again started working with trees and allowing them to teach us how to merge and blend in order to transfer energy. Eric began to push and pull the tree in harmonic motion and before we knew it he had 20-30ft tall trees with about 2-3ft diameter swaying like blades of grass in the wind. Over the course of the summer Eric's movements became smaller and smaller until he could move the tree with just the touch of one finger. Since the wind could easily send the tree swaying we waited until it died down or we simply tried again on another day. On one occasion of no wind I watched the tree swaying very noticeably only to look down to see that Eric's hand was not touching the tree at all, but was shaking uncontrollably. I have asked Eric on many occasions how he does these feats. Letting go, becoming one, and merging are his common responses. If one seeks to know what is going on in his mind he will say responses like "nothing", "stillness", and "void". If pressed further he will talk about the merging experience as a moment of universal love and unification.

I urge those that are in disbelief of these feats to check out the Internal Damage Tai Chi website at www.internaldamagetaichi.com where you can see Glen Hairston (Eric's master) demonstrating the martial applications on Eric with full contact strikes. Furthermore, I urge the true skeptic to seek out Sifu Randolph, who is mostly teaching in University of Pittsburgh's Posvar hall, for demonstrations and instruction.

THE WU LI: THE NEW PHYSICS OF WHAT IS WITHIN AND WITHOUT

In order to explain what modern science cannot we must conceive of a new science. In a way it may be a mistake to call it new, because it is more than likely that it was understood by the ancients and sages of the past. It is, however, new to the western world that has long forgotten and lost touch with what makes us who we are. The Wu Li masters didn't just study these matters intellectually, but rather experientially. This new physics must take on that same approach by no longer regarding the superior human faculty to be solely intellectual achievement that warrants the study of external phenomenon. Physicists study subatomic particles and biologists study cellular activity, but neither of them takes the time to really experience the phenomenon within their own bodies. We excuse our externalization by claiming that such sensitivity is not possible, and upon this declaration we have not only invalidated the experiences of thousands of individuals that have lived on this planet, but we have also conveyed an arrogance that is behind all of our achievements. We have created machine after machine to do tasks that we cannot do on our own or rather that we can no longer do on our own. The old science seeks to understand by reduction and analysis so things can be re-built and/or replicated with new materials and new applications, but yet it completely ignores the technologies of what is already given within the human form. How much do we take for granted and how disconnected have we become from our own bodies? The ancient Wu Li masters understood their world not only in the intellect, but also in experience. Imagine every scientific fact being known not only by the mind, but also by the body.

The term Wu, as mentioned before, has commonly been understood as Shaman, but there are other Chinese characters that are also transliterated into 'wuli'. Wu in other characters can also mean void or nothingness. In context this can be seen in the expression wu-wei, which means non-action. Li is the character for expression, and therefore Wu Li becomes understood as the expression of the void. It could also mean expressions of the shaman. Other related characters of the phrase mean physics or literally patterns of organic energy, but again their ancient understanding of physics or science is very different from what we have created (Zukav 1997 ch.1). One criticism of this 'play' on characters is that in the Chinese script all these characters are different, but it is only in the use of transliterated characters that they are all the same. It is important to keep in mind here that the Chinese characters were originally pictographs or ideographs that represented a relationship between concepts, and thus often times there existed relationships between the characters. It is very western to think that just because they are different characters that there is no relationship between them, and furthermore one should find it very interesting that the transliteration brought forth this interconnectedness (Keightley 1996). One example of external studies becoming embodied is found by looking more deeply into the interpretations of wuli as 'expressions of the void'.

The most obvious question is how anything at all can be expressed from nothing. This might be a more appropriate question for the physicists whom recently discovered that there is no such thing as a perfect vacuum. Within the perceivable nothingness of a man-made vacuum particles seemingly pop in and out of existence. This probability wave of existence and non-existence is what is known as zero-point energy, because it is the lowest possible energy level that can be obtained in empty space. In fact, it might actually be the energy of space itself. It is believed by many physicists that this energy can be harnessed for power, and has been wrongly

popularized as ‘free-energy’. There is no such thing as free energy due to the laws of thermodynamics, but one cannot deny the notion that the universe is itself a perpetual motion machine since all energy is conserved in one form or another. Therefore, harnessing this power would be like putting a turbine in the naturally flowing river of creation (Sciama 1991: Forward 1984: Yam 1997 p. 82-5).

In this way the circular motion is translated to simple harmonic motion of the probability wave, and therefore the vacuum energy depends on the polarity of creation and destruction. Science claimed nothing new here, because it states very clearly in the ancient Chinese texts that from the Wu (nothingness/void) came the Tao (the way) and from out of the Tao came Yin and Yang (Gu 2006: Robinet p. 103: Tsung-yueh 2008). It is also said that the balance and harmony of these polar forces will create infinite power, and it is for this reason why qigong and Tai Chi were created. There are many physicists and engineers around the world working on how to harness such energy, but perhaps this feat has already been achieved thousands of years ago by the ancient masters. Spiritual practices, like Tai Chi Chuan, Yoga, and Qigong help develop ones ability to empty the mind and body of all stress so that the energy of the void can flow freely into the balance of one’s center. This interpretation of Wuli, therefore, is not portraying an abstract philosophy, but an actual physiology that occurs within the bodies of these sages.

ALCHEMY: THE SCIENCE OF THE ANCIENTS

The word science is derived from the root “to know” or gnosis. This implies that there is something to know; something which is worth knowing; something which that is believed to be true (Harper 2001: see science). This notion of an objective truth that is to be found through rigorous analytic study is the result of the modern era. It was a product of the intellectual

machinery that was built upon the ancients, but the modern techniques of inquiry were not inherently within the beginnings of science. The ‘scientists’ of the ancient world were often called the natural philosophers or alchemists. They concerned themselves with essentially the same matters that modern scientists do, but in drastically different ways. The word ‘philosophy’ is derived from the Greek ‘philo’ (meaning love) and Sophia (the goddess of wisdom). The etymology of philosophy reveals the phrase ‘to love the goddess of wisdom or simply to love wisdom’; however the usage of the word ‘love’ is not equal to our modern view of the word (Harper 2001: see philosophy). The Greeks incorporated several different types of love in their language, and philo represented a kinship, family, or brotherly type of love. This is where we get Philadelphia (the city of brotherly love) or philanthropy (a love for humanity as a family) (Harper 2001: see Philadelphia). In the ancient world philosophy wasn’t just an intellectual activity divorced from spirituality, but rather the two were one in some kind of mystical union. The love for Sophia guides one through experiences that lead to great intellectual and spiritual understandings.

Take for instance Pythagoras and the Pythagoreans, now commonly known for the development of the Pythagorean theorem, whom are historically known to have done mathematics in the woods while engaging in spiritual practices of the mystical kind that were believed to allow them to become one with nature, the universe, and the divine. I know that it may be hard to believe that spirituality played a big part in a theorem that you learned in your grade school math class, but try to place yourself at the time of the Pythagoras. Pythagoras, aware of the complexity of the world (due to trade influences, sharing of information, developing religions, and the influence of other pre-Socratics) took a moment to slow down and really experience what it meant to be alive (Beavers 2008). Let me share this moment with. Get in a

comfortable position and take a few deep breaths. Tense all the muscles of your body for a few seconds, and then release. Really sink into that relaxation as you breathe. You can do this a few more times if you wish. When you feel you're ready move on to the next paragraph.

Allow these words to become images in your mind. As you are reading there are 6.4 billion humans living life on this planet. At this very moment there are people waking up, going to sleep, going to the bathroom, getting married, getting divorced, dying, being born, starving, feasting, crying, smiling, attending funerals, attending graduations, hunting, ordering take out, cooking, shopping, building shelters, playing music, dancing, singing, honoring their beliefs, fighting for their beliefs, saving lives, taking lives, making love, making apple pie,....etc. It is all happening right now, and beyond human life there are billions of beings on this planet all experiencing the wonders and struggles of life. At this very moment a tiger has caught its prey, and a butterfly has completed its transformation, while a young bird has found its home nest after its first adventure out on its own. Trees are swaying in the wind and ocean waves are rolling on the shore, while volcanoes erupt with lava. This is not a fictitious world that I am painting, but rather this is the reality of what is happening in the world at this very moment. The moon light giving direction as it makes its way across the sky, while somewhere else the sun graces those who see it with its breathless beauty as it rises or sets. The moon is making its way around the earth, the earth making its way around the sun, and all planets are in motion in their elliptical paths. Our solar system is making its respective orbit around the center of our galaxy, while sun flares are exploding, and some stars are being born and others are dying. Black holes, like the one in the center of galaxy, are being formed all over the universe that is expanding with no end. Planets are forming atmospheres and possibly life. For all we know, at this very moment, there could be life forms very similar to our own doing exactly the same things we are doing. Reading

spiritual, psychological, and philosophic works much like this one; being in awe of creation and wondering what else is out there. All of it is happening right now! Do not let yourself forget this moment that is always happening. Read this over many times so that you do not forget that we are all a part of something much greater.

Now, with the experience of this moment in mind, place yourself at the time of Pythagoras and the flourishing of the Greek culture. Place yourself in the forests, in the chaos of nature, only to find yourself in the same experience of the now whereby the chaos becomes an intelligible order. Numbers begin to take life and equations arise from your contemplation. Pythagoras was noted for believing that all of nature can be explained by numbers. To this one might add that the truth of one world is revealed through a meta-world; the world of mathematics. This meta-world is one of representational concepts that can be manipulated to reveal unique relationships that seemingly govern the manifestation of matter. Some relationships remain purely on the abstract level, as there are no perfectly straight lines or curved circles, but others escape the abstract world. It is not entirely clear whether the relationships emerge from the chaos of the physical world or if the relationships of mathematics guide the manifestation of matter. The latter would necessitate a guiding principle which is concurrent with the blue print of the aetheric plane and/or some spiritual force like God.

In our modern day we teach mathematics as purely an intellectual activity, but this was not at all the case in the days of Pythagoras. Most of us sat in our grade school classrooms barely paying attention to the teacher explaining the details of the Pythagorean theorem: “A squared plus B squared equals C squared” (Chase 2008). Like drones we repeated it, or maybe memorized it. And even for those who did take a particular interest it still did not have the life altering impact that it did when the Pythagoreans first learned about it. To them nature revealed

itself in numbers; if one is able to unite with nature, then the numbers and equations will be revealed. Historically Pythagoras and the Pythagoreans would venture into the forests in search of mystical and spiritual experiences by which the truths of mathematics would be revealed to them.

To many of us who have studied or are currently studying mathematics in the modern world the activity of Pythagoreans seems so ridiculous, but we have to keep in mind that the mathematical truths that were discovered during this era were unprecedented and revealed simple relationships that could be found in nature. We now have the luxury of knowing the truth of this by discoveries made in physics and the relationships found in nature that are in accord with the Fibonacci sequence and the golden ratio. The ratio between the numbers in the series 1,1,2,3,5,8,13,23...etc is found in spirals of flower petals, the lengths of body parts, the mechanics of an opening and closing hand, the swirls of water, the patterns of genetics, and even the spirals of galaxies (Anderson, Frazier, and Pependorf 1999). How amazing and paradoxical is it that mathematics, which is seemingly in a world of its own, can reveal truths about the concrete world that are so simplistic and beautiful? The ancients did not have all this figured out, but believed that the simple truths that were revealed to them were signs that the divine was communicating with them in order to share the principles of creation.

Thousands of years before this period the ancient civilization in the east created the number system we still use today and conceived of the number zero. This was a feat that wasn't done in the western world for many ages later. Mathematics and "science" in the ancient east was done by the rishis(seers) whom it was believed were able to gain insight into the nature of the universe through mystical experiences with the divine. The rishis would use song, prayer, physical practices like yoga, chanting, dancing, and many other methods in order to gain the

insights they needed. I hope one is getting the sense that mathematics and science was very different from what we now practice today in the modern world as scientific inquiry (Sri Aurobindo 2008).

Within both the ancient eastern and western worlds the process of discovering mathematical and 'scientific truths' was done by an internal or mystical union with the universe or divine forces. It is this process that is often enigmatically referred to as alchemy. As westerners we traditionally think of an alchemist as a newager or an ancient pagan who combines various things hap-hazardously in a cauldron or in test tubes looking for the impossible way to change silver into gold. However, alchemy in the ancient world was a study of the internal processes within the human body and how to use them in order to get desired results-like mystical insights into the nature of the universe. All of the chemicals were within the body, and the tools used to manipulate them were the various spiritual practices. The alchemical equations were symbolic of internal experimentation that utilized body heat, blood flow, oxygen flow, and other bodily processes. Therefore, this inner alchemy wished to literally change the physiology of the body in order to produce drastic effects like prolonged life (Voss 1998).

This brief exploration through ancient physics, alchemy, and science might tempt one to disregard all that I have said in light of the major scientific discoveries and technological advancements that the modern perspective has provided. We tend to view the ancients of both the east and west as having very little to offer the modern world, because in our opinion they lack a formal logic and external technologies like chemical medicines, climate control, and even anti-bacterial soap. However, it is quite clear that there are still many aspects of these ancient cultures that remain a mystery to our modern world. The pyramids at Giza, the configurations of stone hedges, the anatomical exactness of the Mayan crystal skulls (an exactness which can't be

reproduced by even our modern laser technology), and the hand-made water-proof clothes of the Eskimo all serve as reminders that there were technologies discovered by the ancients that we are still ignorant of (Shapiro 2008). It is only within the past 20 years that modern science has even begun to investigate the skills of yogis or tai chi masters. The precise control of autonomic functions of the body is a skill mastered by these individuals, but thought to be unattainable by the scientific community at that time. There is much that we do not yet understand, and I believe that it is extremely important that we as a society recognize the assumptions and limitations of our modern scientific perspective so that we may not be hindered by it in our growth as a collective.

THE METHODOLOGIES AND ASSUMPTIONS OF MODERN SCIENCE

The assumptions and methodologies of science and modernity are employed in order to explain the phenomenal world in a succinct and logical way. One formable notion is that science seeks to explain closed casual systems and through modernity it does this by rigorous reductive analysis by which the entirety of the phenomenon at hand is broken down into its simplest forms so that the relationships of the parts to each other and to the whole can be understood. Once the reductive model is achieved, then it is assembled back together to explain the functionality of the whole. It is clear, however, that this technique makes it necessary to create a fictitious world whereby the system exists in parts. Take, for example, the mechanics of a watch. If one used this reductive model, then the analysis would necessitate an intellectual abstraction of isolated part that didn't actually exist. Although the model could explain the functions of a watch in a series of steps, the real watch existed with all the parts working together simultaneously. The criticism is, therefore, that the model is not the reality and will be limited when dealing with

phenomenon that cannot be so easily reduced into parts-i.e. ecosystems. This scientific modern view is our Cartesian-Newtonian world that we lived very comfortable in until the times of Einstein, relativity, Heisenberg, Quantum Mechanics, and String Theory.

The reductive model is more or less a by-product of the notions of causality, closed causal systems, and the utility of Aristotelian two-valued logic. Our assumption of causality is present in our everyday lives when we assume, for example, that fire causes heat. Hume provided an argument against the purely logical formulation of causal relationships in his Treatise of Human Nature that brought the rationalistic endeavor to its knees. The field of psychology is more sympathetic to this view as they understand events to be in co-relation with one another such that any claim of causality is an inference that requires a leap in logic. Just because in the past your experiences of seeing a fire have been accompanied with the sensation of heat doesn't necessarily mean this will always be the case in the future. One could surely conceive of a holographic fire that one perceives, but doesn't emit heat. In this way Hume reveals the subjectivity of any observer that is attempting to formulate causal connections between events. If one assumes the existence of the notion of closed systems of causality, then one must presuppose that events can be isolated from their environments and observers. To obtain a closed causal system one must assume that events are not all interconnected, because if they were then no isolation could occur.

