

Further Examination of the Knowledge Embedded in the Integration of Mind-Body Hypnotherapy and Quantum Physics

Bruce Gregory*

Ryokan College, 11965 Venice Boulevard, Los Angeles, 90066 California

Abstract: This article will continue the exploration of the possibilities for applying the knowledge embedded in the integration of Mind-Body Hypnotherapy and Quantum Physics. The Erickson Resistance Protocol will be utilized as a template for demonstrating a series of relevant and transformative applications. Erickson's consciousness of appreciation will be complemented by the incorporation of inference to illustrate how quantum variables and concepts provide opportunities to creatively focus attention to facilitate unconscious healing processes. Emphasis will be placed on the appreciation and utilization of the themes of structure, receiving, opposites and novelty. The significance of thinking in terms of biology, set theory and group theory will also be highlighted. Further context will be provided by historical reviews of the evolution of the integration of Psychology and Quantum Physics and the role of the unconscious in general.

Keywords: Consciousness, Transformation, Quantum physics, Appreciation, Structure, Opposites, Containment, Resistance, Inferences, Momentum.

INTRODUCTION

Mind-body hypnotherapy is a process that focuses on the facilitation of the activation of unconscious healing networks that utilize the multilevel sets of physiological resources provided by nature. Mind-Body Hypnotherapy was developed by Rossi (Rossi, 1986, 1996, 2002, 2007, 2014)) as he extended and integrated Erickson's work with the natural sciences (Erickson and Rossi, 1979, Lankton and Lankton, 1983, Rosen, 1982). Initially Rossi focused on the integration of Erickson's work with biology, highlighting the vast network of physiological resources at various depths within the unconscious supporting Erickson's interventions. This was driven by the *appreciation of the inferences* contained within the capacity of the unconscious to provide comfort, execute creative problem solving, and transform resistance into receptivity. Erickson's methods appreciated the role of language in communicating through indirect suggestions that were effective in containing and bypassing resistance. This integration later included chaos theory, and quantum physics (Rossi, 1996, Rossi and Rossi, 2007, 2011, 2018).

A core of the roots of Mind-Body Hypnotherapy's integration with the Quantum Physics can be traced to the work of the French mathematician and physicist Henri Poincare (Gregory, 2017, Poincare, 1905, Rossi, 1996). Poincare was responsible for the corrections to the Lorentz transformations which were the foundation for Einstein's breakthrough in Special Relativity. In

Science and Hypothesis (Poincare, 1905), Poincare identified the relationship between the natural sciences and the unconscious. Poincare recognized that there were four primary stages in scientific discovery processes; preparation, incubation, illumination, and integration. The preparation stage involved conscious consideration and permission to explore and identify the relevant variables in the issue being addressed. The incubation stage was the allowing of time for the unconscious to process the considerations of the preparation stage. Illumination referred to the output provided by the unconscious, while integration appreciated the need for time to process and digest the results. Poincare recognized that the unconscious played a fundamental role in the incubation stage, without explicitly identifying what networks of physiological resources/ structures were being utilized. Poincare wrote;

"There is another remark to be made about the conditions of this unconscious work; it is possible, and of a certainty it is only fruitful, if it is on the one hand preceded and on the other hand followed by a period of conscious work (stages one and four). These sudden inspirations (stage 3) never happen except after some days of voluntary effort which has appeared absolutely fruitless, and whence nothing good seems to have come, where the way taken seems totally astray. These efforts then have not been as sterile as one thinks, they have set a going the unconscious machinery (stage 2/incubation) and without them it would not have moved and would have produced nothing.

The subliminal self is in no way inferior to the conscious self; it is not purely automatic; it is capable of discernment; it has tact, delicacy; it knows how to

*Address correspondence to this author at the Ryokan College, 11965 Venice Boulevard, Los Angeles, 90066 California;
E-mail: bgregoryphd@earthlink.net

choose, to divine. What do I say? It knows better how to divine than the conscious self, since it succeeds where that has failed." (Poincare, 1905, p. 390).

The collaboration of Jung and Pauli (Jung, 1952, Miller, 2007, Pauli, 1952) furthered this integration by exploring the relationship between Jungian therapy, and its emphasis and appreciation of the role of the unconscious in transformation and healing processes, with quantum physics, of which Pauli had been one of the founders in the 1920s. Jung's theory of opposites had parallels with Heisenberg's uncertainty principle and Bohr's complementary principle. Jung's appreciation of synchronicity, the role of time, mirrored the value of time expressed in the Lorentz Transformation, Einstein's Special Relativity, and the Dirac equation (Gregory, 2006). In addition, the principle of synchronicity implied the possibilities of connection which were reflected by the quantum principles of superposition and quantum entanglement. Pauli maintained that quantum mechanics was incomplete and needed the insights of psychology and the utilization of the unconscious to complete itself.

Erickson's Resistance Protocol (Erickson, 1964, Gregory, 2016, Rossi and Rossi, 2017) continued this integration by identifying and demonstrating implicitly how quantum variables and concepts, which are foundational to the universe's structures, could be integrated in the processes of transforming resistance and facilitating activity dependent gene expression (Rossi, 2002). The quantum variables Erickson was applying were; time, space, position, motion, and momentum. The quantum principles Erickson was applying were; superposition, quantum entanglement, and uncertainty. Rossi and Rossi (Rossi and Rossi, 2017) added the components of utilizing the Dirac notation and Bayesian probability to facilitate novelty and unconscious searches to explore and access deeper levels of comfort. The Dirac notation of 'bra-kets' served as a subset of transformational structures and a bridge to mathematical structures of transformation. Bayesian probability functioned as a doorway to further explorations of the possibilities for healing embedded within the distinctions between possibility, probability and certainty as they related to fundamental structures of the universe at Newtonian and Quantum levels.

The knowledge expressed through the integration of these two disciplines can be understood as a subset of the knowledge that has arisen and evolved throughout history. History has shown that time is required for knowledge to unfold, be recognized, and then be applied. In Physics there are three main examples reflecting and valuing the need for time. First, it took over two hundred years from Newton's discovery of

classical mechanics until Einstein demonstrated through special relativity that Newton's understandings were incomplete, showing that there were four primary dimensions, not three, the fourth being time itself. Further, his utilization of the Lorentz Transformation showed mathematically that time was relative, not absolute as Newton had claimed. This had a further validation of the need for time as Galileo, considered the father of modern science had argued this in 1632, fifty years before Newton, and the Buddhists had discovered this by 150 AD. With respect to Galileo, his recognition that the earth revolved around sun, and not vice versa, corrected a misunderstanding promoted by Aristotle almost two thousand years earlier. In terms of appreciating this article, it was Galileo who recognized that mathematics was the foundation for all the sciences saying: 'Mathematics is the language with which God has written the universe. Without this understanding humanity wanders in a dark labyrinth.' One of the primary tools of Mathematics is the appreciation and utilization of inference, and the rules of inference, one of the main themes of appreciation in this article.

Interestingly enough, this fundamental connection between time and knowledge was recognized and explored in detail in the Buddhist work *Madamamayika* written by Nagarjuna around 150 AD. Nagarjuna demonstrated through logic that experience was ultimately a consequence of the role of time, and referenced this process as 'dependent origination' (Garfield, 1995, Gregory, 2015, 2017, Merrill-Wolff, 1973, Tulku, 1979). This logic recognized time as a primary source of experience, along with space, implying both time and space's value, and that they were both primary sources of comfort. Further, it recognized that time and space were fundamental variables in the *structures* that shaped human experience. Further, Nagarjuna's logic of four fold negation, also referred to as the Tetrallemma, was complementary to the superposition concept discovered in quantum physics almost 2,000 years in the future in 1925.

In the domain of psychology, it has been widely recognized that Freud's Interpretation of Dreams (Freud, 1900) marked the beginning of the unfolding of psychological knowledge in the modern era. With it, Freud founded the first school of psychotherapy, psychoanalysis. The roots of psychology, however, can be traced to the healing rituals practiced in Greece over two thousand years ago. In more modern times, Wundt is credited with being the father of psychology through his establishment of the first laboratory for experimental psychology in Leipzig, Germany in 1879. Although Freud's Interpretation of Dreams emphasized

the role of the unconscious in dreams it was not the first recognition of the role of the unconscious in the healing process.

In the mid nineteenth century, the work of Braid, Bernheim, Janet, and Charcot identified and began exploring the role of the unconscious in hypnotic healing processes. Braid, who is considered the father of hypnosis, first thought hypnosis was a state of sleep, but later recognized that certain hypnotic phenomena like amnesia and anesthesia could be facilitated without sleep. Braid also recognized that the unconscious processes could be activated by eye fixation, implying that the focusing of attention was a core variable in facilitating the transformation of consciousness. Janet focused on automatic writing in dealing with dissociations operating as a result of post traumatic stress. Charcot was the head of the Salpetriere school and focused on dealing with hysteria and promoting that hypnosis was a passive process. Bernheim, head of the Nancy school, took the opposite position, advocating that hypnosis was an active state, driven by suggestion (Rossi, 1996, Tinterow, 1970).

These explorations echoed, highlighted and *implied* a number of fundamental considerations, concepts, and variables of psychological healing processes. The first of these was the consideration of what were the core factors/variables in psychological healing processes. The second was, how important was the role of the unconscious in psychological healing processes.

The third was, what were the most effective tools for utilizing the unconscious. The implications, however, were even more profound, and have needed more than a century to begin to be sufficiently appreciated, especially in relationship to the mathematical cornerstones of set and group theory, the role of opposites, and the *need for novelty*. These implications were that the appreciation and *utilization of time, structure, receiving, and the focus of attention were core factors* in the facilitation of healing (Erickson and Rossi, 1979, 82, Gregory, 2009, 2017, Rossi, 1986, 2002, Wilbur, Engler, and Brown, 1985). Seen from a mathematical perspective it implied an exploration for an equation that represented and described the healing process in which the variables would be identified, along with their relationship to each other, and the amounts of each, in terms of proportions, multiplication and exponentiation. Most important, however, would be how each would vary with respect to time (stages of the healing process). Seen from a biological perspective it raised the consideration that if the variables were seen as a complex molecule, what would be the combination of the variables. An example of this is the hemoglobin (red blood cell) molecule which is a combination of 635

amino acids. Seen from a metaphorical perspective it implied the question; could these variables be compared to the amino acids, the building blocks of proteins, all twenty of which have a specific structure, and can be considered sources of healing. Braid in the *Physiology of Fascination: and the Critics Criticized* described fascination as the psychophysiological basis for focusing attention to facilitate hypnosis. Fascination *implied* a novel experience that was compelling, in that it implied a satisfaction of unconscious needs that facilitated *opening*, indicated receptivity, a state of openness, and initiated unconscious processes connected to long term potentiation and neurogenesis (Squire and Kandel, 1999, Rossi, 2002). Further, it implied a need for novelty, and a polarity between the old and the new. Braid's appreciation of fascination was expanded upon by Otto (Otto, 1932, 1950). The experience of fascination, mystery, and the tremendous were summarized in the word *numinosum* by Otto, (Otto, 1932, 1950) to describe the heightened psychobiological states that are characteristic of all original spiritual experiences. Jung (Jung, 1960) and Rossi (Rossi, 2002, 2004, 2005) recognized how Otto's description of the *numinosum* reflected a stage in learning/healing processes as a *response to novelty* that was compelling in that it focused attention and activated unconscious healing networks, whose *structures* contained vast knowledge and capacity for learning, transformation and healing.