In addition the assumption of truth not only presupposes that there is a connection between linguistic expressions and reality, but the notion also presupposes that there exists one objective 'real' reality that linguistic expressions can be gauged by. Many who philosophize on language, like Wittgenstein, see the dangers of these assumptions, because language is often a subjective expression of one's culture and socio-psychological state. One needs to look no

further than Einstein's special theory of relativity to realize that there is not one objective reality, but rather a subjectivity that allows for conflicting truth claims to be both valid.

This leads us to the next assumption of logic that declares that statements can be either true or false, but not both or neither. The law of the excluded middle declares that if two truth claims are in conflict with one another, then at least one must be false. We use this type of two-valued thinking every day, but how much does it actually apply to the human experience. It is a great system for mathematical and scientific calculations, but can the entirety of existence be lumped into these two categories? Is getting fired from a job always a bad thing? What about the phrase "when one door closes, another opens"? When humans discuss politics, religion, philosophy, and spirituality is it always the case that only one person can be true, while the others must be false? When you look at glass that is half full is it possible that it could be half empty? Exact measurements would tell us the amount in the cup, and maybe it is more one way than the other. If it is exactly half the volume of the cup, however, then which assessment is correct? One could argue that 'exactly half' doesn't exist, and therefore the cup must be lumped into either being more full or more empty. The two categories seem almost inescapable at some times until one looks at the glass and realizes that within the particles of the water there is empty space, and in what seemed like empty space there are billions of air particles. The fullness of the water now becomes empty as itself is mainly composed of empty space, and the emptiness of the see through part of the glass now becomes full as itself is full of activity. Suddenly it doesn't seem like the two categories apply anymore, because they are only relative to some particular aspect or to the interpretation of what one means by the words 'full', 'empty', 'more', and 'less'. In life it is certainly not always the case that things are as clearly distinct as black or white, good or bad, and true or false.

A two-valued categorization is a notion that we ascribe onto the phenomenon at hand. It is one of the most basic assumptions that underlies most western thought and it is highly effective, however, it itself is not truth. Declaring that the two-valued system is itself true while others are false is a reflective circular argument that utilizes the assumptions of the system in order to prove the validity of it. Such circularity is not accepted within the domain of the system, therefore it seems unjustified that such argumentation should be used in proving its validity when compared to other systems.

Jain logic and the mathematical logic of the intuitionists, for example, both utilize a four-valued system by which statements can be true, false, both true and false, neither, and many combinations in between with other variables of expression such as partial relations and ineffability (Grimes 1996 p. 312). This four valued system used by the intuitionists brought about new discoveries in mathematics that weren't able to be proved using the two-valued system, and likewise the two-valued system proved certain propositions which the four-valued system could not (Moschovakis 2004). So one can readily see that these assumptions limit and pre-categorize the possibilities of any linguistic expressions by forcing notions into being only 'this or that' and pertaining to something conceived of as objective reality. It is these various assumptions of science, reductive analysis, and western logic that shape the way the moderns view the world around them. The discoveries we have made using these assumptions are immense, however it is still important that we keep in mind the limitations of our assumptions; because when the assumptions dissolve so do the limitations. Imagine the possibilities of our sciences, mathematics, and technologies when we no longer limit ourselves to things being this way or that way. Integrative methodologies like those proposed by the transpersonal psychological field may serve not only to pioneer the humanities, but also the sciences.

The new science demands not only intellectual understanding, but also experiential understanding. The laboratory is no longer external, but rather it is one's own body and mind. All knowledge must become internalized so that it can be fully known. The new paradigm will not be bound by the same assumptions as the old paradigm by seeking a more integrative approach into investigating the phenomenon of the universe.

In extensively discussing the assumptions, limitations, and challenges of the old scientific paradigm we are now presented with the opportunity to go beyond them. The very basis of these assumptions affect the way we view the world around us; therefore it will be unavoidable, once the assumptions are dissolved, to view the universe differently. The physiology of Tai Chi Chuan can be explained on many levels, therefore I will begin with the intellectual lens that is congruent with our familiar biological, chemical, and Newtonian view.

THE NEWTONIAN PHYSICS OF TAI CHI CHUAN

The physics of Tai Chi Chuan is multi-dimensional, because one can study it on the level of biology, chemistry, Newtonian physics, Einsteinian physics, Quantum mechanics, string theory, holographic theory, etc... Each study takes a different view on the phenomenon at hand by changing the angle, zoom, and focus of the intellectual lens. I am going to begin this explanation with the focus of the biological, chemical, and Newtonian lens, but we will soon see how the limitations of this perspective will leave us with more questions than answers. Much of this explanation, pardoning a few exceptions, reflects my studies with Sifu Randolph. This information, although learned from him and from over 3,000 hours of experience, is my interpretation of the physiological activity within the body. Let it be noted that I am not

presenting this as fact, but rather as a working theory that will hopefully inspire more scientific research in this area.

Tai Chi Chuan has become, in the more recent years, popularized as a health benefit exercise through the results of various studies that verify and record its effects. Chemically and biologically speaking it is now common knowledge that constant states of stress have not only negative affects on the immune system, but also on vital organs, muscles, blood flow, and other bodily functions. The relaxation of Tai chi, in this sense, enables one to attain a strong level of vitality by emphasizing stress release. Recent studies have actually shown that the chemicals released during intense physical activity that are responsible for muscle regeneration are also released during Tai chi, but serve a different purpose since no muscle tissue is damaged. The chemicals are therefore free to circulate throughout the body to regenerate internal organs, and damaged cells. Conclusively the practice of Tai chi has many health benefits not only because it improves the immune system, but also because it releases regenerative chemicals that can heal many damaged areas of the body (Douglas 2008: Bottomley 2000 p. 361-373).

Tai Chi Chuan was heavily influenced by Qigong which is the ancient Chinese system of medicine and vital organ practice. Specific exercises were developed that target certain areas of the body for healing and rejuvenation. It is through the daily practice of these exercises that one can maintain good health throughout one's lifetime by allowing their body to naturally heal itself without the dampening effects of stress. Although this biological and chemical explanation focuses primarily on the health benefits of Tai Chi Chuan there will be other aspects of this art where the biological and chemical explanations will come into play. Any external stimulus on the body can have negative effects if the body is not relaxed, and the same is also true for external force.

GRAVITY ON THE BODY

In Newtonian physics your body, having mass, is pulled towards the earth by the gravitational force. The natural force of the ground pushing up on you then balances the force of gravity pushing you towards the ground. This is what is clearly outlined in Newton's third law of motion when he states 'for every action there is an equal and opposite reaction'. In addition to the gravitational force of the earth acting on the body it is important to be aware of the gravitational forces of the earth being pulled to the sun, and the sun being pulled to the center of our galaxy. It is the summation of all the circular motions of these large celestial bodies that is acting on the human form. At this very moment the earth is spinning on its axis while it is going around the sun, and the sun is moving in its rotation around the center of our galaxy, and our galaxy may be moving at any unknown velocity throughout the expanding universe. All of these forces are acting on the human form (Newton 1726).

BONE STRUCTURE

The human body is formed by the interlocking bone structure that determines the distribution of external forces by the geometric angles that the bones are positioned in. This particular geometric is the study of the static forces within the body and is exactly same, although severely more complex, as the study of static forces in architecture. A building is made structurally sound by correctly angling supporting beams so that forces acting on the building are balanced throughout the structure. The same can also be true of the human body when external forces are acting upon it. I state can, because rarely are humans coordinated enough to correctly position their bones to use static physics to balance out external forces. If the human body is position correctly, then all external forces will be correctly balanced throughout the form so that it will become structurally sound (Bottomley 2000).

The main difference between a building and the human body is that not all the bones are straight and the connective tissue, cartilage, allows for an overall curved structure. The most balanced structure to any curve is a sphere, because all curves are equidistance from a center point. Therefore, the most efficient and balanced structure of the human form is a sphere. The center of this sphere is approximately two inches below the navel. If one takes the time to study the Tai Chi postures, standing posture for example, then one cannot help but notice the geometric definition of a sphere by the curves of the bone structure. The backward arch of the torso and head balancing the forward arch of the legs defines the vertical circle of the sphere. The arches of the hands clearly define the horizontal circle of the sphere in a completely balanced structure. The Tai Chi form is specifically designed to teach an individual how to attain a well-balanced static spherical structure in various postures. It is through long years of practice that one is able to attain a perfected spherical structure whereby any external forces, like gravity, can be correctly balanced and distributed equally through out the whole body.

THE TISSUES

In the human form, the configuration of bone structures are mostly surrounded by stretchy tissues like tendons, muscles, veins, cartilage, organs, nerves, and skin. Most of these stretchy tissues are like strings bound by both ends and can be made to hold tension forces. This is how you are able to tense your muscles or your skin, because the tissues are bound to the bones on both ends. If your body becomes tense, then the forces of gravity and the universe acting on your structure will become trapped in the body's tissues. So, unfortunately even if your bone structure is perfect you can still be completely unbalanced and unstable if any of these tissues are unnaturally tense (Bottomley 2000).

Since some the energy of all the external forces acting on the body can become trapped in the body through tension it seems as if the force of the gravity and the natural force reacting to gravity are weaker. This is why we often experience dead weight being so much more ‘heavier’ than the body of a living being. If the body is completely relaxed so as to allow the external forces of the universe that are acting on the body to flow into the ground, then there will be minimal energy loss and a natural tension occurs. This is why Tai chi students practice standing posture for so long. The training helps one develop their structural center and natural tension by relaxing all the tissues and balancing all external forces. Indeed, it is the balancing of two polar forces that enables tension to exist in the first place.

This natural tension allows one to take advantage of the many smaller and connective muscles within the body to aid in the equal distribution of external forces. There are over 630 muscles in the human body, but we tend to only coordinate the use of the major muscles groups. Total body relaxation allows for all the external forces to flow through the form (instead of being trapped by it) with perfect balance so that it can be transferred into the ground with minimal energy loss. The transfer of external energy into the ground gives one the feeling of being rooted and connected to the earth. The body, therefore, acts a conduit for any external force and simply transfers it into the ground.

Since the structure of the body is spherical not cubic, then the external forces acting on the ground through your body are met with an equal and opposite force that follows the curve out of the ground and through your body. For simplicity sake we will look at just the force of gravity to see exactly how much force one has available when becoming rooted to ground. According to Newton’s second law of motion the force is equal to a mass multiplied by the acceleration of that mass. If the person weights 80kg and the acceleration of that mass into the

ground is 9.8m/s^2 , then you have a total force of 784 N. This is the amount of force that can flow through the body just by relaxing out the earth's gravitational pull and allowing one to sink into the earth. Any external force (like someone pushing on you) will be added to this amount, because it will meet the ground and bounce back out of you. This is how Eric is able to withstand the push of ten people, because all the forces meet the ground and bounce back out of the ground to meet the people that are pushing.

PHYSICS OF THE SPHERE

The spherical relaxed structure of the body allows for a fluid continuity of energy to flow along the circular paths around the center. All external forces that come in contact with this spinning sphere will be rotated and redirected around this point. Imagine attempting to attack a giant sphere that is spinning horizontally extremely fast. Any attack would be easily redirected to the left or the right, because the tangential force resulting from the high angular velocity that would deflect the attack would be more than sufficient due to do so. This example would require that the sphere already be spinning really fast and that it had only one axis of rotation, but imagine a sphere that is on a frictionless cavity so it can spin on any axis and is sensitive enough to spin even at the touch of a feather. In this example, the attack can be from any direction and would be deflected by its own force causing the sphere to spin. This scenario is most like the structure of a Tai Chi Master, because the deflection of the attack does not require any strength and the spinning can occur on any axis. Pushing hands technique, a two-person practice of pushing and deflecting attacks, was specifically developed to train students in this ability. The sensitivity and coordination required to do this effectively could take years of hard practice to achieve, but the results are quite dramatic.

It is said in the classics that with the softness of yielding one can deflect 2,000lbs with four ounces (Liao 2000). If one attempted to calculate the linear deflection force necessary to offset a linear attack of 2,000 pounds, then of course one will find that it takes much more force to achieve this (Cox 2008). The circular motion, however, utilizes a coordinated fluid movement that matches the exact velocity of the attack so as to flow with it rather than meeting it dead on. This requires the body to become so sensitive to the movements of any external force that a series of micro-adjustments can be made effortlessly so that no strength is used. The hundreds, perhaps thousands, of micro-movements made utilize all the muscles and bones within the body in a perfectly coordinated manner which is not pre-coordinated, but rather are reactions within the moments of the attack. Freestyle push-hands and sparring are used to train one's body to be in the moment by reacting and flowing with any external force.. The collective effect of all the micro-motions of all the muscles and bones in a coordinated manner is known as full body power. In order to attain such ability all the micro-motions must be in perfect harmonic motion with themselves and any external forces so that efficient energy transfer can occur.

The harmony of a Tai Chi Master with his or her opponent is the most important part of the skill. The exact mirroring of structure and velocity of the attacks sometimes allows the master to become 'suck' to the opponent. This skill is known as 'sticky' energy, and it is simply the exact following of any external force through mirroring exact velocities and exact structure. This is why in the classic it states "If the opponent raises up, I seem taller; if he sinks down, then I seem lower; advancing, he finds the distance seems incredibly long; retreating, the distance seems exasperatingly short" (Tsung-yueh 2008). The total blending of the opponent and master allows for the force of any attack to flow in a circular path through the master, into the ground, and then back into the opponent with out the use of strength, but rather timing, alignment, and

sensitivity. This is why Tai Chi hits will often cause the opponent to fly 10 ft back or more, because the force coming out of the master is the attacker's force plus all external forces acting on the body.

YOU ARE THE SPHERE

In this process the circular paths that one takes are extremely important, and it is critical that one realizes that the perception of one axis of rotation is an illusion. Each movement in Tai Chi doesn't just spin on one axis, but rather multiple ones at the same time. At first one might notice that the Master changes the axis of rotation in fluid motions, but a closer look will reveal that all possible centers of rotation are exhausted by any Tai Chi movement. The four main movements of Tai Chi Chuan: ward off, roll back, press, and push; are the northern, southern, eastern, and western curves of the sphere respectively. When one sees these movements it appears as if each movement only follows their designated axis of rotation, however closer examination reveals that all the centers of rotation are actually contained within each movement. "If there is up, there is down; when advancing, have regard for withdrawing; when striking left, pay attention to the right" (Sang-feng 2008). All movements are counterbalanced by another movement that is equal and opposite defining all possible circular rotations of the sphere.

This forces all the limbs to be interconnected and balanced. For example, the right arm is balanced by the left leg, and the left arm is balanced by right leg. In the beginning of push hands practice there is a definitive forward and back motion of the weight that utilizes the interconnectedness of the limbs. The backward motion occurs as the right arm redirects the attack by yielding and sending it through the right back leg, and then into the ground. The forward motion shifts the weight into the front left leg sending the energy from the ground into the right arm for the push. Over time the shifting of weight becomes more smooth as the

practitioner begins to realize the circular curves involved in the shift. It is through the perfected balance of the weight that the shift occurs smoothly and even undetected.

Sifu Randolph talks extensively about weight distribution being 51% and 49%, because the subtle transfer of just 1% helps develop fluidity in the movement. If the movement is perfected, then the ratio might even become 50.111111% and 49.99999%. Transforming the one-two movement of the forward and backward weight transfer into one fluid continuous movement enables extremely small rotations that transfer all the energy back to the opponent in a minimal amount of time. Each soft (yin) movement can allow the energy that was yielded to flow into a hard striking (yang) movement. The force coming out of the ground in the right leg when one yields with the right arm can flow into the left arm for an attack. This perfected skill is so well coordinated that defense and attack are one movement. When this occurs the body isn't just one circular path along a sphere, but it is the sphere.

THE DYNAMIC SPHERE AND THE MOVING CENTER

In Tai Chi freestyle the practitioners are allowed to move around and subsequently they move their centers. The movement of the center can occur in different ways within the realm of Newtonian physics. The center can move in linear way much like a bowling ball that is spinning horizontally and moving forward at the same time due to the tangential forces. This technique maybe used to move in on an opponent's space for an attack. The movement of the center might also be curved instead of linear whereby the master might be following a circular path around the opponent while at the same time rotating on his/her center with whatever attacks are being thrown out by the opponent.

Alternatively, the center might actually change within the body so that it is no longer two inches below the navel. This is very difficult to grasp, because it breaks apart the image in our

minds that the human body is a sphere with a fixed center. Let's say that when doing push hands the center of the master changes from the navel area to the wrists. This would mean that the whole body rotates around the center point of the wrist of the right hand yielding to the opponent's push. This will make the rotation extremely small, and therefore it wouldn't even be necessary for the arm to yield backward. This center could also move to a different location within the body to follow where the opponent is attacking next. Let's say after the energy is being thrown back into opponent from the master rotating around the wrist that the opponent redirects the energy into an attack on one of the fingers. It would then be necessary for the master to change their center in a continuous motion to their finger in order to rotate at that point.

The small rotations manipulate the radius of the sphere, and therefore accelerate the return of the energy. It is possible for the spinning sphere to be on the master's finger tips. The ability to rotate the entire form around any part of the body is how the iron skills are developed. Master Randolph can rotate his whole body around his chest, shoulders, face, legs, or whatever body part is being acted on. The result is that the opponent's attack is nullified by the rotation, and the opponent feels as if he/she hit a concrete wall. It is even possible for Eric to send the attacker flying back just by matching the same velocity and timing of the opponent in conjunction with his rotation.

The issue that arises from the changing of center is how one is able to maintain a center of gravity on their finger or any other part that is clearly not the center of gravity. In the Newtonian realm this may not be answerable, but what does occur is that the master blends with the opponent so perfectly that no longer is the sphere just the master's. The master and the attacker become the entirety of the sphere making it possible for the center point to exist outside both bodies. When perfected the master no longer uses one-two, but just the technique of one.

The moment that the attacker touches the master he/she will be instantly shot in any direction that the master chooses. The radius of the rotation becomes so incredible small that it becomes like point. It is these aspects that push the limits of what Newtonian physics can explain about the physics of the sphere, but there are other elements that can still be explored using this perspective.

THE PHYSICS OF VIBRATION IN TAI CHI CHUAN

The human body, being composed of many string-like tissues that can hold tension forces is easily subject to unnatural vibrations. It is the added tension that one traps in their body that enables the unnatural vibrations of the tissues when subjected to external forces. Overtime these vibrations in conjunction with the added tension wear down the tissues in the body. Imagine the strings on a guitar tuned extremely tight and being strummed very abrasively and unequally. Naturally a string, if not all of them, will break. The strings contain too much tension to vibrate properly and the force of the strumming is not distributed equally among the rest of the strings. This is exactly what happens in the human body. Unnatural tension makes the tissue taught enough so that it can be damaged or even broken. Remember the last time you had to cut a piece of tape for maybe a gift or a project. You had to make the tape taught so that you can cut it. It is very difficult to cut tape without this added tension. The same is also true with the human body when it comes to the damaging of tissues and the pain involved. Try this exercise to get a feel for what I mean:

Spread your fingers out completely and make them your whole hand really tense. Then take your other hand's thumb and your index finger and you are going to squeeze about one inch in from the soft connective tissue in between your thumb and index finger of the other hand. You might have to feel around a little bit, but be careful. You will know what I mean. Ouch, right?

Now relax your hand completely. Let your hand go completely limp, and do the same thing. No pain. If you do feel a little bit of pain, then relax even more. Relax your whole arm and your shoulders. Keep relaxing until you feel at most a little discomfort from the pressure of your fingers squeezing that area.

Without tension there is nothing to strike or to vibrate in a way that is harmful to the body. It would be like trying to hit a feather. If the body is maintained perfectly relaxed, then any strike will not have much effect. Tai Chi Chuan practitioners develop this ability of absorption by getting repeatedly hit, usually by their master, so that they can train their bodies to relax instead of tense up. Many of the external martial arts use the exact opposite technique by tensing the part of the body that is going to be attacked before it is hit. This technique makes the skin harder and able to withstand many strikes; however, it is very similar to the tightly tuned guitar scenario. Overtime the strikes will wear down the tense tissues, and if the striking force is great enough it could even do permanent damage to the muscles. Therefore, relaxation becomes a Tai Chi Chuan practitioner's best friend as he/she learns that there is little or no pain from even Tai chi strikes when the body is without unnatural tension.

Over time the student begins to develop a sense for when and where an opponent becomes tense, and therefore can take advantage of such an opportunity for strike. The strike, if done properly, will resonate the tissues at the correct frequency and cause them to break. If done with full body power, then the strike could even resonate the inner organs and cause them to rupture. This technique takes years of practice to master, and it requires a very acute sensitivity to be able to transfer the energy to specific areas and with the right spiral as to cause them to resonate. This technique is not often practiced on students, because it can be deadly; but it is often seen in moves like Jet Li's Fearless.

THE SPIRALS OF TAI CHI MOVEMENTS AND STRIKES

The movements and strikes of a Tai Chi Chuan Master are not solely the result of one spherical rotation, but rather many that are strung together in the form of a spiral. The structure of the spiral plays an extremely important role in how the energy of the earth bouncing back into the opponent is manifested in the form of the practitioner. The total energy of a linear movement, like a straight punch, is equal to the force of the movement multiplied by the distance that the movement covered. If for simplicity's sake we choose the fist to be the object moved and the forward motion of the fist to be the distance, then the force of the fist is determined by its mass multiplied by its acceleration towards the opponent. However, if one uses a circular movement to reach the same distance for the strike by spinning the waist, then the semi-circle arch is actually longer than the direct linear distance. Therefore, the energy is greater, because the force of the fist is acting through a larger distance. Likewise, if the arms, wrists, and whole body undergo a spiraling motion in addition to the waist, then the distance becomes even larger. Imagine the motion as the spiral of a slinky toy that is compact so that the toy is just a cylinder. The summation of all external forces acting on the body can be expressed when coming out of the body as extremely compact spirals so that the strikes can be made over extremely small distances. Tai Chi Chuan practitioners train for this ability by using gentle brushing and rubbing movements that teach them how to spiral their energy into an opponent (Fowler 2007).

PERFECTED COORDINATION AND HARMONY: WITHIN AND WITHOUT

The spirals and spherical rotations of the body must be perfectly coordinated with the motions and/or attacks of an opponent. The harmony of motion allows for a near perfect transfer of energy into and out of ground. In addition, the master must be in harmony with all the other spiraling and spherical rotations acting on the body in order to gain access to the maximum

amount of power available as understood in the Newtonian realm. The master's movements must literally be in synch with the rotations and spirals of the earth, the solar system, the milky-way galaxy, and the universe. When this occurs the master moves not on his/her own accord, but in accord with the universe. It is very much like surfing on wave. You can't just do anything you want when surfing a wave, because you can lose your balance and fall. The surfer has to ride the wave by constantly adjusting their balance by following and flowing with the motion of wave. The surfer can reach great speeds and have incredible energy behind his/her movement when riding the wave, but once they become disconnected they lose balance and fall. The same is also true with the spirals of all the celestial bodies acting on the human form. When the body is relaxed these spirals vibrate the natural tension of the body allowing a wave of energy to flow through the body and into an opponent through coordinated spiraling motion. The master must be in perfect harmony with these spirals or else his/her power will not be all that it can be.

The outward manifestation of harmony must be perfectly matched by an inward manifestation of harmony in order for the transfer of energy to be at its maximum. All the movements of the tissues and organs, blood flow, air flow, water flow, electrical impulses, and even inner-cellular structures, molecules, and atoms must be in perfect harmony with one another or else the transfer will not be complete. The natural vibrations of the body, like biorhythms for example, will set the frequency for these components to be in alignment. If this is done correctly, then all the activities within the body will move in coordination and synchronization with the spirals of all the external forces acting on the body. This will lead to spirals so compact that the touch of one finger can bend a tree.

THE PROBLEM WITH THE NEWTONIAN MECHANICAL EXPLANATION

The explanation of the mechanics of Tai Chi Chuan is very extensive in the Newtonian view, but it does not shed any light on how one actually achieves the sensitivity, relaxation, and total mind-body control over such subtle motions of the human form. The entirety of the mechanical view simply explains what could be possible if the human body had such heightened abilities, but it is incapable of addressing how such super-sensitivity can be formed in the first place. Many times these abilities are thought to be supernatural or mystical, and more often than not it is believed, by scientists, that they are just myths.

Sensitivity, relaxation, and total mind-body control are domains that require one to look at the interaction of the brain, the mind, and consciousness. The preceding view fails to explain the processes enabling the mechanics, because the processes are synergetic and incapable of being broken down into simple components. The Newtonian, biological, and chemical perspectives break down the phenomenon into abstract steps, but in actuality it is all happening simultaneously. In psychology there are so many factors that influence the development of one's personality that it is not possible to isolate them into reduced components, and similarly the same is also true of the processes within the brain, the mind, and consciousness. The previous view, positing only one true reality, must therefore declare that such things are not possible, because it cannot explain how such things are true.

POST MODERNITY AND POST-POST MODERNITY

The post-modern and post-post modern worldview conceives of an entirely different paradigm to explain the phenomenon that can't be explained by the preceding paradigm. Post-modernism as the name suggests is a movement that began in the 1960's that goes beyond the

paradigm of modernity. It does this by rejecting some the basic assumptions inherent within that tradition such the postulation of one objective truth or reality (Berten 1995). Through abandoning some of the assumptions of western logic it is not always the case that there is indeed one objective reality, or that things must be either this way or that way. Many things, including our experiences of reality, can be very subjective. Furthermore even one's declaration of subjectivity is positing something objective. Thus, the post-post modern movement even rejects the post-modern assumption of a subjective reality, and thus leaves no assumptions (Kirby 2006). In dissolving the limitations of the previous perspectives we are introduced to a new way of understanding the world around us. The investigations of Einstein's theories of relativity, Quantum Mechanics, String theory, and Holographic theory forced scientists to sometimes abandon the assumptions causing the limitations.

The Newtonian worldview was not incorrect and it took us very far, but it has limits on what it can explain. In addition each of the other fields also have their limitations, and therefore it is best if they are all used in conjunction with one another in an integrated platform like the one proposed by the transpersonal theorists. The physics of these other fields can explain, to some degree, the processes of how biomechanics are achieved.

In fact, it is through this exploration that I hope to de-mystify Tai Chi Chuan by showing how it is just a physiological process within the body that is part of our natural evolution. Within the history of Tai chi Chuan one can find extraordinary abilities that are also found throughout the world's religious traditions. This list includes, but is not limited to enhanced sensory perceptions, vital organ control, levitation, shape-shifting, living without food and/or water four long periods of time, telekinesis, telepathy, teleportation, invincibility to physical harm of any kind, healing abilities, super-human strength, etc..... The theory that I am about to propose can

explain all of the following phenomenon, and it also leaves room for other possible abilities and explanations. Now that we have addressed the various assumptions of our western methods of understanding (i.e. law of contradiction, objective truth, causality, closed systems, reductive logic, etc). I am hoping that we can begin to understand a new paradigm that doesn't adhere exclusively to these assumptions, but rather integrates them into a more flexible platform. In the end what one will hopefully realize is that an integration of the old and new paradigms into a hybrid paradigm can be more effective in explaining the phenomenon at hand than either of them alone.

So, then how is it that Master Eric Randolph is able to not be moved even when ten people are pushing on him at once, and further more how is he able to push down ten people, to make his skin like concrete or iron, to bend 2ft thick trees that stand 20ft high with touch of one finger? It is not a question of body mechanics, but an inquiry into how such biomechanics are learned and mastered.

MIND- BODY

The secret, as it says in the classics, is that it all begins with the development of full mind-body integration. In our modern view we have come to honor the mind-body connection, but this wasn't always the case. We now know that the stresses that we put our minds through whether it be at work, with relationships, or other issues drastically affects our body. In fact, in recent years, scientists were able to discern the exact chemicals responsible for communicating information between the brain and every cell within the body (Thomas 1997). Often times individuals use these healing methods of relaxation without even realizing it. The person that needs to take a 'breather' from a stressful family gathering, or the person who ritualizes drinking

coffee and reading the newspaper before starting their day, and even the catharsis of taking a smoking break (minus the damage to the lungs) are all examples of relaxation activities that people do in which give their minds and bodies a chance to release stress and repair damage areas. There have been so many studies on the mind-body connection that we certainly cannot deny it, but what does it mean for the integration of the mind and body to be the secret to Tai chi abilities?

EXTRAORDINARY MIND

What does it mean when woman who are optimistic about their recovery when diagnosed with breast cancer are 50% more likely to survive? What does it mean for the human mind when the placebo effect is found to be 20-30% effective in treating mental illness? (Lasagna 1986: Breecher 1955). Whether we want to admit it or not, the human mind can control the processes of the body. Plasticity is the phenomenon of the brain rewiring itself, and recently it was revealed that such plasticity can occur until death. The brain that is kept stimulated with new information will continue to develop not only new neuronal connections, but also new neurons. The matter of the brain actually changes in ones lifetime according to the way one lives their life. Studies of functional MRI scans of individuals who are blind show enlargement of brain matter in the areas concerning touch sensations with the hands. Since reading Brail requires quite a lot of sensitivity it shouldn't come as too much a surprise. You are literally affecting the way your body develops as you live your life (Leuner 2004: Bruel-Jungerman 2005: Brain Fitness 2008). Biofeedback is a great tool for this and has become such an integral part of the psychological tradition that there are far too many studies to argue with this proposition. Swami Rama specifically subjected himself to rigorous scientific investigation back in the seventies as he

displayed the abilities of vital organ control. Surely one could argue that the technology even 30 some years ago is nothing compared to what we have today, and it is possible that the measuring devices were faulty. Swami Rama, however, was only one the first of hundreds who have been placed under the scientific spot light since that time, and new discoveries are being made everyday.

The rabbit hole goes even deeper as case studies of individuals with severe (MPD) multiple-personality disorder demonstrate that each personality has its own unique physiology which changes according to which personality is present. We are not just talking about changes in hand dominance or eye color, but complete alterations of body chemistries that defy modern scientific explanation. It was found in a particular case that one of the personalities of the individual had diabetes while the others did not. This alone is enough evidence to suggest that the mind can control the processes of the body (Grof 1996 p.61). This now leads us to a very interesting field of study known as altered states of consciousness that began in the 70's and continues to this day with the same rigorous study as any other field of psycho-physiological investigation. Many in the traditional scientific and psychological community regard this field of study as nothing more than an excuse for the use of hallucinogens, but one can see that the times are changing when the highly respected John Hopkins University conducts research on the psychological benefits of psilocybin mushrooms (Giffiths, Richards, McCann, and Jesse 2006). It seems, at least to me, that we tend to live in a world where society emphasizes the importance of the logical and rational consciousness over other states of consciousness that might have equal utility. Further investigation into these matters might reveal extraordinary abilities of the mind that we are completely ignorant of.