Rossi identified this as the Novelty, Numinosum, Neurogenesis Effect, and reported numerous examples of neuroscience research that validated nature's design in supplying vast resources (structure) to support *responses to novelty* that culminated in the KREB cycle and neurogenesis. Eriksson *et al.* documented how novelty led to gene expression. Bentivoglio and Grass-Zucco reported studies that showed that immediate early genes were activated as the consequence of experiences of novelty. Matthews and Butler identified novelty seeking DRD4 genes that supported human migration. Nader *et al.*'s research showed that fear memories could be disrupted and dissolved through novel, creative therapeutic interventions. Ribeiro *et al.* reported that the Zif-268 gene was activated in sleep as the result of prior novel experiences.

(Bentivoglio and Grass-Zucconi, 1999, Eriksson *et al.*, 1998, Matthews and Butler, 2011, Nader, 2000, Ribeiro, 2002, 2004, Rossi, 2002). Kandel's work on neuroplasticity earned him the Nobel Prize in Medicine in 2000. His identification of the structures and processes within the hippocampus leading to the Kreb cycles and activity dependent gene expression validated the need for novelty, the range of the

unconscious' capacity for transformation, and the need for the appreciation of opposites (Gregory, 2007, 2011, 2017, Rossi, 1996, 2002, Squire and Kandel, 1999). The opposite, in this case, was the old/new polarity. Rossi (Rossi, 1986, 1996, 2002) applied his appreciation of novelty in two significant ways that supported the increase in therapists' trust of their ability to facilitate unconscious healing processes. The first was identify the value of 'basic accessing question'. These were questions that would use novelty to initiate

Unconscious searches. The second was a structured polarity exercise, in which the patient would place his or her symptom in one hand and the resources for resolving the symptom in the other hand. The patient would then be directed to focus on the space between the two hands, wait, and watch for the movement and interaction between the two hands.

The research above *implied* the value of receiving, opposites and structure with respect to novelty, and the need for 'yes sets' for *structure*, *opposites* and receiving, which were comparable to the yes sets that Jung and Erickson developed for the unconscious (Erickson and Rossi, 1979, Gregory, 2017, Jung, 1916). 'Yes sets' meant there was a trust and valuing of the theme being addressed. In terms of structure, Kohut (Kohut, 1977, 1981) appreciated both structures and receiving as yes sets (Erickson and Rossi, 1979, Lynn and Sherman, 1991) with his recognition of the process transmuting internalizations, which referred to the structures that supported the integrating of what the patient received from the therapist. Loewenstein (Loewenstein, 1999) appreciated the role of lipid membrane as the primary structure with the responsibility for recognizing what was worthy of entering the cell and what should be excluded. Rossi, (Rossi, 1986, 2002), appreciated the structures of the hypothalamus and the nucleus of the cell as sources and resources for unconscious healing processes and neurogenesis, which implicitly valued that structures had the capacity for receiving, and the *value of receiving* in general.

ROLE AND VALUE OF OPPOSITES

It was Jung who recognized and appreciated their role in processes of transformation and healing in the psychological world (Jung, 1916, Rossi, 1996). The value of opposites had in fact been recognized much further back in time. Around 500 B.C. the Greek philosopher Heraclitus was teaching that the changes in the world were a function of dynamic and cyclical Interaction between opposites, implying that the role of opposites had been woven into the *structure* of the universe and life. This represented a western description of Taoism's appreciation of yin and yang,

which referred to another opposite, active vs. passive. On a broader level the yin/yang duality included the implication and recognition that opposites were complementary, interdependent, and interconnected. Heraclitus' appreciation of opposites was later reinforced by the work of two German philosophers, Hegel and Nietzsche, upon whom Jung drew his inspiration (Yang, 1996, Yelle, 2000).

The appreciation of opposites in the healing process was also furthered during the early stages of hypnosis when the Nancy school led by Bernheim advocated that hypnosis was an active process, while Charcot, leader of the Salpetriere school, asserted that it was a passive process. This duality continued into the twentieth century when Pavlov asserting that hypnosis was a state of deep sleep (passive) and Hull arguing for hypnosis being an active state (Berheim, 1886, 1957, Rossi, 1996, Tinterow, 1970). Erickson took this a step further, integrating both perspectives with his naturalistic approach, which utilized a variety of indirect suggestions, which was driven by Erickson's consciousness of appreciation with respect to the implied directive. By demonstrating that hypnosis could be both, Erickson was indirectly applying Nagarjuna's logic of four fold negation developed around 150 A.D., which was the logic pointing toward infinite possibilities. This logic was reinforced by the work of Cantor in 1895 when he was developing set theory (Dunham, 2011), and by the Schrodinger equation, initiating quantum mechanics in 1925 (Greene, 1999, TCL, 1996).

Erickson's work with suggestions provided an additional opposite as a resource tool in transformation of consciousness processes; direct and indirect suggestions, which had their own distinct structures. One of the primary objectives of indirect suggestions was to facilitate the transformation of resistance into receptivity, which was an additional polarity. Erickson's appreciation of the processes connected to the polarity between resistance and receptivity was one of the key factors in his success in treating difficult, complex cases (Haley, 1973, Lankton and Lankton, 1983, Rosen, 1982). Further, Erickson's appreciation implied that the *consciousness of appreciation* was a core factor in the *structures of transformation* in that what was appreciated was where the focus of attention went. Erickson's work with resistance was exemplified by his Resistance Protocol (Erickson, 1964, Gregory, 2011, 2017). This protocol was consistent with principles from both Quantum Physics and Tai Chi as it *appreciated* that resistance was a force with momentum that needed validation, which when appreciated mathematically, provided containment of the resistance. This meant that validation might require different doses of creative repetition depending on the force of the

resistance, and further implied that *validation* was a core structure/variable of the transformation process.

The quote below, from Erickson's Resistance Protocol illustrates Erickson's mathematical appreciation of the need of the resistance to be validated.

"You have come for therapy, you have requested hypnosis, and the history you have given of your problem leads me to believe strongly that hypnosis will help you. However, you state more convincingly that you are a resistant hypnotic subject that others have failed despite prolonged efforts to induce a trance, that various techniques have been of no avail, and that reputable men have discredited hypnosis for you and as a therapeutic aid in and of itself. You have frankly expressed your conviction that I cannot induce a trance in you, and with equal frankness you have stated that you are convinced that you will resist all attempts at hypnosis and that this resistance will be despite your earnest desire and effort to cooperate" (Erickson, 1958/1980, p. 302).

Additionally, the role of opposites had been addressed in physics in terms of whether light and the electron were particles or waves. Maxwell had shown that light was a wave in 1865, and in 1905 Einstein showed that it was a particle. This implied there was an additional layer to the structure of the universe and life, revealing that light was both a wave and a particle. Later, as quantum mechanics evolved, the Heisenberg equation described the electron as a particle, while the Schrodinger equation described the electron as a wave. Experiments showed that the equations yielded equal

results, showing that the electron was both a particle and a wave (Greene, 2004, TCL, 1996).

Tibetan Buddhist meditation theory and practice was based on the appreciation of the opposites contained within the *implications* of the subsets of the time, space and knowledge variables. These were; lower space and Great Space, lower time and Great Time, lower knowledge and Great Knowledge. Lower space referred to intervening distance while Great Space referred to Space itself that allowed/ permitted infinite possibilities. Lower time referred to linear time while Great Time was understood as the source of experience and nonlinear. Lower Knowledge referred to the knowledge about things from the perspective of the self, while Great Knowledge was understood as knowledge itself, and outside of the knowledge of the self. The appreciation of these opposites were drawn from the implications set forth by Nagarjuna in the Madmamayika, based on the doctrines of four-fold negation and dependent origination (Garfield, 1995, Tulku, 1979).

Figure 1 below organizes some of the major subsets of the set of all opposites.

Additional opposites include:

- Active vs. passive
- Particles /waves
- Lower time/Great time
- Lower space/ Great Space
- Lower Knowledge /Great knowledge

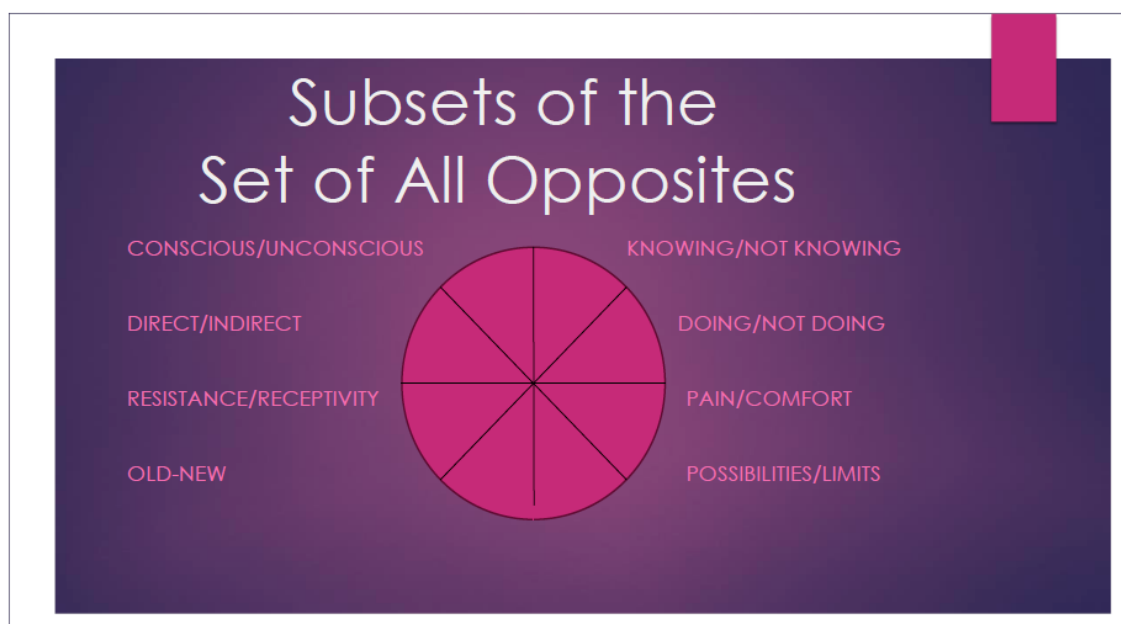


Figure 1: Subset of Set of all Opposites. © 2017 Bruce Gregory, Ph.D.