Transpersonal theorists have come to understand that other cultures do not place such an emphasis on one particular mental state, but rather view the various different states of consciousness having a utility of their own. It is for this reason that anthropologists and transpersonal psychologists have dubbed the western world as mono-conscious; while other cultures who embrace altered states of consciousness are poly-conscious (Wright 1994). This isn't to say that our waking rationally thinking state is bad, but rather to acknowledge that other states of consciousness are not inferior to it. A dancer or a drummer would readily admit to this, because they do not have the time to think about every movement as they are performing, but rather they relax and just flow with the changing rhythms-especially with free form jazz dance and drumming. We all experience various altered states of consciousness even within our daily lives. Every time you find yourself daydreaming or spacing out you are experiencing a different level of consciousness. When you drive somewhere, but then completely forget how you got there, or when you get déjà vu. Poets, artists, musicians, and even mathematicians use different states of consciousness in their work. Many mathematicians and scientists, like Einstein for example, claim that they just 'saw' the answer or the solution. Certain mathematical savants report that they don't just count numbers, but they see them, feel them, and even smell them. So, hopefully one can realize that it isn't by rational argumentation alone that amazing discoveries are made, but rather there are many different kinds of states of consciousness which each have their own utility.

Scientifically these states of consciousness are measurable, and thus there are many studies about them. Our failure to see the utility of the various other states of consciousness enables us to justify them as delusions of the logical mind, and therefore to legalize substances which promote such experiences. Take for instance, the legality of *Salvia Divinorum*, which has

become recently popular among senators, governors, and concerned parents. The active chemical Salvorin A inhibits neuron receptor activity of the experiences of self-identity, reality, and spatial and temporal awareness. In conjunction the chemical blocks dopamine and opiate receptors, and drastically increases the T cell count in one's body. Medicinally the plant shows many promises for cheaply and effectively treating various drug addictions, low immune systems, depression, seizures, and ADHD. Given the effects on the above mentioned receptors it is no surprise that one who consumes Salvorin A in large doses will experience altered sensations of reality, space, and time, and even lose their sense of identity. For hundreds of years this plant has been used responsibly by the natives in Mexico for spiritual experiences and medicinal healing. I am suggesting that the reason that this plant now faces future illegalization, despite its immense medicinal benefits, is because our society cannot see the utility of the hallucinogenic experience (Roth 2008). *Salvia divinorum* and psilocybin mushrooms have been classified as Ethnogens, which are understood as plants that enable one to connect with the divine or spiritual world (CSP 2008). In the western society such a classification would hold no validity, because there exists the assertion that there is only one true reality. Similarly, we see the same behavior in our treatment of dreams when we find ourselves declaring that they are not real.

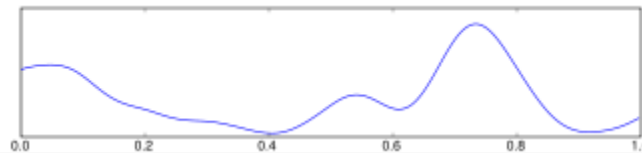
Recently many studies have been on the physiology of dreaming by the Lucidity Institute of California, for example, have revealed some startling results about the nature of dreaming. It seems that one's sensations during dreams are biochemical processes that are occurring within the brain, but the activation of the motor cortex in response to this stimulus is inhibited. Every sensory experience that one has, even in the waking state, is interpreted into electrical impulses through the nervous system, and then sent to the brain in an electrochemical form. The sensations of holding this document, for example, are interpreted into a particular biochemistry

that is occurring within the brain as you are feeling the paper in your hands. If you were to have a dream of this exact experience, then the findings of the Lucidity Institute reveal that the biochemistry of the dream experience would be identical to that of the “real” experience. The issue of where the stimulus for the biochemistry of dreaming experiences originates from is still bit unclear, but certainly the chemicals are not biased towards which experience is “real” or not (Laberge 2008).

It seems at this point more likely that humans are the ones that ascribe such categorizations of the phenomenon of experience. Typically the inhibited motor cortex is taken as sign that such experiences aren’t “real”, but truly what does it mean for an experience to not be real? Is reality to be something that is observable by others, like some mass objectivity? This definition would be easy if not for the fact that every living being experiences the world just a bit differently. Objectivity is perhaps more or less an agreement on certain commonalities of experience, and so it can be said to be some kind of shared “reality”; but that is not to say that we should reject those experiences which don’t fit within the pre-constructed paradigm of what we believe is real. Experience is still experience, and to say it is not “real” is to ascribe a value or a judgment onto those experiences that cannot be verified as being true or false, because of the inherent subjectivity of the evaluator. Reality is just a word, but something is going on at this moment. You are having an experiencing...of....something. The experiences of consciousness (awareness of experience), post-reflective being, “I-ness”, and post-reflective identity are just some of the many types of experiences that one can have. It is by letting go of our traditional two-valued system that we may begin to see the utility and diverse beauty of the experience of life.

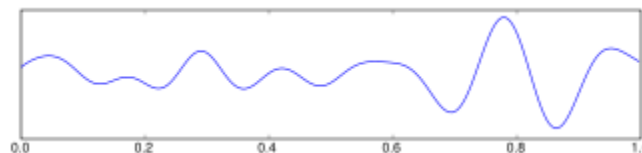
We now have come to understand that these various aspects of experience have measurable frequencies associated with them. EEG scans measure the overall electrical activity of the brain, and although they remain primitive and lack the ability to shed light on a handful of alter states of consciousness, they provide a good basis for recording the various commonly known states:

Wave patterns



Delta waves.

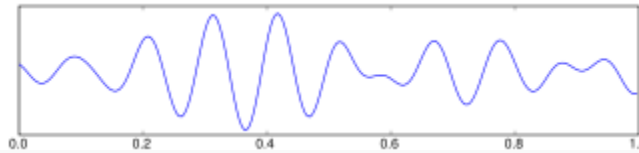
Delta is the frequency range up to 3 Hz. It tends to be the highest in amplitude and the slowest waves. It is seen normally in adults in slow wave sleep. It is also seen normally in babies. It may occur focally with subcortical lesions and in general distribution with diffuse lesions, metabolic encephalopathy hydrocephalus or deep midline lesions. It is usually most prominent frontally in adults (e.g. FIRDA - Frontal Intermittent Rhythmic Delta) and posteriorly in children e.g. OIRDA - Occipital Intermittent Rhythmic Delta).



Theta waves.

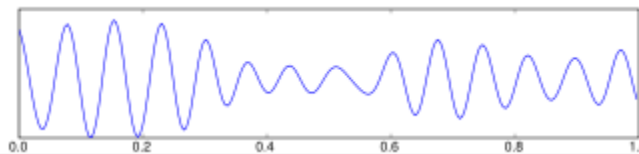
Theta is the frequency range from 4 Hz to 7 Hz. Theta is seen normally in young children. It may be seen in drowsiness or arousal in older children and adults; it can also be seen in meditation. Excess theta for age represents abnormal activity. It can be seen as a focal disturbance in focal subcortical lesions; it can be seen in generalized distribution in diffuse

disorder or metabolic encephalopathy or deep midline disorders or some instances of hydrocephalus.



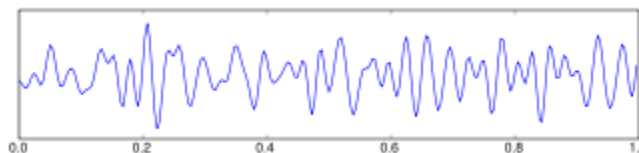
Alpha waves.

Alpha is the frequency range from 8 Hz to 12 Hz. Hans Berger named the first rhythmic EEG activity he saw, the "alpha wave." This is activity in the 8-12 Hz range seen in the posterior regions of the head on both sides, being higher in amplitude on the dominant side. It is brought out by closing the eyes and by relaxation. It was noted to attenuate with eye opening or mental exertion. This activity is now referred to as "posterior basic rhythm," the "posterior dominant rhythm" or the "posterior alpha rhythm." The posterior basic rhythm is actually slower than 8 Hz in young children (therefore technically in the theta range). In addition to the posterior basic rhythm, there are two other normal alpha rhythms that are typically discussed: the mu rhythm and a temporal "third rhythm". Alpha can be abnormal; for example, an EEG that has diffuse alpha occurring in coma and is not responsive to external stimuli is referred to as "alpha coma".



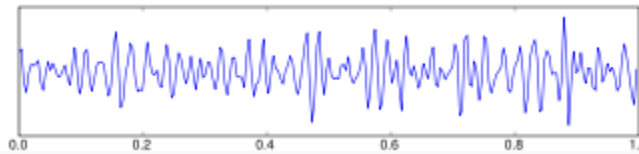
Sensorimotor rhythm aka mu rhythm.

Mu rhythm is alpha-range activity that is seen over the sensorimotor cortex. It characteristically attenuates with movement of the contralateral arm (or mental imagery of movement of the contralateral arm).



Beta waves.

Beta is the frequency range from 12 Hz to about 30 Hz. It is seen usually on both sides in symmetrical distribution and is most evident frontally. Low amplitude beta with multiple and varying frequencies is often associated with active, busy or anxious thinking and active concentration. Rhythmic beta with a dominant set of frequencies is associated with various pathologies and drug effects, especially benzodiazepines. Activity over about 25 Hz seen in the scalp EEG is rarely cerebral (i.e., it is most often artifactual). It may be absent or reduced in areas of cortical damage. It is the dominant rhythm in patients who are alert or anxious or who have their eyes open.



Gamma waves.

Gamma is the frequency range approximately 26–100 Hz. Because of the filtering properties of the skull and scalp, gamma rhythms can only be recorded from electrocorticography or possibly with magnetoencephalography. Gamma rhythms are thought to represent binding of different populations of neurons together into a network for the purpose of carrying out a certain cognitive or motor function (Aurlen, Gjerde, Aarseth, Karlsen, Skeidsvoll, Gilhus 2004; Epstein 1983). (FIGURE 2)

Ethnogens, hallucinogens, and any other mind altering drugs do nothing more than inhibit or produce more of a certain kind of chemical that is already in the human body. “Contemporary spiritual literature often notes that the chakras as described in the esoteric kundalini documents bear a strong similarity in location and number to the major endocrine glands, as well as nerve bundles called ganglions. One speculation is that the traditional practices have formalized a method for stimulating the endocrine glands to work in a different mode which has a more direct effect on consciousness, perhaps ultimately by stimulating the release of DMT by the pineal gland, which may be analogous to the 'pineal chakra' (Strassman, 2001).

Will there come a time when the natural hallucinogenic chemicals found in the body will be regulated by some drug so that individuals won't be able to experience altered states of reality? How far will go? How much do we fear what these sages knew? Tai Chi Chuan, Yoga, and any other psychosomatic exercises alters the mind, and so will they too be made illegal practices? The mind is capable of so many amazing things, and unfortunately we fear the potentials. The sciences recently have begun to understand the various levels of consciousness and their respective frequencies, but will there come a time when experiencing a different reality is socially acceptable? Much of what the sages talked about can be scientifically verifiable, however that might not be the problem. The problem might be the readiness of the collective to own up to what great potential each human being has. Technological suppression has been the seed of capitalism, but it is also the reason why so few have reached their highest potential. If all those who believed and experienced were shunned and socially exiled for their "stupidity", then none would believe and none would practice. Now the times are changing, but it is truly up to each and every human being to determine their future-to their own work.

EXTRAORDINARY BODY

Even with this break down of the basic states there is so much more to understand about how these states influence the body and vice versa. Through this exploration I will be looking at the mind state of agape/universal unconditional love/unity/stillness to see how that affects the body, but first it is important to understand that the human body is so much more than just flesh, blood, organs, and bones. The electrical activity of our nervous system creates scientifically verified electromagnetic (EM) fields around the human body that can be captured by Kirlian Photography, and are popularly known as auras (Krippner 1974). Also, since each of us is a

mass, then by the understandings of modern physics each body contains around it a gravitational field that bends the space around us and distorts our temporality ever so slightly. The human body also emits infrared light, an olfactory bubble, and on the occasion photons pass through us as opposed to being reflected (Talbot 1991 part 2: Feinstein 2001: Criswell 2001). Not to mention that all the motions of our organs and sensations are interpreted into electrical activity by the nervous system rendering the human body as some kind of dynamo. We are mostly composed of water which we can apparently affect the structure of us as told by Dr Emoto, and furthermore physicists theorize that our gravitational and EM fields can affect the subatomic particles in our close proximity (Feinstein 1996).

Dr. Emoto's research is very controversial so I feel it necessary to exam in detail some of the criticism around his research. In his study he exposed water to various kinds of stimulus including prayer, speech, music, and even written language, and then crystallized the molecules and photographed them with a microscope. The general co-relation is that molecules exposed to a positive stimulus (like the word beauty or elegant music) were crystallized in a symmetrical form and most typically demonstrating the hexagonal attributes of a snowflake. Likewise, molecules exposed to a negative stimulus (words like hate or anger, and even contaminated water) were crystallized in erratic forms that lack symmetry (Emoto 1999). Much of Dr. Emoto's work has been criticized as unscientific due to a lack of inconsistent results and a double-blinded methodology. Recently the double blinded methodology was used to valid the claims of this research and were published in Explore Journal (Radin, Hayssen, Emoto, and Kizu 2006). Even before this validation, however, Dr. Emoto himself agrees that his work does not comply with the assumptions of traditional modern science. Modern science necessitates exact replication of the results that are supposed to give support to the theory being claimed. The exact

replication of his findings (of the exact associated water molecule structures respective to each stimulus) has been near impossible to produce, and thus leading to several criticisms about the research at hand. However, exact replication of associate structures would necessitate exact replication of time and space that of course is impossible. For example, the thought of love as a stimulus to a bottle of water one day may yield a slightly different structure when compared to results of the stimulus presented the next day. This lack of exact replicated structures, in my opinion, reveals the fluctuations of our thoughts not so much the water's response. What we comprehend of love one day is certainly not the same as the next day. In addition there are perhaps an infinite number of other factors that influenced that water at that particular time and space that can never again be replicated.

Through his research Dr. Emoto is presenting a dynamic interconnected universe whereby the modality of such connectedness is caused by the resonance of matter/energy-waves. We tend to think of ourselves as simply just flesh, bone, and blood, but I urge you to visualize what science has discovered about us. We are an interconnected network of cells that each has their own organelles and subparts. How much of a stretch is it to say that if one can influence their cells with their mind, then one can influence their molecules, atoms, or even subatomic particles? Not a stretch at all actually, because in order to influence something on the cellular level there had to be influence on the atomic level.