THE ROLE OF THE CONSCIOUSNESS OF APPRECIATION

Erickson demonstrated through his consistent successes with complex, difficult cases that his appreciation and mastery of the utilization of the core variables of transformation and healing was a function of his *level of consciousness*. This was particularly evident in the choices he made in what to focus on, and the choices he made to creatively focus a patient's attention which facilitated the activation of unconscious problem solving and healing processes during the process of transforming resistance into receptivity. In his resistance protocol (Erickson, 1964) this focusing of attention was divided into stages which are represented by Figure 2 below:

The stages above reflect thinking in terms of an *organized structure*, implying the value of structure, and further implying that structure is a source of comfort. Erickson would structure his treatment plans around an individual's life experiences and needs in relationship to them. Erickson was appreciating the role of individual differences, and how validating these differences creatively would support the transformation of resistance into receptivity. Simultaneously, Erickson would make a bridge to the role of the unconscious, and would progressively utilize a variety of tools/structures to facilitate a yes set and a response set to the unconscious (Erickson and Rossi, 1979, Lynn and Sherman, 1991, Yapko, 2005). These psychological structures included; truisms, the opposites of not knowing/knowing; doing/ not doing, positive possibilities for outcomes, possibilities for focusing attention, appreciation of the structure of time/pacing, metaphor, confusion, and shock. Erickson appreciated that time was needed to build a *momentum* for the patient's responsiveness. This

represented an integration application of the value of the momentum operator inferred in the Dirac equation which will be presented as a Figure on p. 15. He developed a variety of structures for utilizing time that reflected mathematical thinking in terms of set theory and group theory.

Figure 3 below represents a biological model of some of the core consciousness variables Erickson was appreciating during the treatment processes. Each of these variables can be considered atoms from a metaphorical perspective.

The quote below from the Erickson Resistance protocol is an example of Erickson applying core variables and principles from Quantum Physics through appreciation of time, opposites, possibilities, and uncertainty. This was complemented by his utilization of set theory(categories) and group theory(permutations around a theme that maintains structure.

"In other words, I will ask a question to which only your unconscious mind can give the answer, and concerning which your conscious mind can only guess if it does at all; maybe correctly, maybe wrongly, or maybe have only some kind of opinion, but if so, only an opinion, not an answer.

Before I ask that question, I would like to suggest two possibilities. (1) Your conscious mind might want to know the answer. (2) Your unconscious mind might not want you to know the answer. My feeling, and I think you will agree, is that you came here for therapy for reasons out of the reach of your conscious mind. Therefore, I think that we should approach this matter of the question I am going to put to your unconscious mind for its own answer in such a way that your own

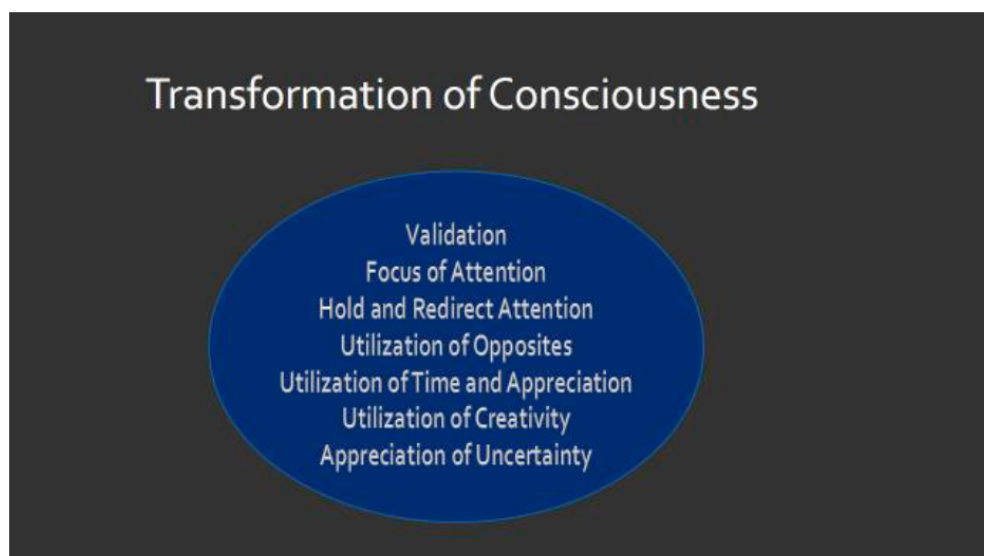


Figure 2: Organization of Erickson Resistance Protocol. © 2014 Bruce Gregory, Ph.D.

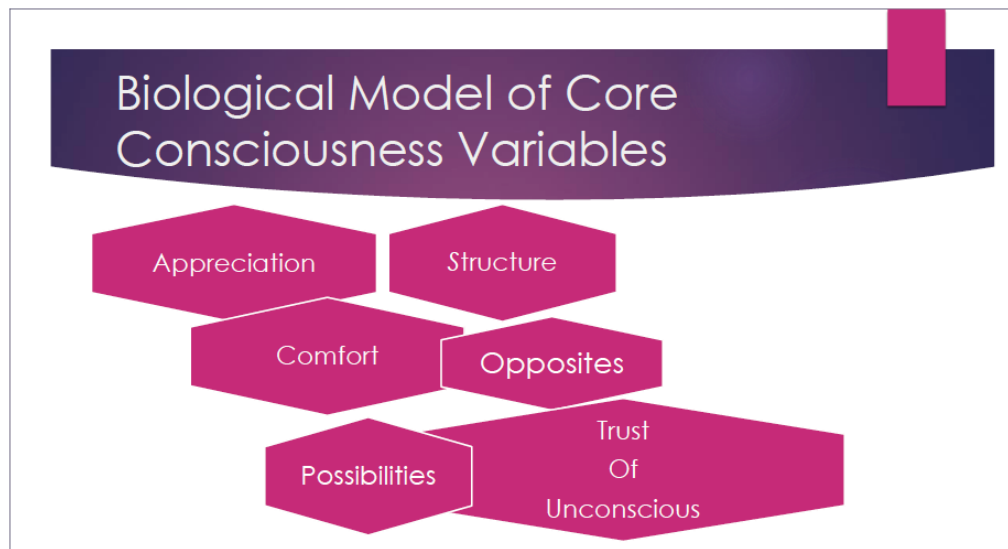


Figure 3: Biological Model of Core Consciousness Variables. © 2025 Bruce Gregory, Ph.D.

deep unconscious wishes to withhold the answer or to share the answer with your conscious mind are adequately protected and respected.

Now, to meet your needs, I am going to ask that yes or no question, and be prepared to be pleased to let your unconscious mind answer, and in doing so either to share the answer with your conscious mind or to withhold it, whatever your unconscious mind thinks to be the better course. The essential thing, of course, is the answer, not the sharing nor the withholding. This is because any withholding will actually be only for the immediate present, since the therapeutic gains you will make will eventually disclose the answer to you at the time your unconscious minds regards as most suitable and helpful to you. Thus you can look forward to knowing the answer sooner or later, and your conscious desires, as well as your unconscious desires, are the seeking of therapy and the meeting of your needs in the right way at the right time." (Erickson, 1958/ 1980, p.304)

"An unconscious mind response is different, because you do not know what it is to be. You have to wait for it to happen, and consciously you cannot know whether it will be 'yes' or 'no'. It does not need to be in accord with the conscious answer that can be present simultaneously in accord with your conscious mind's thinking. You will have to wait, and perhaps wait and wait, to let it happen. And it will happen in its own time and at its own speed." (Erickson, 1958/ 1980, p.305)

In the above Erickson demonstrated an appreciation of the consciousness of group theory by creatively permuting the polarity between the conscious and unconscious, the polarity between knowing and not knowing, and the quantum variables (time, space, motion, momentum, position, and

uncertainty) (Asher and Gross, 2006, du Sautoy, 2008, Gregory, 2011, 2015, 2017).

In terms of set theory, Erickson was appreciating and utilizing subsets of possibilities, which reflect the qualities of superposition in the quantum world, and subsets of transformational structures. In terms of the consciousness of appreciation, Erickson was appreciating all of the above, including the creative focusing of attention, one of the core variables in the transformation of consciousness, martial arts, and classical music theory (Dunham, 1991, Rossi, 2002). Erickson's choices, which were natural consequences of the quality of his consciousness of what he appreciated, reflected parallels with two major components of quantum physics; superposition, and the collapse of the wave function. The principle of superposition reflects a scientific and mathematical validation of the value and incorporation of 'infinite possibilities' in the structure of the universe and life. The collapse of the wave function is made through observation. Erickson's choices of where he focused attention functioned as the observation collapsing the infinite possibilities of choices that a professional can conceivable make during treatment in any given moment. In terms of treatment value, by trusting and utilizing 'infinite possibilities', attention is being given metaphorically to the polarity between hopelessness and hope, one of the core dynamics in the treatment of the depression mood disorders, and the catastrophic thinking component of the anxiety mood disorders.

Figure 4 below organizes the themes of appreciation, possibilities and structure from a biological perspective of atoms joining to become a molecule, or molecules (amino acids of consciousness) joining to become a complex protein of consciousness.

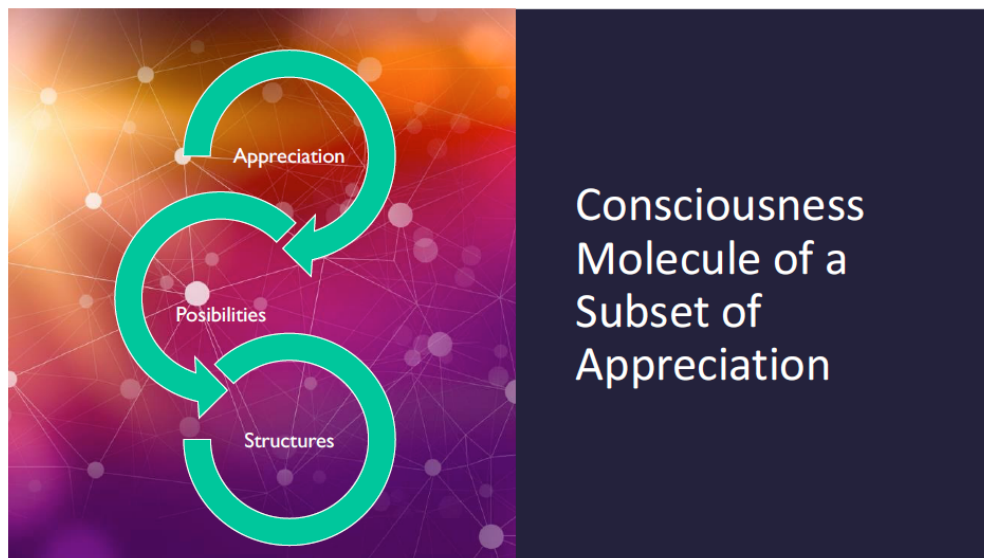


Figure 4: Consciousness molecule combining appreciation, possibilities and structure. © 2025 Bruce Gregory, Ph.D.

In this case, appreciation, possibilities and structure are the atoms.

Using set theory, a subset of the consciousness of appreciation is the consciousness of possibilities. A subset of the consciousness of possibilities is the possibilities of structure.

The quote below from the Erickson protocol is another example of the application of the appreciation of possibilities.

Now I don't really care if you listen to me with your conscious mind, because it doesn't understand your problem anyway, or you wouldn't be here, so I just want to talk to your unconscious mind because it's here and close enough to hear me, so you can let your conscious mind listen to the street noises or the plane's overhead or the typing in the next room. Or you can

think about any thought that comes into your conscious mind, systematic thoughts, random thought because all I want to do is talk to your unconscious mind, and it will listen to me, because it is within hearing distance even if your conscious mind does get bored. Just be comfortable while I am talking to your unconscious mind, since I don't care what your conscious mind does (Erickson, 1958/ 1980, p. 302)."

Figure 5 below organizes many of the primary subsets of appreciation in facilitating transformational healing processes.

Quantum Physics: Overview, equations, relevance to treatment and structure

Quantum Physics was developed in the 1920s by Schrodinger, Heisenberg, Pauli and Dirac. It was developed through the study of the behavior of the

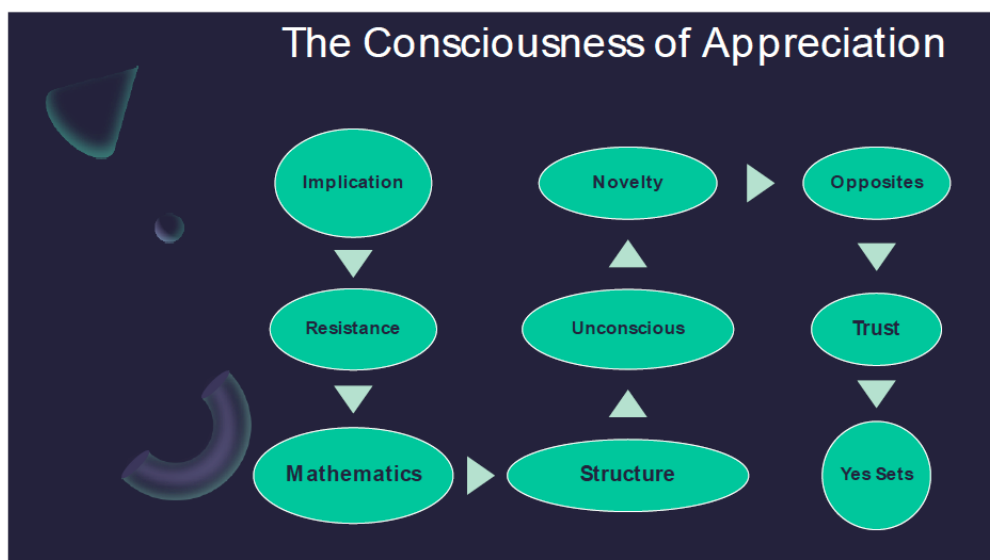


Figure 5: The Consciousness of Appreciation. © 2020 by Bruce Gregory, Ph.D.

electron, one of the fundamental particles of the universe, a carrier of the electromagnetic force, along with the photon. The equations developed identified the key variables and principles operating on the micro level of the universe, revealing main components of the structure of the universe at that level. Erickson's consciousness of appreciation had allowed him to utilize these variables and principles to creatively focus attention even though he never explicitly addressed the equations and what they inferred.

Figures 6-9 below are the main equations of Quantum Physics:

- Schrodinger Equation
- Heisenberg Equation
- Heisenberg Uncertainty Principle
- Dirac Equation

These equations provide the mathematical and scientific empirical validation of the value of the depth

and dimension themes, which place them as subsets of the components of *structure*. They contain the inferences that support building the bridges (Erickson and Rossi, 1979) to access deeper forms of comfort and healing. The Schrodinger equation describes the behavior of the electron as a wave, including the core variables reflecting the structure of the universe at the quantum level. The core variables are: time, space, position, momentum.

The Heisenberg Uncertainty Principle showed that the more one knew about the electron's momentum, the less one would know about its position. This equation mathematically validates the need for uncertainty, thereby providing permission for not knowing at the quantum level of depth. In addition, it reinforces the importance of momentum, supplying support for appreciating its relevance in terms of the containment of resistance, a prerequisite for the transformation of consciousness.

When seen as complementing the Schrodinger equation in treating the electron as a particle, the

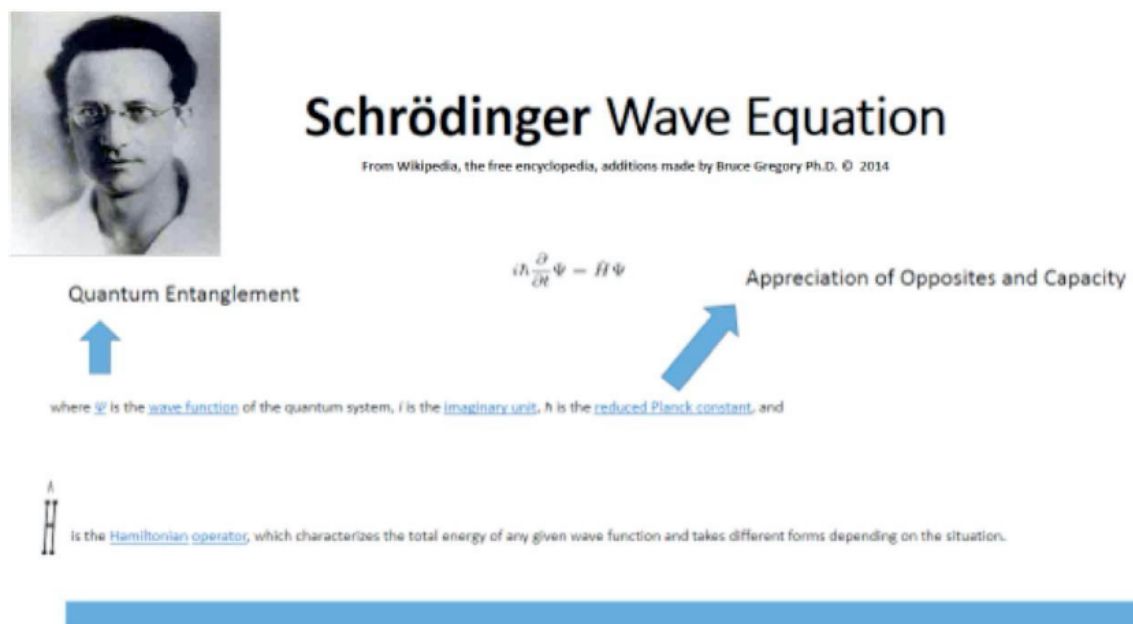


Figure 6: en.wikipedia.org/wiki/Schrödinger_equation, August 12, 2014 additions by Bruce Gregory Ph.D. © 2014.

Heisenberg Uncertainty Principle

Figure 7: en.wikipedia.org/wiki/Heisenberg_picture, August 12, 2014.

$$i\hbar \frac{\partial}{\partial t} \psi = \hat{H} \psi$$

Figure 8: Heisenberg equation.

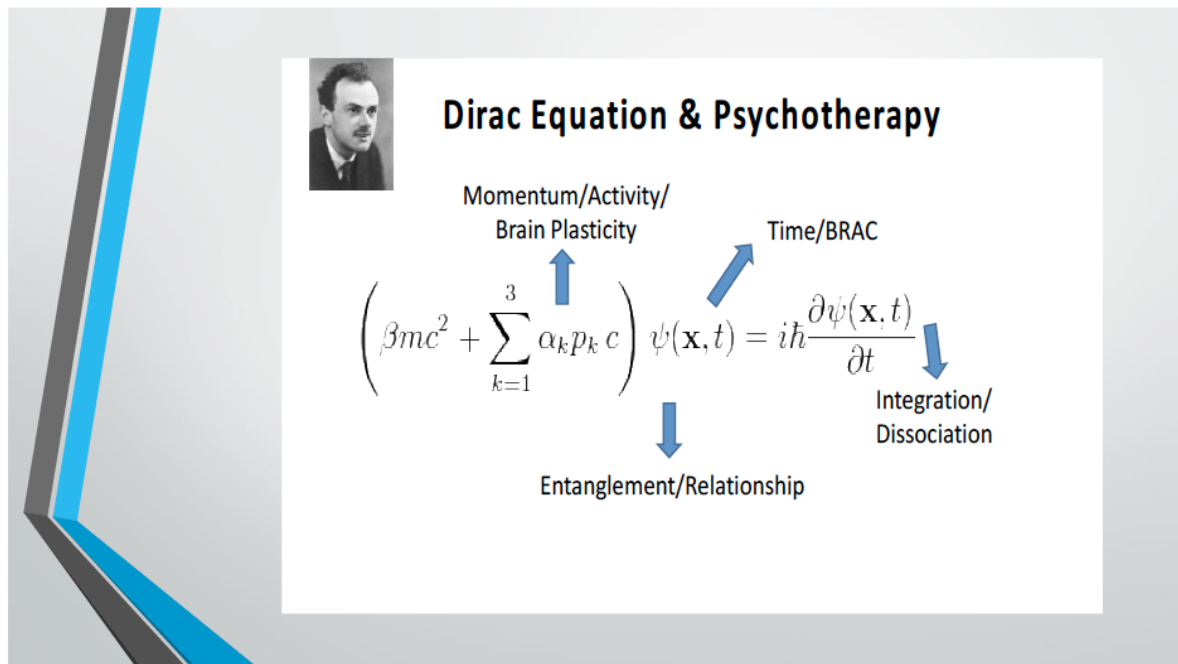


Figure 9: en.wikipedia.org/wiki The Dirac equation, additions by Bruce Gregory, Ph.D.©2014.

Heisenberg equation mathematically validates the capacity to address either/or issues of splitting, which often interferes with conflict situations with couples and organizations. When the professional trusts its value, it can be utilized to expand trust in the capacity to explore, and access creative alternatives to either/ or thinking at deeper levels.