It might be surprising to realize that each particle within our being and within the universe is vibrating at various frequencies. This is now a verifiable claim, but it existed long before we made the machinery to test it. Mantras, in the east, are more than just words or phrases repeated for the meditation inducing effect. It was believed thousands of years ago that all of matter is vibrating, and each aspect of matter has it is own mantra. The vibrations of each

mantra were specifically designed to have certain effects on matter, and ones own body. The ancients in both the east and west developed pro-types of what we now know as atomic theory, vibration theory, and relativity. Since the time of the ancients the evolution of these theories has been more or less completely divorced from their origins. In the ancient times this knowledge was obtained by ‘seers’(rishis) or mystics, but what is it that they saw? Perhaps they ‘saw’ the universe in its totality as it “truly” is, but from this arises even more questions. How could they see, literally see, the vibrations of matter? Is it possible that the human electromagnetic field could react to other EM fluctuates and the eyes could be sensitive to other EM frequencies? And to puzzle things even more it has been discovered that we emit an energy that is not known to science. George Egely created a device, named the Egely wheel, that is basically a very light wheel on a near frictionless platform. He noticed that it would spin near the presence of a human hand, and decided to run an extensive battery of tests to determine the cause. He removed each force known to science by placing the device in non-conductive dark chamber that is wind resistant and he wore heat-resistant gloves only to find that the wheel still spun (Egely and Vertesy 2008). I know this sounds a bit unbelievable so I urge those who are skeptical to research the studies and perhaps even purchase the device so that you can come to your own conclusions. The point of discussing all these puzzling issues is to re-enforce the notion that the human body is so much more than we have ever scientifically thought, and thus it maybe capable of things we never thought possible. We, indeed, do hear of extraordinary feats and even sometimes we believe them, but they are mostly considered miracles that are outside of natural law. The rendering of these extraordinary feats as intellectually explainable phenomenon through physics might enable them to be viewed as evolutionary.

MIND, BODY, AND CHI

In continuing to present a scientific explanation for the phenomenon at hand it is important to fully understand the role of the mind. In the Tai chi classics it states that the chi is controlled by the mind and expressed through the body. Chi is commonly understood as energy, but this quickly divorces it from the scientific world. Chi is traditionally understood as all the processes which enable life. It is important to understand that chi is the air oxygenating the blood, the blood being pumped to the body, the electrical impulse of the nervous system, the processing of glucose...so on and so forth. The classics are saying that mind can have control over chi which is the very subtle functions of the human body. Many of the practices of tai chi involve very complex movements that require full body participation and an uncluttered mind. Often times tai chi beginners hear the phrase “act, don’t think”, but there also comes a time when one must “think and not act”. The movements that ones goes through in order to bend trees or not be moved by the collective pushing force of ten people are so subtle that the mind must take control and guide the body into making the small adjustments necessary-much like driving or riding a bike. Through letting go of one’s thoughts the body can flow freely, but the focus of the mind can guide the flow in order to achieve certain results. Tai chi is very much like golf. There are so many things to focus on simultaneously that at some point one has to just stop thinking, get in their zone, and hit the ball. It is this ‘getting in the zone’ aspect that is so intriguing.

It seems that there are certain mind states that are more conducive to enabling one to control the subtle movements of the body. Is it possible that certain resonant frequencies of the brain could control the frequencies of other bodily tissues? Could the mind control the body on the subatomic level? How would you react if I told you that everything we have ever created technologically speaking is already embedded in our own physiology? Most would be doubtful

and rightfully so, but I ask of you to look at what creates your doubt. Is it solely the lack of empirical evidence or is it something deeper? Is it perhaps that if we open our minds to this possibility, then everything in the world could change? When learning that we are actively manifesting our own bodily chemistry as we live our lives is there not some deep sense of responsibility that we now should have towards our own lives. Existentially we create the lives we live, and with this there is great freedom and also great responsibility. It sometimes can be overbearing, because there is no longer anyone or anything left to blame for our own misfortunes. With all the limitations removed, then there no longer any excuses nor modalities of control. With this complete freedom comes a great fear. I ask that we keep this in mind as I begin to present the empirical evidence and theoretical paradigm of our future.

AN EXTRAORDINARY UNIVERSE

Everything at this very moment is vibrating both independently and in synchronization like a song. This is the very basic principle that modern science has come to know in the latest theories of the universe. Einstein may have sat with eyes gazed as he ‘saw’ matter to just be another form of energy. Matter, being extremely condensed energy, vibrates as a standing wave so that it appears to us as a solid. The illusion of solidity gives us the impression that our world is static, but by taking a closer look we can realize that it is actually very dynamic. Everything in the universe is constantly moving, and constantly changing. All the elements, molecules, atoms, and particles are all vibrating at their own frequencies and together they create a kind of chorus of creation (Green 2004: OTAR 2007). ‘Everything is a song’ is a Native American saying that is very ancient and seemingly very accurate (Welch 1986).

We live in a universe where the substance of existence, EM radiation (light), can be both a wave and a particle. In this world light can be sucked into an endless hole of nothingness that is created by an infinitely small and yet infinitely dense mass. Gravity is considered to be a mass-less particle, and could provide communication to other dimensions of existence. Something coming from nothing isn't just the origin story of the universe, but an ongoing phenomenon as particles seemingly pop into and out of existence in a vacuum. In all this craziness of paradoxes and chaos there emerges an order that is beautiful and elegant. We find equations that describe relationships and ratios that are found everywhere. The golden ratio is seen not only within the body, but also in the petals of flowers, in the succession of generations, in the twists of sea shells, in the spirals of subatomic particles as they collide with each other and spin off, and even in the spirals of the galaxies. The opening and closing of your hand is governed by the same ratio as the unfolding of flowers or the spinning of a galaxy.

It is here that we see that the microcosm and the macrocosm intertwine even though they are so far apart. Equations that describe the gravitational forces of large objects are almost identical to those that describe the electrical force between charge particles (Neilsen 2008). If one looks at the orbits of large celestial bodies in this way, then the structures of atoms don't seem so foreign. If we look to our own bodies, then could it be that our organs function to our bodies in the same ways that the organelles function to our cells? And even if one was to look infinitely into the microcosm and infinitely in to the macrocosm is there not the same familiar nothingness of empty space? We are a part of something that is so beautifully simple, and yet so complex. It seems that in this extraordinary world the parts tend to reflect the whole like trees branches resembling the structure of the whole tree.

The holographic universe, a prevailing cosmological theory, portrays a world that is not illusive in the sense that it doesn't exist, but rather that things aren't exactly as they appear to be. There are photos taken by scientists with the aid of very sensitive equipment that have captured the image of the same photon in two different spatial locations at the same time. Likewise, there seems to be other trans-spatial connections between subatomic particles whereby whatever happens to one particle affects the other in a specific predictable relationship even though the two could be separated by thousands of miles. In order to resolve this issue many scientists feel that it is possible that what we perceive as two distinct spatial locations is not necessarily the case. It is, according to Michael Talbot, like looking at two different camera angles of a fish swimming. One will notice a connection between the twisted movements it makes to right on the screen and the twisted movements it makes towards the screen. What this means is that the universe is not the Newtonian-Cartesian form that we once thought it to be nor is it as simplistic as gravitational dilations of Einsteinian space-time (Talbot 1991 p. 41-44).

The notion of a hologram provides an interesting analogy of the new space-time construct that is beginning to form. A holographic plate is such that even if broken into a thousand pieces, each piece if brought to the light would reveal the entirety of the image stored on the plate, but just smaller. In the theory of the holographic universe every level of existence reflects the entirety of the whole (Talbot 1991 p.13-20). For example, scientists have recently mapped out the entire human genome only to find a lot of extra data that was more or less inexplicable. Since then scientists have realized that our DNA contains the entire evolutionary history of all species related to our evolution on the planet earth. All the history of the evolution of humanity from the single celled organism to now is stored in the chemical bonds of your DNA making it a part of you (Genome 2008). All too often scientists and philosophers see the human as just a

small part of the massive universe, but it is important to realize that it is just as much a part as we are a part of it. The elements that run through our bodies are the same as those that run through the rivers of creation. In ancient India there existed a metaphor of the universe called the jeweled net of Indra whereby each jewel in the net reflects all the others (JNI 2008). It is this inter-connectedness that the physicist David Bohm saw as he developed his notion of the undivided wholeness of all things (Bohm 2003 p. 139-182).

If the universe is composed of the vibrations of various energies in a dynamic order, then it is the illusion of things being static that gives us the impression that things are divided and separate. Where exactly does your hand end and does the space around it begin if all things are vibrating together? The point of decisiveness that determines the separation seems more and more to be an arbitrary one that is done for the sole purpose of attempting to cover up the discovery that the universe is an inter-connected continuum of being.

I urge you to stop for a minute to really digest the world that had been depicted by this physicist and to contemplate why such a discovery might meet great resistance. If the world was truly as inter-connected as Bohm is suggesting, then there is nothing that is in isolation. Therefore, every action you make will have an effect not only to you immediately, but also in ways that you could not even imagine. With this comes a great responsibility and respect for the inner-connectedness of our world. However, this can be far too over burdening. It is much easier to believe that our machines have no effect on the environment or that our negative attitudes have no effect on our bodies or other people, because it alleviates the responsibility. With knowledge comes power, as Hitler said. With greater knowledge comes greater power, and with great power comes great responsibility. So, with great knowledge comes great responsibility, and often times we readily reject the knowledge because we aren't ready for those

kinds of great responsibilities. In essence this is what the ancients meant by Karma, but so few have taken it to this level. Popularization of the term has led to a very shallow meaning of the concept by which it is reduced to what comes around goes around. This maybe very true, but the traditional laws of Karma reveal that all causes have effects, and that you carry with you some level of responsibility for all the things that have manifested in your life, in other people's lives, and all events throughout the universe. Now this can be scary, or it can be extremely liberating as you realize that you have the freedom to manifest your own reality.

The world that you manifest isn't necessarily the world within your perceived proximity. Is it possible that you are right now having an effect on the creation of stars, planets, and solar systems? And vice versa do such things have an effect on you, and what would a science of this kind mean for the new age pop culture like astrology? Finally could a science of this kind find support from the existing work of theoretical physics?

Einstein's special theory of relativity was, as the title suggests, geared toward a very specific domain of phenomenon. Namely, near to light speed velocities. However, there exists a more general form of the theory by which the notions of time and space are relative onto themselves. In this theory time is not set to a particular measure nor is space. Without a particular measure there is no way to make a distinction between one temporal frame reference and another, and likewise there is no way to compare spatial quantities. The spatial lengths or measures that set the parameters for such distinctions are no longer available, because the spatial dimension is now relative to itself. What is it that makes a given length what it is? A ruler may measure inches or centimeters, but a more exact measure would count atoms or particles (Bohm 2003 p.41). However, what happens when the universe isn't as clean as the Newtonian construct, but is full of a folding, bending, and warped space-time due to various factors?

In this universe it wouldn't matter if two spatial quantities were equivalent in atomic or particle count, because the space-time distortions could make them unequal. Likewise, it is also true that unequal quantities can be made equal through the warping of space-time. Often times we conceive of space as a cube that is composed of layers of flat planes, but this new construct presents a very different picture. Imagine the universe (space-time) being like a piece of paper that was crumbled up into a ball that was infinitely small. In this world the fabric of space-time is infinitely folded in upon itself so that every point touches every other point.

In this universe the space between your fingernails is also the length of a football field, the radius of our galaxy, and even the length of the entire universe. Within this temporality is also all temporalities such that the present contains within it the eternal and infinite possibilities of the past and future. Mathematically speaking this world would be represented by the geometric of an infinity of dimensions whereby each dimension folds the previous dimension unto self. The formulation of this geometric would itself be a point, because the infinite folding of all dimensions unto themselves would necessitate an infinitesimal singularity. So by increasing the dimensions into infinity we are left with the zeroth dimension of a infinitely small point. The mathematical connection of zero and infinity has been explore in more detail using the geometrics of the complex number plane to show that any move away from infinity is a move towards zero, and any move away from zero is a move toward infinity (Seife 2000 Ch. 6). It seems on this level that the two concepts are intrinsically linked to one another, but is it possible on other levels that they are actually the same thing? In a world where every spatial and temporal point is every other spatial and temporal point, then the part doesn't just reflect the whole as suggested by the holographic theory; but each part *is* the whole. The universe is all in

all. With an extraordinary mind, body, and universe we can see the unfolding of infinite possibilities.

We have all heard the stories of things that “defy” modern science, but perhaps we use the word “defy” because we are so attached to our current understanding of the way the universe functions.

“Miracles happen, not in opposition to nature, but in opposition to what we know of nature”

-St. Augustine.

There are so many studies that present the need for a shift in paradigms that reveal to us that more is going on than we would like to believe. For the past decade Dr. Yan Xin has conducted tests on the body in order to measure and record what Taoists call ‘chi’. We discussed earlier that ‘chi’ is all the processes that enable life in the human body. The ‘chi’ that doctor Xin is specifically talking about is that which is like EM radiation. Dr. Xin has measured and recorded ‘chi’ being emitted from several chi gong masters. He reports on the validity of his studies by commenting that “the scientific papers on these qigong experiments have been rigorously reviewed by highly accomplished academics, including Professor Qian Xuesen (Tsien Hsue-sen), former Chairman and current Honorary Chairman of Chinese National Association of Scientists, Ph.D., California Institute of Technology, formerly Goddard Professor, Jet Propulsion Laboratory, California Institute of Technology; Professor Zhao Zhongyao, an eminent expert on nuclear physics in China, member, Academia Sinica, an early academic advisor to Dr. C.N. Yang who later won a Nobel Prize in physics (being a member of Academia Sinica is roughly equivalent to being a fellow of the U.S. National Academy of Sciences); Professor Bei Shizhang, biophysics expert, world renowned biophysics teacher, member, Academia Sinica; Professor

Feng Xinfang, microbiologist, member, Academia Sinica; and Professor Hu Haichang, thermophysicist, member, Academia Sinica. After they became aware of, participated in, or reviewed the scientific papers on the qigong experiments I conducted in collaboration with a number of experts and professors from prestigious Chinese universities, such as Tsinghua University and Beijing University, they *all acknowledged that qigong is highly scientific in nature*” (Yan 2008).

In summary the Chi emitted from Chi gong masters was repeatedly detectable by electromagnetic, infrared, and various other sensors. Specific unknown particle flows were detected near key meridian points of the subjects reaching the chi therapy. A 400% increase in the reaction time of the body’s photoelectric current was found in measurements of the chi masters physiology. The fast reaction times might explain how the body is producing strong EM fields, but not where the energy is coming from in the first place. Dr. Xin comments on a specific research that investigates alternative sources of human bio energy: “Current research on qigong phenomena is still difficult. For the International Yan Xin Qigong Association, I have given over twenty four workshops. The Third Workshop had two classes with over three hundred persons combined -- about ninety percent of them were in a Bigu state. (*Bigu is a state in which a person maintains a normal life without taking any food.* Standard Bigu means very little or no intake of water. Basic Bigu means only drinking water and juice. Non-standard Bigu means ingesting water, juice, and occasionally juicy fruits and vegetable soups). The Eighth Workshop had more than four hundred students, among which only a dozen or so people had eaten food (according to a survey). This was ninety to ninety-five percent short-term Bigu, or Bigu within a given period of time. In Beijing, China, a seventeen year-old high school female student has been in Bigu for over six years, only drinking water. I use Bigu as an example. Perhaps scientific research should

explore the basic theories of the Bigu state and further investigate its applications. If we have a scientific breakthrough, perhaps then it is possible that human beings will make tremendous improvements in quality of life” (Yan 2008).

One explanation might be found in a study by Dr. Xin whereby he examined a case where cellular tissues were remaining alive without blood serum, and therefore without any conditions to be provided oxygen and other nutrients. The cells lived in water for more than three months during the experiment, and thus giving support to the possibility that water alone can support living tissue.