The Dirac equation integrated quantum mechanics with special relativity, inaugurating what is now known as quantum field theory. In doing so, Dirac combined core elements of the structure of the universe from a macro portion (large) with the core elements of micro(small) portion of the universe. This was accomplished by integrating the Lorentz transformation utilized in Einstein's special relativity with Schrodinger's wave equation and by adding the momentum operator that would become so fundamental in Erickson's resistance protocol (Farmelo, 2006, Gregory, 2015). The Lorentz transformation was the mathematical validation that time was relative, depending on the frame of reference of the observer in situations containing uniform motion, not absolute as Newton had

claimed (Isaacson, 2006). The transformation showed that space and time were interdependent, and were connected to the speed of light, which was constant. This was a revolutionary breakthrough in the understanding of the structure of the universe and life. It affirmed, validated, and valued time, space, frame of reference and light as core variables in the structure of the universe. As such, it also inferred they were sources of comfort at the deepest levels. Further, it added two additional subsets to the set of all connections; time and space, and spacetime with light. By adding time into the equation, it showed there were four dimensions operating, not three as Newton had said. Through inference this made dimension another subset of the sources of comfort. Further, by integrating the worlds of the large and small into one equation, the Dirac equation created another opposite that could be employed in activity dependent gene expression. With this integration of the large and the small the role of depth in the structure of the universe became more validated, valued, and magnified. Many of the technological advances of the 20th century were made

from applications of the Dirac equation. These included: PET scans, lasers, MRIs, and semiconductors.

APPRECIATION OF INFERENCES

The equations of Quantum Physics in the above section identify the core variables and principles in the structure of the universe at the micro level. By doing so, these equations infer that these variables and principles, time, space, motion, momentum, position, superposition, uncertainty, and quantum entanglement are sources of comfort. Erickson's approach was driven by his appreciation of inferences, which he called the implied directive; The quote below reflects this appreciation.

“An understanding of how Erickson uses implication will provide us with the clearest model of his indirect approach to hypnotic suggestion. Since his use of ‘implication’ may involve something more than the typical dictionary definition of the term, we will assume that he may be developing a special form of ‘psychological implication’ in his work. For Erickson, psychological implication is a key that automatically turns the tumblers of a patient’s associative processes into predictable patterns without awareness of how it happened. The implied thought or response seems to come up autonomously within patients, as if it were their own response rather than a suggestion initiated by

the therapist. Psychological implication is thus a way for structuring and directing a patient’s associative processes when they cannot do it for themselves. The therapeutic use of this approach is obvious. If patients have problems because of the limitations of their ability to utilize their own resources, then implications are a way of bypassing these limitations.” (Erickson & Rossi, 1976, pp. 59-60).

When the consciousness of appreciation is applied to inferences, we can identify a number of inferences with respect to structure, structure’s role in the healing process, the possibilities of creatively focusing attention, building yes sets and response sets, and receiving, enjoying, and integrating comfort. The first group of these was connected to Erickson’s facilitation of yes sets with the patient. The yes sets implied that the patient was receiving, and this implied that the patient was receiving from a *network of structures*, was enjoying the receiving from the network of structures, and would over time, integrate the receiving through the support of more *networks of structures*. Further, receiving itself was important, had untapped value, and was linked to other themes of value integral to the healing process. The structures have been identified in detail (Gregory, 2011, 2017, Rossi, 1986, 2002).

The above further implied:

- There are potential yes sets for a variety of experiences.

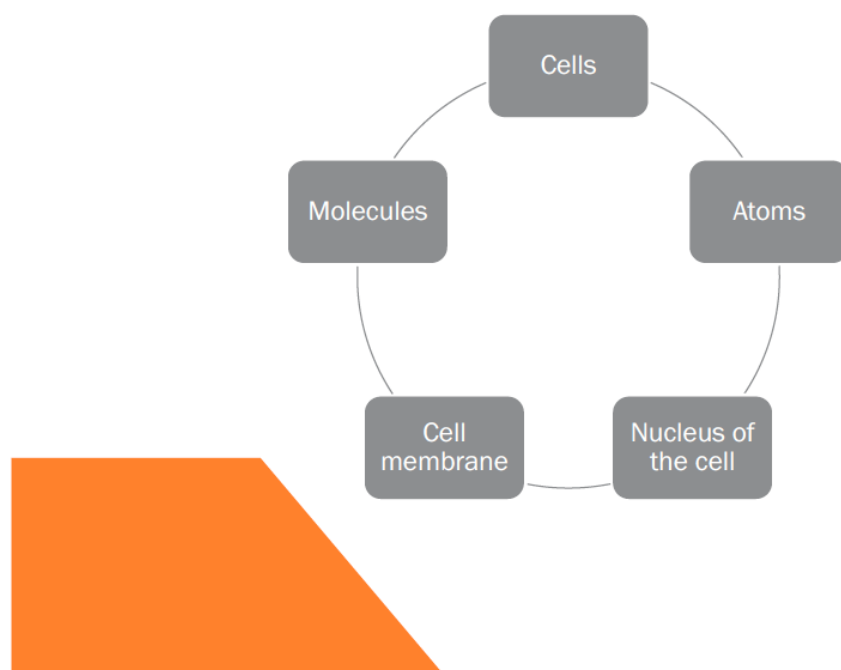


Figure 10: © 2020 Bruce Gregory, Ph.D.

STRUCTURE SUBSET: EXTERNAL/MACRO

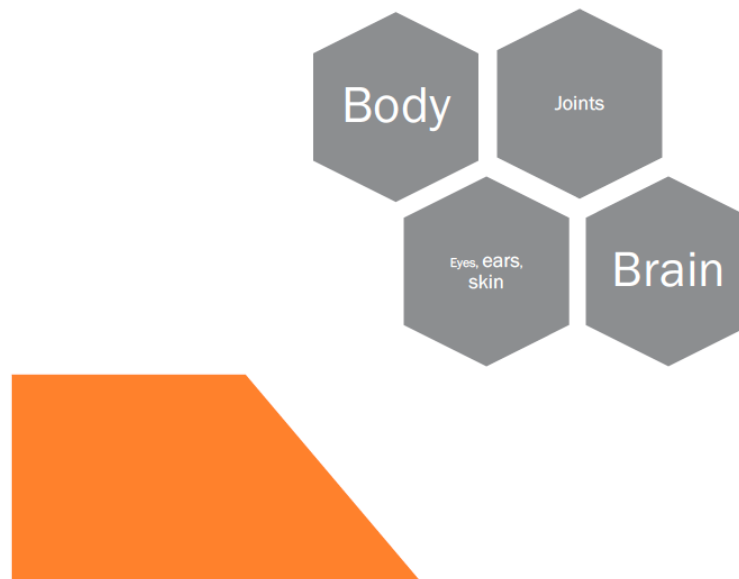


Figure 11: © 2020 Bruce Gregory, Ph.D.

- Capacity of unconscious intelligence is more than sufficient.
- Structure has significant value; for example, not just a house, but a large, special museum. Or, a large pharmacy with the best healing medicines.
- The need and value of time.
- Implication was a set with subsets.
- Vast possibilities for creatively focusing attention around themes.

Figures 10 and 11 below reflect some of the major physiological structures supporting the healing process.

Thinking in terms of set theory and group theory, we can reason that there is a superset of all inferences, which contains subsets, which are all, types of structures. One subset of inferences about structure is that there are *structures that support reasoning*. These structures for reasoning are vast and powerful, as evidenced by their utilization of the fields of mathematics and philosophy (Gregory, 2015, 2016, 2017, 2018, Heidegger, 1927, 1997, Kant, 1781, 1929). This further implies that reasoning is source of novelty, which implies *structures for dealing with novelty* (Gregory, 2015, Rossi, 2002, Ribiero, 2004, Squire and Kandell, 1999, intelligence for integrating the old and the new (Erickson and Rossi, 1979, Jung, 1916, Rossi, 2002), and structures that support intelligence. Figure 12 below Identifies the above progression of inferences.

Addition inferences include:

- Unconscious is a structure embodying intelligence, knowledge and capacity.
- Unconscious is composed of substructures (set theory/ subsets).
- Substructures can be combined creatively to creatively focus attention.
- Unconscious contain vast networks of structures designed for receiving.
- Receiving is dependent on time, and has stages and rhythms.
- Appreciation of structure and receiving can support the creative focusing of attention.
- Appreciation of receiving and time can support the increase of trust within professionals.
- Deepening the appreciation of structure can support more openings and possibilities.
- Openings and possibilities imply more novelty with respect to structure.
- Permission is a molecule supporting the appreciation of structure.
- Novelty is needed and has value.
- Appreciation of set theory and group theory support the utilization of structure in focusing attention.
- Appreciation and utilization of yes sets support the utilization of structure in focusing attention.

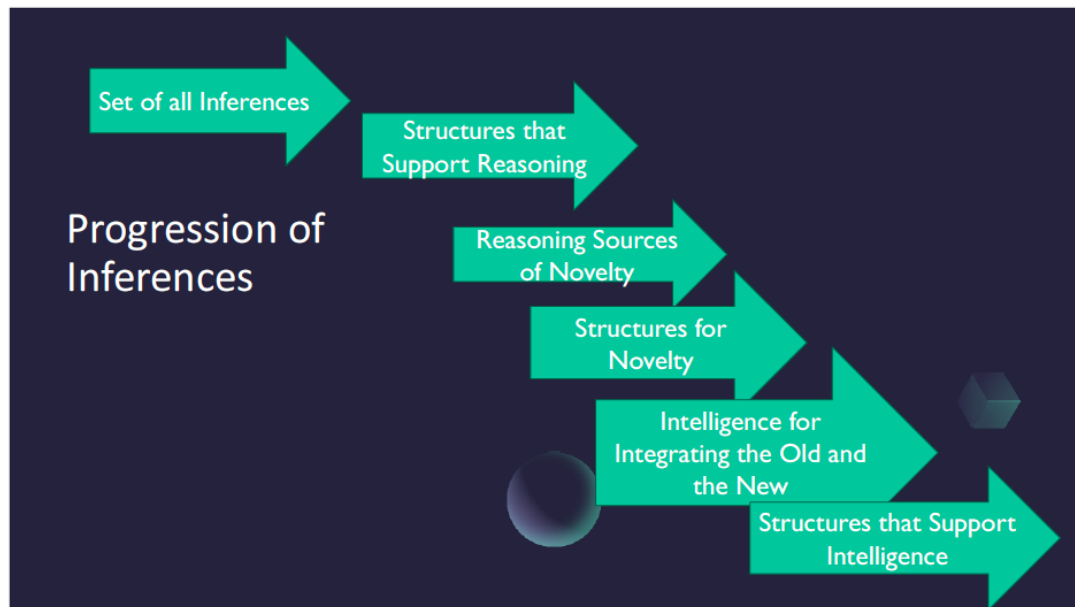


Figure 12: Progression of Inferences © 2025 Bruce Gregory, Ph.D.

- Reasoning about inferences reflects an appreciation of structures, and the role of structures.
- Hidden patterns revealed through mathematics are bridges to deepening appreciation of structure.
- Using set theory and group theory we get the limits of structure and the possibilities of limits.
- The possibilities of creatively combining various structures which implies the possibilities of healing.

RELATIONSHIP BETWEEN COMFORT AND STRUCTURE

Comfort can come in many forms, and have many sources. Comfort can be psychological, physiological, or spiritual. It can be healthy or unhealthy comfort. It can come from sunlight, iced tea, tea, food, sleep, shelter, touch, a hug, being held, interpersonal needs being met through being heard, empathized with, understood, or being validated as Erickson demonstrated in his resistance protocol. In addition, comfort can come from antibiotics, anti-inflammatories, braces, information, reassurance, tone of voice.... Sources of comfort include; the sun, the four forces, quantum variables, molecules, organs, cell, music, art..... or, addictive drugs, alcohol, shopping, porn....

The psychoanalytic approach stresses the comfort coming insight, while the psychodynamic approach stresses containment. The self-psychology perspective stresses mirroring and sensitivity. The cognitive behavioral approach emphasizes behavior change and clear, logical thinking, while the humanistic approaches

advocate for the honoring of feelings and their expression. In contrast, the Jungian and Ericksonian approaches stress the trust and utilization of the unconscious and its vast resources/structures in the treatment process.

Erickson was sensitive to, and appreciated that resistance and receptivity both implied the need for comfort (Erickson, 1964, Erickson and Rossi, 1979). When one reasons from a mathematical perspective and considers how Erickson's consciousness reflected an appreciation for the variables of the transformation process it becomes apparent that Erickson appreciated the role of the unconscious in providing comfort, the limitations of the conscious mind in providing comfort, and the importance of utilizing the polarity between the conscious and unconscious minds to focus attention.

Erickson deepened the trust in the unconscious to provide comfort in a variety of ways.

His level of consciousness supported his recognition and appreciation that the validation of resistance functioned as a transformer which turned resistance into receptivity. This implied that *receiving* was a core component of the healing process (Erickson, 1964, Erickson, Rossi, and Rossi, 1976, Gregory, 2015, Kandel and Squire, 1999, Kohut, 1977, Rossi, 1996, 2002), and that patients had substantial resources for receiving in the unconscious. Further implications with respect to receiving included;

- The value of where it was coming from (Rossi, 1986, 2002).
- The appreciation of the depth it was coming from (Loewenstein, 2000).

- Rhythm of delivery (Erickson and Rossi, 1979, Lankton and Lankton, 1983).
- Methods of transportation and providing (Rossi, 1986, 2002, Squire and Kandel, 1999).
- Resources for receiving, enjoying, and integrating (Erickson and Rossi, 1979, Rossi, 1986, 2002).
- Capacity of depth (Loewenstein, 2000, Squire and Kandel, 1999)
- Value of depth
- Value of focusing attention
- Consciousness for focusing attention

REVIEW OF STRUCTURE'S ROLE IN THE HEALING PROCESS

The appreciation of the role of structure in the transformation of consciousness has been recognized in a number of areas that utilize and reflect reasoning with respect to set theory, inference, and the appreciation of novelty with respect to the focus of attention, and the utilization of the polarity between the old and the new. A subset that represents the value and application of the appreciation of structure, the philosophy and practice of yoga, utilizes the appreciation of structure to support connection and focus with respect to time, space, and humility. The practice of the asanas or postures supports the transformation of consciousness through the utilization of breathing, and gentle opening which contain multiple inferences that validate and nurture the trust, patience, balance, gentleness and receiving components of consciousness. (Feuerstein, 1980, 1989, Iyengar, 2003, Lasater, 2000). The practice of Tai Chi supports the transformation of consciousness by complementing harmony of structure around the joints, working the focus of attention from the ground up, which is represented by the term 'rooting', with a harmony of motion that integrates the appreciation of opposites and balance. This is enhanced by an appreciation of receiving, gathering, and yin aspects of experience. The yin perspective emphasizes the capacity of softness as a transformer. These aspects of experience infer the appreciation of the *resource networks for receiving and opening* as subsets for comfort, healing and the transformation of consciousness (Gregory, 2012, 2018, Jung, 1916, Man Ch'ing, 1985, Rossi, 2002, Yang, 1996). The theory and practice of Tibetan Buddhist meditation reflects an appreciation of the role of structure with respect to experience, the origins of experience, and the processing of experience as a foundation for transforming consciousness. The logical foundations for this are reflected by the *inferences* utilized in Nagarjuna's *Madhyamikai-karika*. These inferences are encapsulated in Nagarjuna's concept of dependent

origination. Dependent origination describes the structure and origins of experience, culminating in the realization of the fundamental role of dependency in the generation of experience. Its primary objective is to support the transformation of consciousness by redirecting the focus of attention away from the ego's delusions and obsessions toward the primary sources of experience, time and space. This approach validates and appreciates structure, and implies that the *appreciation of structure* can be applied in the transformation of consciousness (Garfield, 1995, Gregory, 2015, 2017, Merrill-Wolff, 1973, Tulku, 1979).

The novelty components in the above orientations are reflected by the creative focusing of attention on parts of the body, and the connections between different parts of the body. This is done in conjunction with breathing, focus, and visualization to access comfort, and connect with spiritual aspects of experience, which facilitates the transformation of consciousness in the process. From the perspective of set theory, the parts of the body, which are expressions of *structure*, and the connections between them can be seen and understood as resource subsets/sources for comfort and the transformation of consciousness. (Ash and Gross, 2006, du Sautoy, 2008, Matthews and Butler, 2011, Rossi, 2002, Yang, 1996).

In the contexts of set theory and inference, research in neuroscience has supported the appreciation and value of structure from a variety of directions and levels. At the organ level the structure and processes of the hippocampus that are so fundamental to activity dependent gene expression and the resulting transformation of consciousness were identified in detail by Squire and Kandel (Rossi, 2002, Squire and Kandel, 1999). At the molecular level Loewenstein (Loewenstein, 1999) illustrated how the structure of adenylyl cyclase was critical to the sharing of information. Penrose and Hameroff highlighted the role of structure in relation to the role of microtubules in consciousness processes (Penrose and Hameroff, 2011). Rossi's discussion of the different types of genes, and their temporal parameters inferred the value of structure and its potential application through an appreciation of set theory (Dunham, 1991, Gregory, 2015, Rossi, 2002).

Rossi identified in great detail, on a number of levels, the varieties of structures within the unconscious that are sources of comfort, problem solving, and healing. Some of those structures are reflected in Figures 10 and 11 above (Matthews and Butler, 2011, Ribiero, 1999, Rossi, 1986, 2002, Squire and Kandel, 2000). These structures operate on a variety of levels of depth, and provide a different type and quality of comfort based on the their individual

structure. A cell can provide protection, energy, and a vast supplies of molecules. The molecules themselves provide different comfort and support the cell based on the combination of atoms making them up. The structure of molecules provide comfort whether it be an antibiotic, red blood cells, or tea. An expanded list of structures is below to support the application of curiosity to the *possibilities of structure*.

- Equations describe structure
- Bridges
- Windows
- Doors
- Geometric structures
- Mathematical structures
- Atoms
- Molecules
- Planets
- Galaxies
- Organs
- Glands
- Brain structures
- Bones
- Houses
- Museums
- Conversations
- relationships
- Focus on structure
- Structure as a doorway/bridge

When the trust of structure is deepened, complemented by the appreciation of its value a new consciousness molecule is created and built. This molecule, active as a the result of a building of a yes set (psychological level) and a new nerve pathway (biological level as a consequence of

The Kreb cycle and activity dependent gene expression), then guides the focusing of attention either directly through the theme of structures, or indirectly through indirect associative focusing (Erickson and Rossi, 1979, Lankton and Lankton, 1983, Rosen, 1982. When the unconscious recognizes the theme, then searches can be activated that explore the possibilities of problem solving, learning and healing. Figure 4 on page 10 reflects the consciousness molecule.

Figure 13 above is one example of how thinking in terms of combinations of structures can be a creative way to facilitating novelty, activating unconscious search processes evaluating the potential of these possibilities to generate new forms of comfort.

Deepening of the appreciation of structure with applications.

This section will focus on the integration of:

- The appreciation of depth
- The appreciation of dimension
- The focusing of attention
- The structures of experience
- How quantum physics provides a template for deepening trust in the focusing of attention and the utilization of inferences.

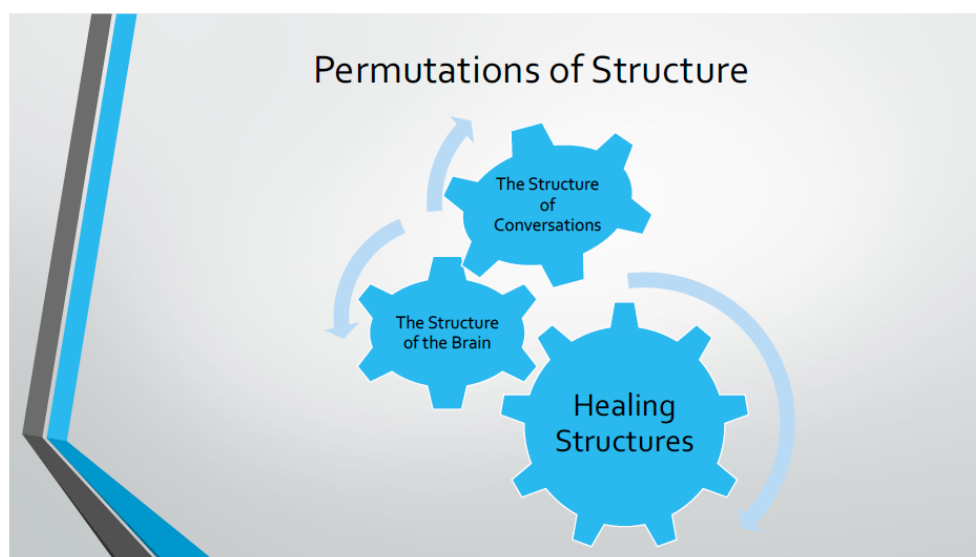


Figure 13: Permutations of Structure ©2017 Bruce Gregory, Ph.D.