“The studies by Qian [et al.51, 52] examined the effect of EQ on cancer growth, metastasis and survival time of the host, tumor models were formed in 114 mice by transplantation of U27 or MO4 cells into their subcutaneous tissues. The tumor infected mice were randomly divided into two treatment groups for three separate studies – qigong group (exposed to EQ 10 to 30 minutes daily for a period of time) and control group (no treatment). In study 1, mice in both groups were sacrificed on day 20 after the transplantation. The average tumor volume in the qigong group was significantly lower than that in the control group (2.2 vs. 6.3 cm³; $p < .001$). In study 2, the mice were sacrificed on day 23 and all auxiliary lymph nodes and the lungs were taken out individually to be examined histo-pathologically for metastasis. The metastatic rate in the EQ group was significantly lower than in the control group (1/16 vs. 6/15; $p < .05$). In study 3, the mice were not sacrificed but were allowed to live out their lives and the time of death was recorded for each. The average survival time in qigong groups (n=10) was significantly longer than that of the control group (35.4 vs. 30.5 days; $p < .01$). The same authors performed similar studies in different settings and they each reached the same conclusion”(Chen and Lee 2007: also see Chen and Yeung 2002: Chen and Lin 2002)

In addition to these extensive scientific studies there are also some incredible demonstrations of superhuman abilities on the popular TV show Ripley's Believe It or Not whereby a chi healer can increase his hand temperature to about 200 F. There is also an extremely reputable chi gong master that has been under scientific study a few times. John Chang has the ability to produce strong electrical currents from his body, and light paper on fire with his chi. Also Chinese hard qigong abilities are very impressive with an interview by Mind, Body, and Kickass moves. These demonstrations will give you a feel for the types of phenomenon that science should now attempt to rigorously study.

Chi Healer <<http://www.youtube.com/watch?v=T6UTGkC73GE&feature=related>>

John Chang < <http://www.youtube.com/watch?v=RAAB0dbc3Es>>

Hard Qigong <<http://www.youtube.com/watch?v=RAAB0dbc3Es>>

The studies of Swami Rama are one of the few extensive studies of a spiritual adept. The various studies of Swami Rama at the Menninger Foundation in the 1970's recorded his ability to move objects with his mind, cause two spots on his hand to have a 10 degree temperature difference, and finally he was able to cause his heart to stop beating. Around the same time a mister Jack Swartz demonstrated the ability to push a 6 inch darning needled through his bicep muscle without giving any physiological signs of pain. It was also recorded that he was able to stop the bleeding at will, and on one occasion no blood appeared at all (Green and Green 1974: ibid. 1977). Many of these demonstrates lack true scientific rigor to begin any attempt on explanations. I am not in any way saying that these demonstrations are fake, but rather the actually effects of the abilities is only clear in a few of them. Nevertheless, these demonstrations

give one a good feel for the types of phenomenon that warrant serious scientific investigation. If one seeks an understanding that explains all the phenomenon of the universe, a grand theory to unify them all, then we cannot just push aside or ignore studies that utilize modern scientific methodologies correctly and challenge our preconceived notions. What I am about to present is an exploratory theory that seeks to explain the extraordinary human abilities by utilizing not only a synthesis of previous research, but also the experience of over 3,000 hours of training as a Tai Chi Chuan practitioner and instructor. I am in no way claiming that my theory is true or fact, but rather that it is a possibility that is in need of some serious rigorous scientific study and consideration.

KUNDALINI THE THEORY

The progressive story of human evolution expresses an interconnectedness of the universe that suggests that everything is evolving together. This is something that many religions have expressed throughout the ages. Within the cultures of Taoism, Hinduism, and Buddhism there is an understanding about latent power that exists within the human body. This power is known as Kundalini and it is coiled up, like a snake, at the base of the spine. Along the spine there exists seven energies, as discussed earlier, known as Chakras. When the kundalini is awakened it rises up the spine and creates a circuit of energy that re-establishes the human being with its divine essence manifesting infinite power. The Yamashiro institute and a few others have measured the EM fields of the human body and found concentrated fields near the chakra locations. There does seem to be a considerable amount of research and study on the process of the kundalini that has verified some of the claims by the ancients.

The importance of one's mental state and its effects on the body are found to be scientifically explainable by the kundalini research of the physicist Itzhak Bentov. In this theoretical research he noticed that the micro-motions of the body can become synchronized with one another when aligned to one frequency of motion. Constant rhythmic breathing causes the blood flow of the body to correspond in some way to the frequency of the breath, because of the rate of blood oxygenation. Bentov found that constant rhythmic breathing and pulsations of the body can cause a standing wave of blood flow within the aorta valve that leads to the brain stem. The physical pulsations were translated into electrical pulsations as they reach the brain. Bentov found that this electrical pulsation would cause a circulation of sensory stimulus up and down the body. In this circulation the entire body would be pulsating to one very specific frequency. Bentov's theory explains how the frequency of the mind can be made controllable from the harmonic motion of a very specific psychosomatic process. The practices associated with this process are kundalini yoga, dancing, drumming, singing, and basically any rhythmic action that is done for very long periods of time (Bentov 1990). In theory this process demonstrates how the entire body can be tuned to one specific frequency, but for what? I believe Tesla holds the answer to this question.

TESLA TECHNOLOGY

Today we see this technology as wireless pads that can charge cell phones or other electronics using the resonance of electromagnetic fields. Nikola Tesla made it his life's work to create such innovative technologies well before the physics existed to explain it. He flunked out of engineering school and became an inventor who developed AC current, the first telephones, remote control machines, and even the wireless transfer of energy. Tesla saw the earth as a giant

capacitor that could store the electrical discharges from lightning storms in between the cavity from the ground to the upper ionosphere. Tesla suspected that the earth might have an electromagnetic field whose resonant frequency would be extremely low due the large distances the waves would have to travel. It was many years later that this was actually proved scientifically and called Schumann resonance after the physicist that proved it. Tesla, without knowing the exact physics behind this phenomenon, built a tower at Colorado Springs that successfully transferred energy wirelessly through tuning the emitter to the resonant frequency of the earth's EM field, and thereby causing light bulbs on the ground some distance away to shine. It was only later that Tesla was able to use this resonant technology to charge a capacitor full of energy from the lightning strikes discharged in the ground. Tesla, during his life, was often regarded as a nutty inventor, but since we now owe 90% of our technological advancements to this one man it is clear that he was just way ahead of his time (Cheney, Margaret, and Robert 1999).

THE DIAMOND BODY AND THE ANTENNA: THE TECHNOLOGY OF BREATH AND RHYTHM

I believe that the reason for the body synchronization is to generate a very specific resonance that can conduct and transfer energy to the human body much like the technology that Tesla created. Well after Tesla's death Schumann not only proved the resonances of the earth to be real, but also found the base resonant frequency to be at 7.88 hertz which is within the range of the human brain. Technologically speaking the brain, when entrained to a certain frequency, acts as an antenna so that all kinds of information and energy can be accessed. It is no surprise that the lucid dreaming state of shamans is also found at this same brain frequency.

The ancient technology of monotonous drumming creates binaural through a slight difference of frequency between the two surfaces of the drum. The brain registers the difference of the frequencies when the two are played together, and it literally entrains the brain to that frequency. There are several studies that utilize this technique in clinical cases to treat individuals with pathologies like ADD, ADHD, bipolar, OCD, and various other mental illnesses. It seems that non-repetitive drumming actually entrains the brain to the alpha waves and thereby increasing focus and concentration. Therefore, it seems clear that the ancient systems of healing that relied heavily on breath rhythms, drum rhythms, and even dance actually had a very sophisticated physics behind the medicine (Maxfield 1999:Drake 1996).

The brain frequency synchronization acts as an antenna for the earth's energy, but also for cosmic energies. This term 'cosmic energy' is not mystical, but simply refers to all the EM radiation from the stars and galaxies that are resonating and affecting the earth. According to the scientific studies of this phenomenon the electrical oscillations causes the healthy release of nitric oxide into body and brain. NO is responsible for increasing blood flow and high states of arousal like sexuality (Dixon 2006). This makes perfect sense, because the kundalini rises from the base chakra of sexuality. This high state of arousal activates the entire cortex and causes the brain to begin to oscillate on various bandwidths. This enables energy and information to be channeled from the cosmos to the brain. The large amount of energy that is being channeling into the body forces the human form to become like a Bose-Einstein condensate as shown by the studies of Herbert Frohlich. I believe this is the case, because the human form as it prior to its physiological change is not capable of handling such large amounts of energy. The living tissue must therefore organized into a crystal lattice like structure with properties of a super-conductor and Bose-Einstein condensate in order to remain living. (Frohlich 1988: also see Clegg 1983).

A Bose-Einstein condensate was a theoretical prediction by Einstein and Bose to be a substance capable of perfect energy transfer, but recently it has actually been proven to exist. Scientists placed a molecule in a freezing chamber that reduced the temperature to near absolute zero. In terms of thermodynamics the colder the scientists made the environment the more energy was being sucked out of the molecule. In order for the molecule to maintain existence it had to give up its separate atomic structure, and therefore all the atoms merged into one atom. The atoms that made up the molecule become one indistinguishable atom whereby no part was identifiable, but rather each part became the whole. This occurred through the synchronization of the frequencies of the various atoms, because it took too much energy to maintain separate frequencies. The molecule reached its lowest possible energy level, and thus became a substance of perfect energy transference (BEC 2008).

Herbert Frohlich discovered that living organic tissue displayed the same type of behaviors when in the presence of large amounts of energy. It has been often theorized from time to time that consciousness is actually a Bose-Einstein-like condensate formation enabling all cells to vibrate to the same frequency. The Bose-Einstein-like behaviors of living tissue have similarities to the behaviors of superconductors, and perfectly aligned crystal-like lattice structures. Superconductors are “an element, inter-metallic alloy, or compound that will conduct electrical energy without resistance below a certain temperature. Resistance is undesirable because it produces losses in the energy flowing through the material. Once set in motion, electrical energy will flow forever in a closed loop of superconductive material-making it the closest thing to perpetual motion in nature” (Eck 2008). In recent years scientists have found superconductors in non-metallic materials, in high-temperatures, and even in organic tissue (ibid.). All of this recent work supports Herbert Frohlich’s research that living tissue can display

these properties if stimulated correctly. The body, being a closed loop of tissue, could exhibit this perpetual circulative behavior of electrical energy, and therefore gather large amounts of cosmic energy. The Meissner effect, a property of superconductors, occurs due to an endless flow of electrons causing a balanced diamagnetic expulsion of any magnetic field. It is for this reason that a magnet may levitate perfectly above a superconductor, because the repulsion and attraction are balanced. If the human body can exhibit behaviors like these materials when in the presence of large amounts energy, then almost all the extraordinary abilities, including human levitation, can be explained scientifically.

THE PROCESS AND THE HEART CHAKRA

The mind-body movements of Tai Chi Chuan create a unity within all the processes and micro-motions of the body. Each organ, cell, atom, subatomic particle of the human form is vibrating at a determinable frequency. When the frequencies are all in synch with one another, then perfect energy transfer can occur. The chakras, when aligned, act as some kind of transformer that allows the energy from the cosmos to be channeled to the body without any decay. The process sends out a circular pulse of stimulation throughout brain that runs up and down the body flowing along the chakra points. The lower chakra is activated and flows upward towards the chakras of emotion and will (elements: water and fire respectively). This flow of electric stimulation can only pass through the two lower chakras when they are in balance with each other. In other words, their frequencies must be aligned in order for the power to transfer fully. The turbulent waters of emotions like fear, anger, and sadness must be placed into balance by the tamed wild fires of will power. When the two come together they exist in harmony

allowing for the kundlini to continue towards the heart chakra of love, compassion, oneness, stillness, peace, and empathy.

The lower energies and higher energies must be united in the body through the opening of the heart chakra whereby oneness overcomes the mind. Through the mind-body connection this oneness becomes manifested in the body as the body is overcome by the immense cosmic energy. The body achieves the lowest possible energy state by becoming like a Bose-Einstein condensate whereby all the atoms of the body attain the same base frequency and merge together into one indistinguishable mass. Since the particles are no longer forced to maintain individual form the body reaches its lowest possible energy state.

This state is very similar to the zero-point energy discussed much earlier in the chapter, and thus the body is capable of becoming like a superconductor with super-fluids (frictionless fluids) enabling many extraordinary feats. The body may literally take on the 'all-in-all' space-time structure whereby each point becomes every other point. This physical process may shed some light on the parable 'one becomes nothing in order to become everything'. I am hoping that can see the importance of the heart chakra and state of agape not just in the philosophic framework, but also in the physiological process presented. This state influences every cell in the body, and creates the unity necessary within the body in order to handle the large amounts of cosmic energy. It is like a switch in the circuitry of the chakras. The opening of the heart chakra not only creates unity within the body, but also externally. The unity with the external world is not just a harmonic of motion, but an actual folding of space-time whereby each point in the human form touches every other point in existence. In theory the body actually becomes the entirety of the universe. This state is completely dependent on the experience of agape. If this

experience is lost, then the body will emulate a disconnected state of separation. If the unification is maintained, however, then all things can be made possible.

THE ABILITIES

The human body has now become upgraded into a super-conductive, bose-einstein, super-fluid, and crystal lattice like form. With these new attributes many things are now theoretically possible. Human levitation is simply a by-product of the Meissner effect, and flying can be made possible by the ionization of air particles with the energy made available from the cosmos. The ionization would create a bed of electrons that the superconductivity would react to by repelling in balanced manner so as to produce propulsion (Saslow 2002 p 486-489). Telepathy is nothing more the ability to correctly interpret all the information that is being sent to the human brain from the resonance of the human body with the earth's EM field. Telekinesis of any kind is an extension of the Bose-Einstein state whereby external objects can merge with one's consciousness. The energy is transferred through the proper resonant frequency in order to manipulate the matter, but it also can be the bending of space-time whereby the external object shares the same spatial points as the individual.

With the immense power channeled through the body it is possible for the mind to manipulate matter in any way shape or form. The body can employ nano-like technology on itself so it can create micro-structures in the human form that can be made impervious to any physical attack. Teleportation is nothing more than taking advantage of the inter-connectedness of all spatial points. Walking through walls is a pre-arranged agreement between the particles of one's being to slide past the particles of the wall. Time travel would be made possible by taking advantage of the interconnected temporality, or it can be twisting space with energy flowing

through one's body in order to make one's particles travel at the speed of light. Healing is the transference of energy at proper resonances in order to kill viruses and bacteria, but it also could be transference of the agents causing the sickness into the evolved individual through teleportation. One can readily see that there are many different ways to achieving the same results when it comes to these abilities.

Not eating, as stated earlier, is simply just the conversion of the human physiological dependence on glucose to the energy made readily available by the zero-point state. Weather or geological control is sending of the energy flowing through the body to the earth's EM field at certain frequencies in order to achieve certain results. The abilities go on and on, because with this state there are no physical limitations. There are those, however, that might be able to do many of these feats, but are not utilizing the state of agape.

One can achieve abilities through the uses of anger and fear whereby the flow exists, but is constricted by a nearly closed heart chakra (like pinching a hose). The energy is thus derived only through the turbulence of the emotional chakra and the fires of will power. It is limited, and destructive to others, and oneself. The individual that achieves the abilities through the state of fear utilizes his own bio-energy or steals the bio-energy of others. Unfortunately this is possible through a lower frequency vibration of the heart chakra that will enable energy circulation, but necessitates another energy sources since the body cannot yet channel cosmic energy. The destructive nature of the mind state of fear and anger that create the forced flow will utilize the destructive side of the zero-point energy. Overtime the body of this individual will decay as the body either utilizes his/her own bio-energy or steals it from others. The mind-body connection will insure that this individual will eventually succumb to bodily decay and death. It is only through the state of agape that an individual can have a balanced access to the immense energy

of the universe whereby eternal life can be achieved. Therefore individual whose achieves agape will be made impervious to any individual who utilizes the fear or anger state.

THE SELF CRITICISM AND THE PURPOSE

It must be noted at this point that this process is extremely complex and very difficult to explain in words, because all the aspects of the experience are occurring simultaneously. In my research I sought to present a theory that utilizes an integrative approach, and therefore this process cannot be fully understood by words, but rather in conjunction with experience.