Depth relates to the third dimension, height. In terms of opposites, this can mean above, or below. Examples of above could be the helicopter view of two hundred or five hundred feet above ground, the view from an airplane at 30,000 feet, or the view of the earth from beyond the atmosphere. Below, varieties of depth reflected by structures include; being inside the muscles covering bones, being within the bone marrow, being inside an organ like the kidney or liver; being inside a cell; being inside any protein molecule like hemoglobin, serotonin; being inside the nucleus of the cell, or the nucleus of an atom. All of these structures provide a different kind and quality of comfort.

Erickson provided a number of templates for going deeper, deepening trust and appreciation.

One of these was the phantom limb case (Erickson and Rossi, 1979) in which he used geometric progression.

Additional examples included;

- Relaxation, comfort, enjoyment delight
- Response training
- Levels of trance

The relaxation, comfort, enjoyment, delight progression identified different depths of receiving, implying resources/structure with capacity for achieving depth, resources/structure for internalizing safety, and resources/structures for building more trust in the unconscious, which has its own networks of vast structure that contain both intelligence and knowledge. Response training included behaviors like hand levitation, numbness or heat in the hands, catalepsy, and changes in heart rate. These responses indicate an achievement of a second level of trance depth. Behaviors indicating the third, and deepest level of trance, include; age regression, altered perception of time and space, and dissociation. As with other themes, the fundamental requirement for the utilization of the themes of depth and dimension is the building of a yes set for each so there is a connection with the unconscious that the theme in question has value.

Depth, from the perspective of implication, and the consciousness of appreciation, implies dimension, the value and possibilities of reasoning in terms of dimension (Abbott, 1885), capacity for receiving and experiencing safety, and vast, almost unlimited opportunities for creatively focusing attention to facilitate novelty. These include considering and exploring:

- The structure of dimensions
- Are dimensions subgroups of space

- How one thinks about dimensions, understands them
- How dimensions are the sources of comfort
- How dimensions house the comfort
- How dimension are subsets of structure, and subsets of the sources of comfort
- What kinds of structure are you drawn to?
- Have you considered structure in terms of depth?
- Have you considered structure in terms of complexity?
- What is your relationship with receiving?
- What parts of you do you consider your most effective receivers?
- Have you explored your rhythms for receiving on paper, imagined them, or discussed them with others?
- How do deeper structures relate to more depth, directly or indirectly?
- What structures does the unconscious employ to explore structure?
- Is structure more related to a molecule, or an atom, or a force?
- Have you ever wondered whether structure can be seen metaphorically as gates to a city, entering a house/doors, or going to new world/atmosphere, or even a combination of all three, or other possibilities like windows, stairs, or bridges?
- Have you considered the distinctions between healthy vs. unhealthy structures?
- Have you explored the consciousness of structure, or the structure of consciousness?

Receiving, opening, and being in terms of structure, appreciation and inferences.

Learning, transformation of consciousness, and healing are dependent on receiving which is ultimately consolidated in the hippocampus through processes of activity dependent gene expression (Kandel and Squire, 1999, Ribiero, 2004, Rossi, 2002). While receiving begins with the surface structures' receptors; eyes, ears, nose, skin, the majority of the receiving is done in the brain, organs, molecules and cells. These processes are initiated and facilitated in mind-body hypnotherapy by the primary variable of the *focus of attention*. The two primary variables in the focus stage

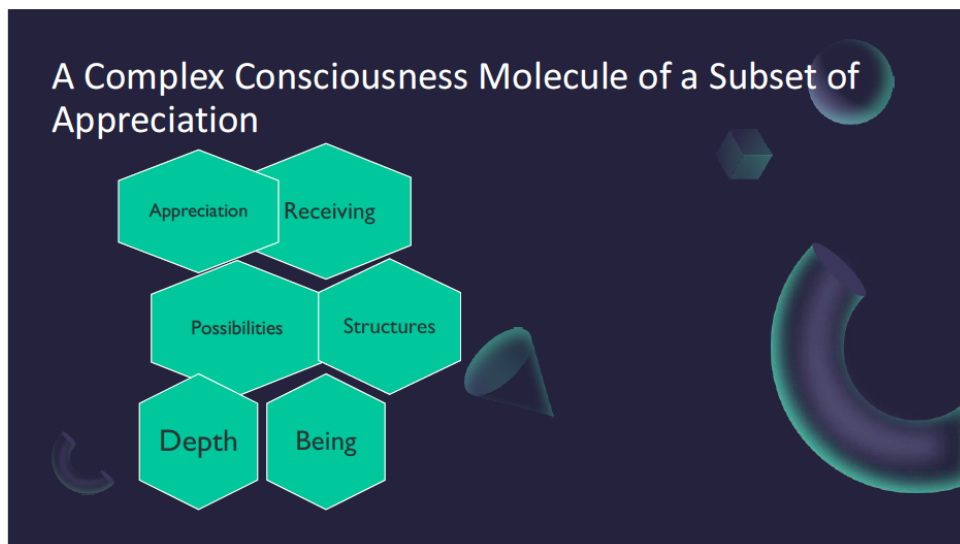


Figure 14: Complex Consciousness Molecule ©2025 Bruce Gregory, Ph.D.

are the object and direction of the focus. Erickson was the master of focusing attention creatively to interrupt chronic, dysfunctional patterns, while facilitating novelty and the accompanying unconscious searches. Musical training, sports, martial arts, and meditation all appreciate the fundamental role of the focus of attention.

When the quantum concept of superposition(infinite possibilities) is recognized, trusted and appreciated, it can be applied creatively by utilizing the themes identified in Figure 14 below.

These themes can be combined creatively like Erickson did in the resistance protocol, but in this case the primary theme is *receiving*, which *implies* opening, structure, depth, trust, possibilities and being. This starts with recognizing and validating the process of opening, and the structures/resources that support the

opening. Connected with this is recognition and exploration of the possibilities for opening which can include considerations of:

- Time
- Depth
- Direction
- Proportions, Addition, Multiplication and Exponentiation
- Fundamental sources of receiving within the quantum level

An example of a possible progression is in Figure 15 below.

Receiving becomes a bridge to focus attention, connect with the other themes, and then connect the themes with each other. This process becomes an

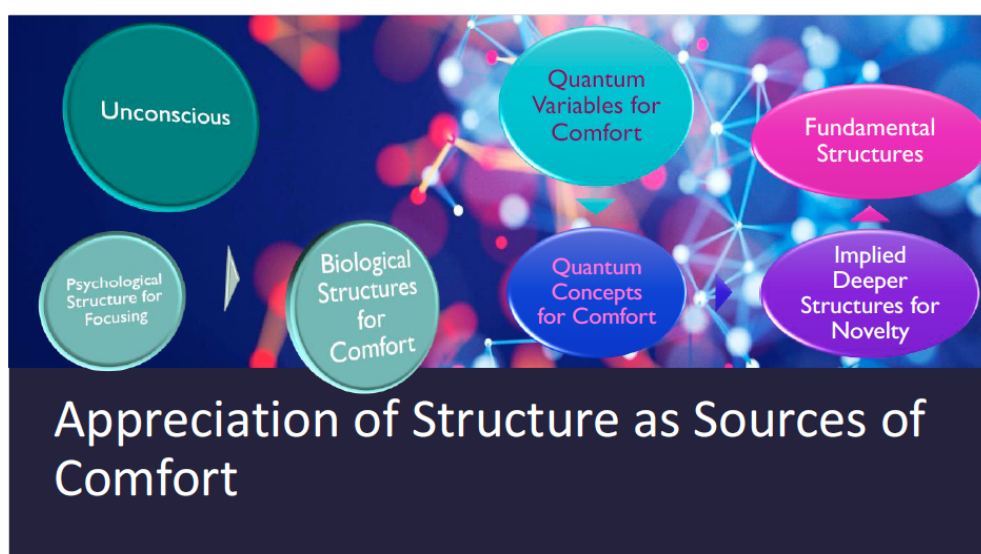


Figure 15: Progression of receiving © 2025 Bruce Gregory, Ph.D.

appreciation and application of the quantum concept of entanglement. The progression of these connections can be thought of as a process of opening a safe, which in this case contains comfort. Receiving implies *permission to be*, not do, which raises the question what unconscious resource networks attend to the healing of the imbalances of the opposite of pressure/permission. Further implications are found in the questions;

How much time is needed?

How much repetition is needed?

What are the possibilities for creative repetition?

The progression of implications continues with the possibilities contained within the exploration of the being state. This exploration is a function of there being a strong yes set for being, and the state of being. One of the consequences of the unconscious exploring this state, it's possibilities, the sources of it, and its relationship to time is learning to value the state itself.

A second consequence is the building of a bridge to time's middle position, the present. This bridge can provide an opening to exploring the present, and discovering what is in it, and what is connected to it. An even deeper implication is the possibilities for addressing the opposite of the I/we polarity, which is the basic polarity embedded in the quantum entanglement issue.

All of these explorations fall within the category of subsets of possibilities for learning, receiving, and healing.

Summary of core Implications in terms of progression are below.

- The appreciation of the need for validation supports the transformation of resistance.
- The appreciation of reframing supports the asking of questions that activate unconscious.
- The appreciation of opposites supports facilitation of unconscious searches.
- The recognition of receiving implies trust, safety, and capacity, nurturing curiosity.
- Curiosity can be a bridge to exploring and connecting with the structures for receiving.
- Receiving implies the need for time, and worthiness for time.
- Receiving implies need for being, and value of being state.
- Receiving implies connection to sources of receiving.
- Receiving can be a bridge to connecting to, and exploring being state.
- Receiving implies structures for being.
- Being implies knowledge for being, and capacity for being.

Figures 16-20 summarize the core sequences for applying the integration of Quantum Physics and Mind-Body Hypnotherapy. The categories covered are:

- Consciousness

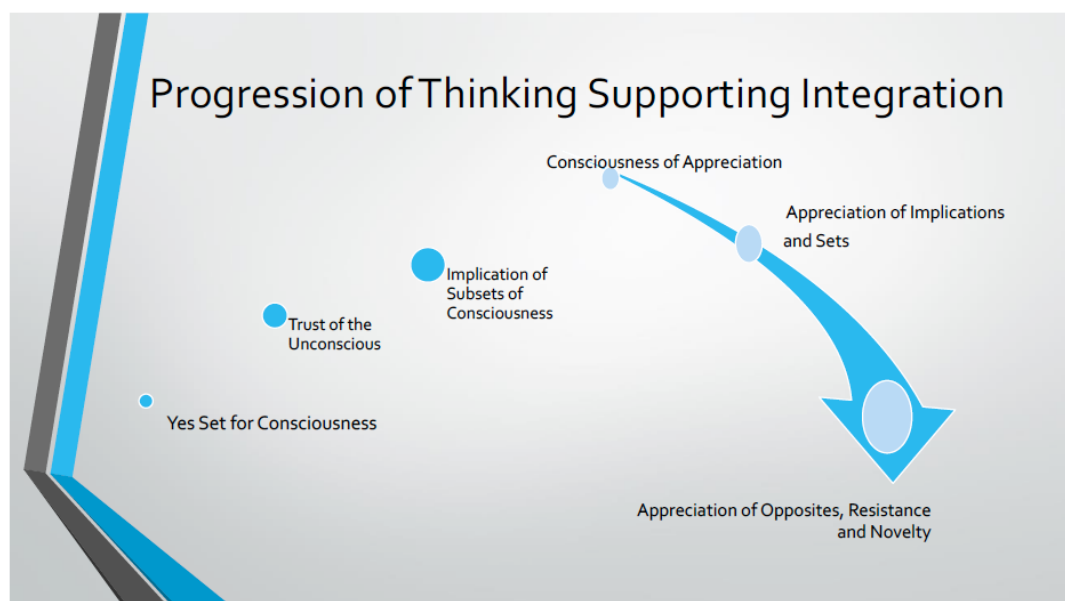


Figure 16: Progression of Thinking Supporting Integration © 2023 Bruce Gregory, Ph.D.

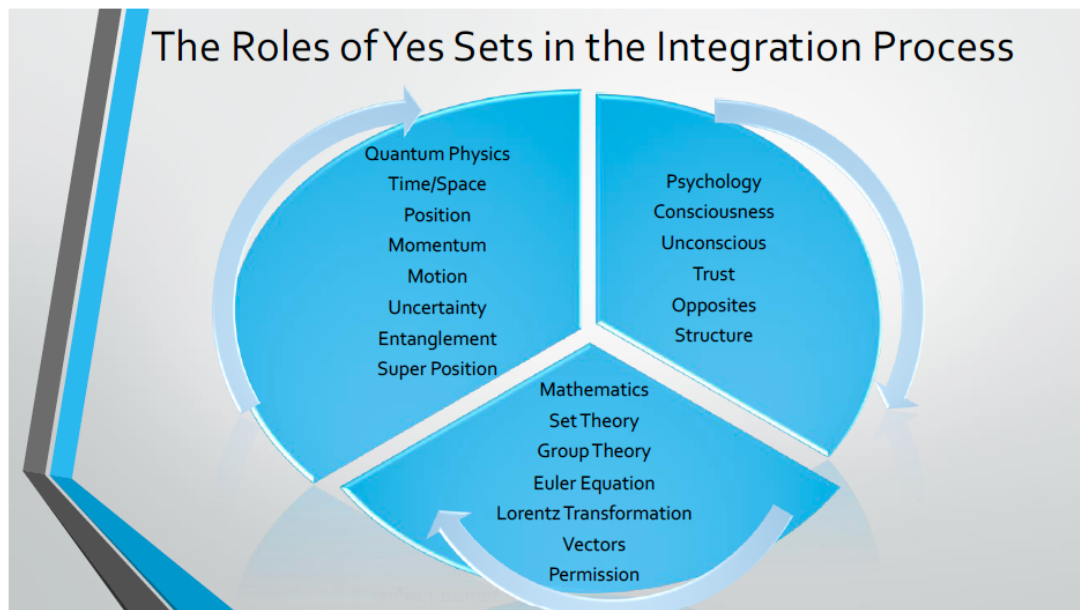


Figure 17: The Role of Yes Sets © 2023 Bruce Gregory, Ph.D.

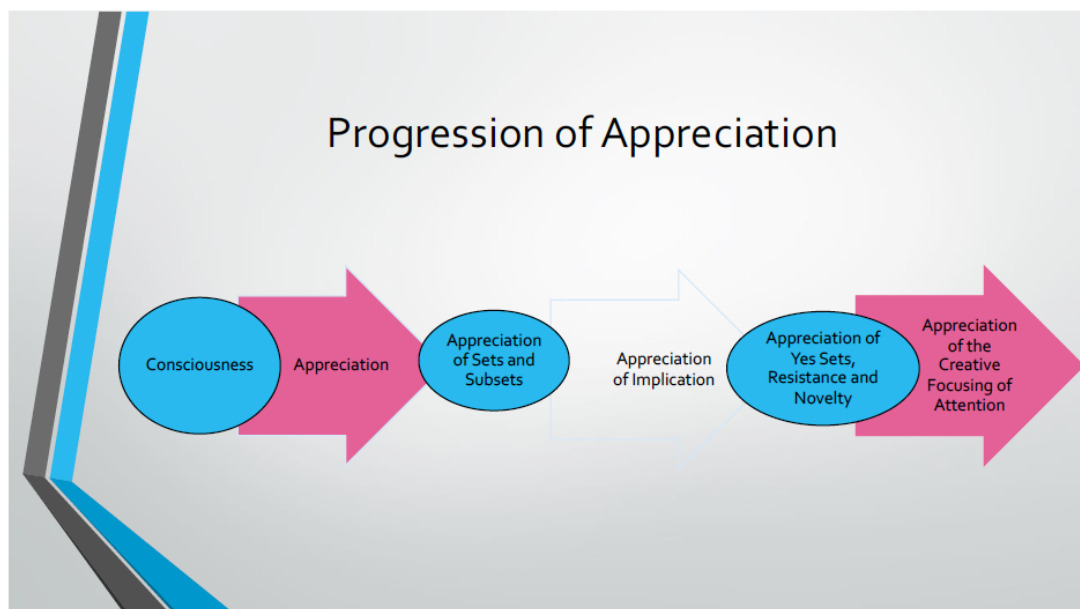


Figure 18: Progression of Appreciation© 2023 Bruce Gregory, Ph.D.

- Yes Sets
- Progression of Appreciation
- Consciousness of Structure
- Appreciation utilized to focus attention

SUMMARY

This article has explored how the deepening of the appreciation of structure can be complemented by the depth of the appreciation of inferences to creatively focus attention in the context of facilitating transformation of consciousness and healing processes. The relationship between the Erickson

Resistance Protocol and Quantum Physics is highlighted, complemented by a detail exploration of how the consciousness of appreciation is applied in the creative focusing of attention. Numerous examples are provided reflecting Erickson's utilization of set theory and group theory in applying the variables and principles of Quantum Physics. The appreciation and application of yes sets for structure is reinforced by the exploration of the roles of depth and dimension in creatively focusing attention.

CONFLICTS OF INTEREST

The author declared no conflicts of interest.

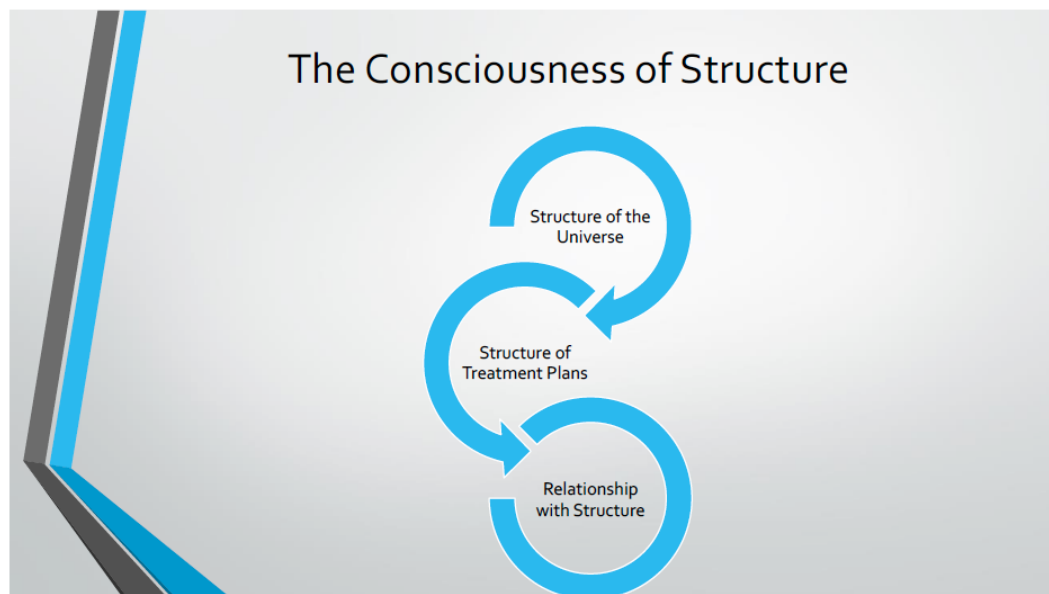


Figure 19: Consciousness of Structure © 2023 Bruce Gregory, Ph.D.

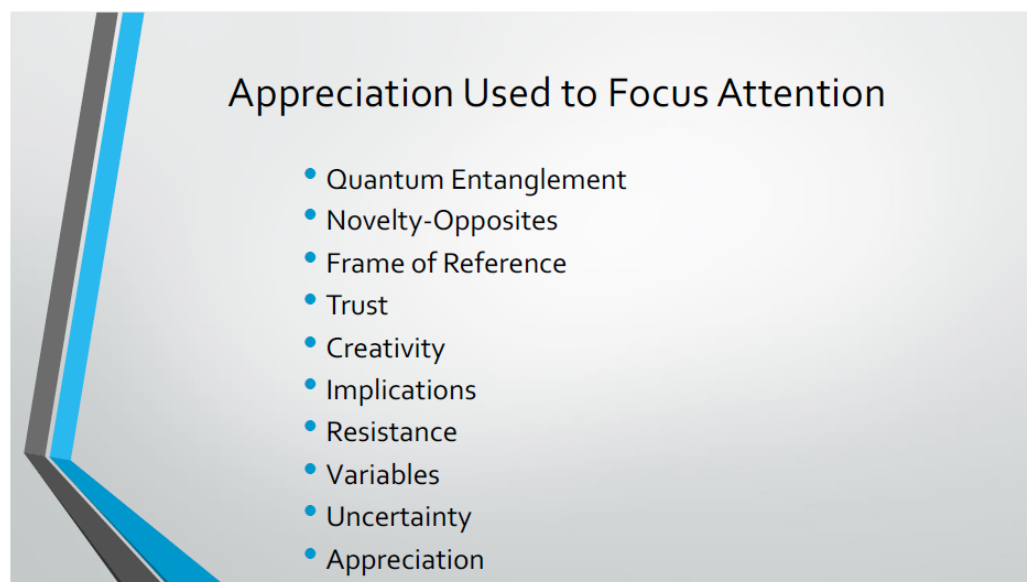


Figure 20: Appreciation used to focus attention © 2023 Bruce Gregory, Ph.D.

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<https://doi.org/10.12974/2313-1047.2026.13.01>

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