Unfortunately, I have not yet experienced this state, and therefore I cannot continue to claim the full validity of this theory. I can say, however, that many of the abilities that I have mentioned can be intellectually and logically explained through this theory. Again, my goal was not prove the validity of my theory, but to provoke response in the academic community to take the claims of the sages more seriously. I am not a trained scientist, and there are many things about this that I do not understand. The point was never to create a perfect and sound theory. This I cannot do, because I lack the credentials, the training, and the experimentation. I anticipate much criticism of this theory from the academic community, and hopefully that will get the attention of the scientific community. The purpose is address why the phenomenon at hand is so often simply disregarded or not even considered, because it does not fit nicely into our pre-existing paradigms or assumptions. There are so many things that we do not understand that I feel it would be wrong of us to outright declare these feats as impossible. In reconsidering these extraordinary human abilities (siddhis) as being worthy of scientific study we might come one step closer to understanding our fullest potential, and how to get there. One day we may no longer look

outside of ourselves for technological advancement, but rather we will look within as we transform our bodies with love and grace.

THOUSAND PETAL LOTUS -UNIFICATION

Now that one can realize the in-depth physiology of these abilities it is now suitable to understand them as possible evolutionary traits. Surely in any mutations of a species it begins with a few individuals of the species before the trait continues to manifest completely or not. The spiritual masters of history are these few individuals who have set themselves, to the best of their abilities, outside of the rat race of all survival threats. Throughout history they have existed in the world, but not of the world.

The love for all things has been shown to enable extremely high levels of functionality that are even unprecedented by scientific achievements. What happens to war when one can't be shot, blown up, burned, starved, drowned, stabbed, or harmed in anyway. The master whom turns to violence will find themselves at a loss, because their partially closed heart chakra places limitations on their potential. Therefore, it benefits all humans to care for one another, and by doing so will insure their own survival. The power of agape insures individual and collective survival. Those that have adopted the agape state have indeed died, but most have done so willingly. Swami Rama, for example, chose the exact time of his death. "What is to die, but to stand naked, and melt into the sun?" (Gibran 1991 Ch. 27). In these traditions death is a part of life. It is giving back what the earth gave to you. "for dust thou art, and unto dust shalt thou return"(KJV 3:19). To die at one's will is a mastery of life that too could be for the survival of the collective. The natives of certain American tribes would often bury the bones of the deceased near trees so that the calcium from the bones would aid in the tree's growth. The

complex ecosystems of the planet are all inter-connected and sometimes it is necessary to sacrifice one self in order to insure collective survival.

I see in our near future a time when humans will master these skills and ascend to their highest evolutionary potential. In a comparative study of many of the world's traditions one will find a common theme of our ascension to begin during this decade. Christianity, Hinduism, Hopi, Mayan, and many other religions believe that this coming era will mark a transformation for all of humanity. It is now, but always, an interesting time to be alive. We, the human race, are being given a choice. We are being faced with our own self-made destiny. We have not been the stewards to the earth, and so now is our final chance. In the past we have been faced with this issue before, but never has our technological advancement been so great that we could wipe out both the human race and the earth itself. How did this happen? How did we let things get this out of control? Some would say that humans are inherently evil, and this is just our way-our nature. Others would say that it is our punishment for turning away from the divine. The transpersonal theorists and humanists would say, however, that it is our perceived separation from the divine that has given rise to our fears that has fed our destructive ways. Now is the time to manifest what we have always been searching for. The endangerment of our race places us in an excellent opportunity for an evolution beyond these matters. In almost every religion there is a figure that will supposedly come back to bring about this age of transformation. Isn't strange that the second coming of Christ and the coming of Kalki from Hinduism employ the same imagery of a man with long white hair carrying a sword while riding a white horse that descends from the sky?

There have been many comparative studies between the various traditions to align the salvation figures. In Buddhism its Maitreya, in Zoroastrianism its Baha'u'llah, and in Islam it is also the return of Jesus (White 1988). Perennially it would seem as if all the claims of these

salvation figures could be satisfied by one figure that appears to all of them in different ways. In addition, there are several cultures that have well developed time systems that predict the immediacy of these events. In looking specifically at two cultures that have been known for their predictions of this age one might discover more grounds for this claim.

One of the great mysteries in religious scholarship is the prophetic aspects of various traditions that claim certain knowledge of what the future holds for humanity. One such mystery that has become popular among the New Age community is often regarded as the end of time marked by the end of the Mayan calendar in the year 2012 C.E. One of the key academic proponents of the main body of scholarly work done on this particular prediction is by Jose Argüelles. His work looks comparatively at the Mayan time system and the Hindu time system by overlapping their philosophies of the universe in a coherent manner. This section will briefly address these two philosophic time systems and their comparisons by appealing to recent scientific projections about the time frames involved. Ultimately, it will be shown that the Mayan time system is actually a smaller cycle of the Hindu time system. This relationship will allow the two systems to be aligned, and thus revealing some very important information about human evolution. Finally, this section will present Arguelles' speculations on the implications of this information by addressing scientific explanations. This topic has remained clouded by 'new age' enthusiasm for the end of the world for quite some time, but it is actually believed by Mayans' that 2012 C.E. will be the beginning of a new age for humanity whereby humans will be able to take the next step in their evolutionary path.

The Mayan culture is itself an enigma to religious scholars mainly because of its late rise relative to the societal development of the world in the early part of the first century CE, and even more so due to its unprecedented abandonment before the beginning of the second century

CE (Arguelles 1987 p. 19). The Mayan left many things behind including a complete mathematical time keeping system that is consistent and accurate even for modern scientific standards. The Mayan used a twenty-based numerical system that enabled them to calculate the times and positions of planetary interactions, star movements, equinoxes, and other cosmic events. This numerical system transcended its mathematical utility, because each number corresponded to an ideograph which represented a philosophic notion about the interaction between the universe and humanity. In this system certain numbers which corresponded to ideographs were actually believed to be the harmonic numerical frequency of certain planetary relationships, and even the universe as a whole. These frequencies correspond to certain orbital patterns, but also to certain energetic frequencies which reflects the nature of the universe relative to human evolution. This system is similar to the wheel of harmonics in music, and thus there are certain fractal patterns that develop between the relationships of these harmonic frequencies. The mathematical system of the Maya was used in this way to calculate various harmonic frequencies of the cosmos that related to certain events concerning human evolution. (Arguelles 1987 p. 66). Therefore, the Mayan calendar system was more than just a way of keeping time, but rather a system by which certain stages of human and cosmic evolution can be calculated with accuracy.

The Great Cycle for the Mayan is a period whereby the sun is being brought into galactic harmony with the universe. This idea of galactic harmony is very complex, but it involves the understanding that all the rotations and interactions of celestial bodies can be put into numerical frequencies. Therefore, the Mayan system is a way to calculate a certain time period where all the frequencies of the celestial bodies are in synchronization with one another. It believed that during this cycle the cosmic synchronization will enable the earth to evolve in such a way that

will enable all living beings on the earth to evolve also (Arguelles 1987 p. 70). This Great cycle has been calculated as a 5,125 year period that is broken up into thirteen eras each consisting of a little more than 394 years. The cycle of the thirteen baktuns, according to the Mayan, began at a time when the earth first begun the process of synchronization in the year 3113 BCE (Arguelles 1987 p.112). Since the Mayan time system is often misinterpreted as simply a calendar, then this is also believed to be the date when the Mayan calendar system began. One must keep in mind, however, that the Mayans as a society didn't arise until early in the first century CE, and therefore their time keeping system involved a lot of back dating. The great cycle eventually ends in 2012 CE and thus, according to the Mayan time system, earth is in the last baktun before reaching total galactic synchronization.

The last baktun period (1618 AD to 2012 AD) is considered by Arguelles to be the time of transforming matter. This transformation begins with the triumphs of industrialization and scientific advancement, but quickly leads to the horror of atomic wars, terrorism, and the collapse of the technological civilization. In the last final years of this era the earth will undergo a purification by which humans realize that the paradigm of their past achievements has failed them (Arguelles 1987 p. 115). On Dec 21, 2012 CE the earth will enter into complete galactic synchronization by which humans will be able to take the next step in their evolutionary path. The Mayans believe, according to Arguelles, that this synchronization will enable human DNA to mutate in such a way that certain energy channels like Hindu chakras will be opened. The human body will go through a complete transformation along with the earth's etheric body, and huge amounts of energy will flood the newly formed cosmic circuit. It is believed that at this point humans will evolve transcending their physical form and gain god-like abilities similar to the shaman-king that led the ancient Mayans (Arguelles 1987 p.82-187).

The Hindu time system, according to Arguelles, encompasses the larger cycle that the Mayan system is part of and is broken into four eras. Throughout Hindu history there have been many discrepancies between the texts written about the four Yugas which describe the time lengths involved. Arguelles makes it clear in his interpretation that the discrepancies are actually smaller cycles of the Yugas within bigger cycles of the Yugas. One of the first written texts of ancient India, the Laws of Manu, reveals a 12,000 year cycle that consists of the Krita (Satya) Yuga, Treta Yuga, Dvapara Yuga, and finally the Kali Yuga. The first stage of this cycle lasts for 4,800 years and is often called the golden age, because it is the age of the highest spiritual existence. In this stage there is no need for spiritual leaders or gurus, because every individual is connected to the source. The next age lasts for 3,600 years and is often called the silver age, and thus regarded as the first step down from the highest spiritual state by which it is necessary to make sacrifices to connect with the divine. The third Yuga or the Bronze Age lasts for 2,400 years and is regarded as an even further reduction of the highest spiritual state by which temple worship is now necessary for connection to the source. The final age called Kali Yuga is signified by kali, the goddess of chaos, whose presence reigns over the darkness and destruction of the Iron Age. This period only lasts for 1,200 years, but is regarded as the lowest spiritual state by which it is necessary to chant in order to maintain connection to the divine. (Arguelles 1987 p.50-75).

The entirety of the cycle is thought of a cosmic cow that is perfectly balanced on four legs in the beginning of the cycle, but as each age passes it raises a leg. Finally, in Kali Yuga the cow is barely balancing on just one leg, and thus this represents the spiritual chaos in the world. Since time is regarded as cyclic in Hindu philosophy, then there is a 12,000 year cycle for the descend from Satya Yuga to Kali Yuga and a complimentary 12,000 cycle for the ascent out of

Kali Yuga to Sat Yuga. One thousand cycles of this 24,000 cycle is, according to the Laws of Manu, actually just one day and night in the eyes of the creator god Brahma. Therefore, Arguelles believes that the discrepancies in the time lengths of the cycles arise from calculating the entire length of each age given the full day length in the eyes of Brahma. The smaller cycles of 12,000 years are within a bigger cycle of 24,000 years which is itself in an even bigger cycle of 4,320,000 years. It is a very complex system, but Arguelles believes that the Mayan cycle, starting in 3113 BCE, is actually a smaller cycle within the 12,000 year Yuga cycle that starts around 10,000 BCE (Arguelles 1975 p. 297-304). The connection between the two systems is made clear by a later astronomical Hindu text called the Surya Siddhanta which places the beginning of the Kali Yuga only 11 years before the beginning of the Mayan calendar in the year 3102 BCE.

There has been much scholarly debate in the past as to whether this date was an actually observed phenomenon of celestial bodies or back-dated using mathematical calculations. Modern scientific data has verified the celestial alignment spoken of in the astronomical treatise, however regardless of whether it was observed or not Arguelles believes that it is no coincidence that this celestial alignment was dated 11 years before the start of the Mayan calendar. Sheldrake's morphogenetic resonance theory was created by three other biologists in the 1920's that later appealed to Einstein's gravitational field theory. The idea, as discussed earlier, was that there are certain types of fields that help determine the form and structure of matter much like DNA, but they function as fields that can emanate from bodies like a gravitational field. According to Arguelles these fields can be scientifically measured in the sun by looking at the movement of sunspots which makes a full cycle in just less than 23 years. Since the morphogenetic field is resonating, then Arguelles relates one-half cycle (11.3 years) to a field

pulse from the sun that is either inward or outward (Arguelles 1987 p. 118-120). Thus, Arguelles thought it was no surprise that Hindu astronomers picked up on some unusual alignments and celestial activity, because the last morphogenetic pulse from the sun would indicate the beginning of the earth's synchronization process in 3102 BCE. Therefore, according to Arguelles 3102 BCE is not necessarily the beginning of the Kali Yuga, but is the indicating period for the beginning of the Mayan cycle.

In order to align the two systems correctly one must mark the beginning of the second half of the Yuga cycle around 10,000 BCE. This cycle represents the descent from the golden era into Kali Yuga, but one must keep in mind that the ending of one era is always the beginning of another. Therefore, as the Kali Yuga era is coming to end it is simultaneously the beginning of the golden era. If one follows the cycles according to their indicated length in the Laws of Manu, then the end of Kali Yuga is around 2000 CE. If one overlaps the 5,125 year Mayan cycle leading up 2012 CE on top of the Hindu Yugas, then it appears that the Mayan cycle began in between the Dwarpara Yuga and the Treta Yuga. Thus, it might be possible that the Mayan cycle occurs within each 12,000 year cycle of the Hindu Yugas. The role of the Mayan cycle would seem to be a preparatory process by which the earth and humanity are being synchronized for the next golden era. Therefore, the Mayan cycle is actually a smaller part of Hindu Yuga cycle by which the end of the Kali Yuga and the beginning of the Golden era are made one and the same.

The reality of what will actually happen on December 21st 2012 will remain a mystery until that date comes to pass. Jose Arguelles, however, made it his life purpose to reveal the sacred knowledge that the Mayan system had to offer the modern world on this topic. The details of the Mayan time system and the Hindu Yugas are much more complex than what could

fully be explained in the scope of this paper, but nevertheless there are some definitive overlaps between the two systems. The Mayan cycle, according to Arguelles, is actually a smaller part of the Hindu Yuga cycle that prepares humanity through galactic synchronization for the next Golden Era. There are many theories regarding this galactic synchronization that are just now starting to be accepted by the scientific community. It is unfortunate that such advanced civilizations are often times regarded retrospectively by westerners as primitive, but their technology does not come in the same plastic form as ours. Nevertheless, it is truly an exciting time to be alive, because the next stage of human evolution, according to Arguelles, will bring humanity back to its divine origins.

The support from this comparative study may show that the era is now, but what evidence do we have from the present. “If we're looking at the highlights of human development, you have to look at the evolution of the organism and then at the development of its interaction with the environment. Evolution of the organism will begin with the evolution of life perceived through the hominid coming to the evolution of mankind. Neanderthal and Cro-Magnon man. Now, interestingly, what you're looking at here are three strings: biological, anthropological -- development of the cities -- and cultural, which is human expression.

Now, what you've seen here is the evolution of populations, not so much the evolution of individuals. And in addition, if you look at the time scales that are involved here -- two billion years for life, six million years for the hominid, 100,000 years for mankind as we know it -- you're beginning to see the telescoping nature of the evolutionary paradigm. And then when you get to agricultural, when you get to scientific revolution and industrial revolution, you're looking at 10,000 years, 400 years, 150 years”. Furthermore if you consider the developments of the technological age within the past 80 years and the information age with the past 30 years “you're

seeing a further telescoping of this evolutionary time” (Healy 2001). The rapid exchange of information resulting from vast use of the internet has led to an acceleration in the developments of new technologies. “What that means is that as we go through the new evolution, it's gonna telescope to the point we should be able to see it manifest itself within our lifetime, within this generation” (Healy 2001).

At a point in the future I believe we will hit critical mass. This term can refer to many things, but in the societal sense it refers to a point at which the collective assimilates an individual behavior. The hundredth monkey story told by Ken Keyes serves to illustrate this phenomenon that was originally conceived of by Rupert Sheldrake’s morphogenic fields. The story involved the study of a certain species of a Japanese monkey and their taste for potatoes. Many of the potatoes they found were sandy and unpalatable, but they ate them any way. One particular monkey figured out that she could wash off the sand in a nearby stream, and very soon she taught all her friends, and her parents. Eventually the numbers of those who learned this trick grew until it reached a point, the hundredth monkey for example, where overnight all the monkeys adopted the trick. The researchers even observed that monkey’s of the same species on different islands could be introduced to potatoes and use the trick without having to relearn it (Keyes 2008). This mock study may simply be a story, but recently it has gained some significant scientific evidence that might suggest the existence of a critical mass point for humanity.

In addition Monica English, a graduate student at University of Nottingham, conducted research into measuring the ability of people to do crosswords puzzles that were a few days old to see if the puzzles being already answered by millions impacted the group. The results were

featured in the Noetic Sciences Bulletin, Autumn 1991, pg 1. The following is Sheldrake summary:

"The crossword puzzles she used were from the London Evening Standard, not the New York Times, and in the experiments she tested groups of subjects before and after the crossword puzzles were published in the Evening Standard on Feb 15th 1990. Each group of subjects also did a control crossword which had been published ten days earlier in the Evening Standard. This was to estimate their ability to solve crosswords of this kind. The results were scored blind. She found that the results for the Evening Standard 'easy crossword' showed that the subjects performed better after the crossword had been published in London, relative to scores before publication. This difference was significant at the 5% level, using the one-tailed t test. This effect was not detectable with the Evening Standard 'quick crossword' which the students found much harder to do and in which they completed fewer clues" (MD 2008).

If each state of the human mind is associated with electromagnetic waves as measured by EEG, then in many ways the states of the human mind and its interaction with other minds are subject to the physical laws of resonant wave mechanics. When two or more waves are in resonance with one another, then the total energy of those waves is the sum of the energy squared (Hartman 2004 p.209). If, for example, eighty thousand individuals were all participating in the same resonant frequency, then the total energy would be equal to 6.4 billion separate energy waves. It is perhaps in this way that critical mass is possible. It has been suggested by many that only one percent or less of the population is needed in order to bring about this change.

After the attacks of 9/11 Dr. Singh suggested to the US government that we should adopt Vedic technology using this kind of critical mass theory. "Dr. Singh's American backers,

including Lt. Col. Richard Neate, USAF (ret.), said they realize the idea sounds far-fetched to the general public but said that approximately 600 research studies conducted by 212 institutions in more than 30 nations have supported the efficacy of transcendental meditation on reducing collective and individual stress in human beings. In fact, more than 50 peer-reviewed journals, including the *Journal of Conflict Resolution* and *Science* have featured studies on the subject of transcendental meditation's effect on collective stress. The unified field theory is pretty standard in quantum physics now and is not controversial," said John L. Davies, PhD of the Center for International Development and Conflict Management and professor in the department of government and politics at the University of Maryland at College Park. Dr. Davies said his work as a social scientist focuses on interpreting the work of physicists 'to try to make sense of what we're seeing in quantum mechanics'" (Mientka 2001).

In addition to this work the US government has granted money to Universities to measure the claimed effects of transcendental meditation: "According to Dr. Schneider, the U.S. government and private institutions have provided \$17 million in funding to MUM for the study of transcendental meditation during the past 13 years. Presently, MUM is conducting research with a consortium of institutions, including Drew University Medical Center in Los Angeles, the Moorehouse Medical School in Atlanta and the Medical College of Wisconsin in Milwaukee.. Dr. Schneider said that while Dr. Singh spoke here of the collective benefits of the ancient Vedic technology, his work focuses on the individual health benefits of the technique. He said MUM's previous randomized, controlled studies had shown that the Vedic technique reduced blood pressure in subjects with hypertension by twice as much as other relaxation techniques and exactly as much as medication. Referring to a MUM study that was published in the American Heart Association journal *Stroke*, Dr. Schneider said, "The program was effective in reducing

hardening of the arteries as measured by ultra-sound of the carotid artery walls, which parallel the arteries in the heart and brain” (Mientka 2001).

Studies done by the Maharishi University, founded by the late Indian sage Maharishi Mahesh Yogi and accredited by The Higher Learning Commission, have demonstrated the effectiveness of meditation on lowering the percentage of violent activity. One of the most well known studies was done in 1993 in the district of Columbia in Washington, D.C. “Based on the results of the study, the steady state gain (long-term effect) associated with a permanent group of 4,000 participants in the Transcendental Meditation and TM-Sidhi programs was calculated as a 48% reduction in HRA crimes in the District of Columbia” (Hagelin, Rainforth, Orme-Johnson, Cavanaugh, Alexander, Shatkin, Davies, Hughes, and Ross, 1999).

Previous to this study there was a large gathering of transcendental meditation practitioners in 1989 in order to measure the effects on global terrorism. “When the number of experts in Maharishi's Transcendental Meditation and TM-Sidhi program participating in each of three assemblies approached or exceeded 7,000 (the square root of 1% of the world's population), there was a significant decrease in international conflict, and a large drop in fatalities and injuries resulting from international terrorism. There was a highly significant decrease in international conflict during each of the three assemblies (36%, 24%, and 35%, respectively); a 72% drop in international terrorism immediately after the beginning of three assemblies taken together; and a significant increase in the World Index of stock prices during the three assemblies taken together” (Leffler 1997). As stated earlier, these studies have been replicated many times over providing sufficient evidence that critical mass can be attainable. The quantum coherence theory gives scientific support to Jungian theory of a collective conscious, and furthers our understanding of an inter-connected universe.

In addition to the possibilities of humans reaching critical mass on their own volition there is also drastic geological changes that will make it easier for this change to take place. Currently scientist are measuring that the Schumann resonance is actually rising above 7.88 hertz. Some researchers have claimed that the Schumann resonance is at 11 hertz and rising, but there are too few studies to support this claim. It is clear, however, that due to rising temperatures there will be dramatic effects on the SR. “Clearly, the magnitude of the SR is related to the number of lightning strokes (~ 100 per second) occurring worldwide. It is well known that thunderstorms and lightning strokes in many parts of the world are directly related to lower-atmospheric air temperatures. Higher temperatures produce more lightning strokes. Earle Williams (1992) linked Schumann Resonances to convection and tropical and/or global temperature. He used SR data from receivers from several locations to support his arguments. There is a debate over the sensitivity of the SR to global temperature, but there is a consensus about the connection.”(Kruger 2008).

There is continuing controversy over how drastic global climate change will affect SR. Some researchers claim that just a 1 degree C increase will cause a 400% increase in the SR frequency, while others maintain an effect as low as 5-6%. Putting the specifics aside, it is certainly the case that in the years to come the SR is going to rise. This is going to have profound effects on the human body, because the SR has been affecting humans since the beginning of our evolution. Many of our biorhythms have been influenced by the SR, and it is for this reason that many researchers believe that a rising SR will be detrimental to the human body. In light of the theory that I have present let us take a moment to contemplate what a rise in the SR would mean for the physiological process that I have outlined in the previous chapter. If the SR were to rise to the fast beta (11-13 hertz), then the strongest base resonant frequency that

would be suitable for energy transfer would be accessible by the everyday waking logical state that most of us find ourselves in most of the time. With predictions of up to a seven degree C increase in global temperature by the end of the 21st century (IPCC 1996) even the lowest percent of SR influence will result in 35%-40% increases in SR frequency. This would be more than sufficient to enable the masses to achieve the correct resonance in order to begin the physiological transformation. At temperature increase this high, however, life as we know will not be supported by this new climate. There will be drastic changes to the land masses, and much of our created civilization will be destroyed. It is very possible that such drastic temperatures aren't necessary to make the SR reach 13 hertz, but I wanted to make the point that this process is going to happen regardless of the figures involved.

These studies make it clear that the physiological transformation maybe dependent upon is one's state of being, but it is also something that is occurring independently. In many ways it could be stated that the earth is actually evolving in such a way that it is making the conditions more conducive to our evolution. If we fail to save our environment, then this evolution will be necessary in order to survive. The physiological changes that will occur during the transformation will make one suitable for any changing earth environment. Theoretically speaking the human form will not only be able to manipulate matter to change the environment, but moreover it would not be necessary. The human form would not require any form of energy external to itself, and thus the quantum cohesion that creates life will be self-sustaining. In addition, no weapon could even come close to harming the individuals who have evolved. There is no doubt that this science will be manipulated by the governments in order to attempt to create this state artificially, but they will all fall short. All artificial reproductions of this state that are used for harm will not only cause harm to the individual using the abilities, but the abilities

themselves will be child's play to those individuals who have evolved themselves. Even technologies that are created external to the individual will not even come close to the potentials of those who have evolved using agape.

It is, indeed, an evolution that I am talking about. It is something that is happening right now on its own, and yet we have the choice to be part of it. To make the choice to evolve is to begin an endless journey of mastering the physical form. Agape is the key to this evolution by enabling individual and collective survival. It isn't that Darwin's theories were wrong, but rather that they were incomplete. There comes a point when the individual interests can be aligned with the collective interests. To maintain the balance between all species is to ensure the cycles of ecosystems. This is so much more than our evolution, because we as a species affect so many other life forms on this planet.

Individuals surely seek their own survival, but so do collectives of certain species, and furthermore so do ecosystems. The planet earth as one organism seeks its own survival by the harmony of all species that it bears. Without the trees and plants neither humans nor any oxygen breathing life form could exist. In this sense it is beneficial for all species on the planet earth to cooperate and work together. The state of Agape insures one's own survival, but also the survival of the collective. If any individual attempts to cause harm, then the agape state will be lost; and thus one's own survival would be sacrificed. Surely one could conceive of scenarios where an individual would be willing to temporarily lose their survival advantage in order to commit murder or rape. Fortunately, there will be nothing temporary about their loss of agape. The destructive energy of their behavior will be stored in their body, and will disable them from reaching that state again.

Agape is not just something that someone can enter into and use to levitate, because that's the fastest way to get to work. It is not temporary, but its effects are life altering. Each individual in this state will want to help all those in suffering, and therefore with their abilities we may see an end to all human suffering and dis-ease. The golden age may come within this era, and may be more profound than we ever thought. The evolution is happening now, and will continue until it is complete. The secret abilities of the spiritual masters were the first of the few who choose to be a part of this evolution through their healings, invincibility to weather, survival without food or water, invincibility to physical injuries, levitation, transcendence of time and space, manipulation of objects, and even manifestations of matter. I am talking about a human evolution which will give us abilities that set us outside the survival rat race of the world. Humans will be in the world, but not of the world. This is a science, not mysticism. It is only through agape-like love, however, that this is possible. Humanity will once again return to its divinity so that we can be the stewards that we were meant to be.

If indeed what I am proposing is the case, then the implications are drastic. The scientific theory that I have presented will contribute significantly towards helping transpersonal psychology gain reputable status in the scientific community. The theories that I have proposed warrant serious scientific investigation and by scientific I mean experiential practice in conjunction with intellectual inquiry and proof. If nothing else is achieved by this thesis, please let that be heard. Facilities should be designed specifically for the study of these extraordinary abilities, and biofeedback technology should be used to aid in their development. Much of this is already in progress by the Institute of Transpersonal Psychology and by the Noetic Institute in California. The theory that I have proposed may have exposed the potential complexities of the technology of the body, but this should not hamper our technological achievements and

investigations. Research designed specifically at this area of study will necessitate a healthy and positive use of technology that will aid in our evolution. This healthy and positive use of technology will finally fulfill the Hopi prophecies, and humanity will finally live up to its name as homo sapiens-wise human.

The transpersonal movement has the potential to become fully integrated into every dimension of the human experience. Evolutions can take place in business, economics, politics, music, art, mathematics, the sciences, and especially the education system. The movement will promote a society that values creativity over productivity, compassion over fear, equality over greed, knowledge over arrogance, servitude and stewardship over possession, and a love that is unconditional and universal. The path will be a long one, but for those who are patient it will be worth it. Have patience, but do not feel helpless. There is so much to do, and so much that you can do. Be a good human being. Be kind and gentle. Forgive yourself for your mistakes, and forgive others for theirs. Walk with those who are scared, and talk to those who are lonely. Start with a smile down the street, and then maybe a conversation at the corner with the homeless. Transform strangers into acquaintances, acquaintances into friends, and friends into family. If you are dreaming, then follow your dreams. If you are full of love, then follow your heart. If you are afraid, then know that you are loved. It does not matter what you have done in the past or how hateful or angry you are. Your very earthly existence shows that you have been given a chance, that you have been forgiven, and that you are always loved. Perhaps this is the kind of love that Jesus talked about at the last supper. These are things that you can start doing right now. These are things that will bring about the evolution. Imagine the world full of people looking past their suffering and anger to see their fears, and finding a love so profound that it dissolves away all their torment. Every day you can be a part of that love by simply being who you truly are. Let

go of your fears, stresses, worries, and sorrows, because they are not you. In letting go you will find the grace, the glory, and the joy of life. You are always growing, always becoming. Life throws us all for a spin, and in its great ups and terrible downs we find something that is beyond both. Be a good parent, be good sibling, be a good friend, and most importantly be a good stranger. We are all 99.999999% genetically identical-we are a family. So, let us be family.

Once individuals begin to take a proactive role in this next step of evolution, then we will soon hit critical mass. Humanity will be able to survive its dark days and will return to its infinite level of being (divine). In this world there be no limitations, but only infinite possibilities. It will be on earth as it is in heaven, because the earth will be transformed. The entire economy will disappear, because humans will learn how to manifest whatever they need. Furthermore, they probably won't need anything. Capitalism and the governments will lose their modes of control. This is most likely what will cause the most resistance, because those who have not tasted their immorality will still fear losing control. It is more than likely that there will be, as I said before, attempts to control the abilities with artificial reproductions. Overtime this will be of little concern to those who have evolved, because nothing they face can cause them harm. The critical mass will be reached, and the transformation will occur even more rapidly. The societal focus will shift from physical production to spiritual production and selfless service to all those in need. This will be the age of our divinity, or rather just our fulfillment of what it means to be human. "God became man, so that man might become God"

"Can you hear me? Wherever you are, look up! The clouds are lifting. The sun is breaking through. We are coming out of the darkness into the light. We are coming into a new world, a kindlier world, where men will rise above their hate, their greed and brutality. Look up! The soul of man has been given wings, and at last he is beginning to fly. He is flying into the

rainbow -- into the light of hope, into the future, the glorious future that belongs to you, to me, and to all of us. Look up, look up!"(Chaplin 1940). In the end it will be as the beginning (The Alpha and the Omega). The unification will lead us down another path to another day where we once again may choose to become earthy so as to learn even more about who we truly are. Union with the divine is endless, but it is always happening. The cycles of involution and evolution, I believe, will lead us back to simple lives that are in unison with nature. It is only the imbalance of our times that has made it necessary for us to evolve to attain these abilities in order to survive, but in the perfect harmony of the golden era there would be no need. It will look the same as it did thousands of years ago, but so much will be different on the inside. In our highest state of evolution we willingly walk the earth with our bare feet, and let the raindrops fall upon our skin. These will be the days of our true humanity when we move beyond the duality, tasting the tree of light, becoming it, becoming life, and then merging into the unity of the singularity/oneness/omega point that is Taiji.

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