

BIOTHEOLOGY, IMAGERY AND HEALING

by Gilah Yelin Hirsch

ABSTRACT

Already a profound questioner at the age of ten, Hirsch wrote to Albert Einstein asking how he could reconcile being the greatest scientist in the world, while, as she had read, believing in the wrathful god of the Old Testament. His reply included this advice: *“Try to form your opinions always according to your own judgment.”* This simple yet startling exhortation became the guiding meter of her life.

Growing up, she continued to be mystified by the incongruities she observed around her, and developed an interest in science while (quite by accident) becoming an artist. Her fascination with these two supposedly very different disciplines led to an ongoing inquiry into the relationship between the two, and ultimately to her understanding that the *artist brings abstraction into form*, while the *scientist brings form into abstraction*.

Couched in the disciplines of anthropology, psychophysiology, psychiatry, psychoneuroimmunology, philosophy/theology and art, this article focuses on imagery as a powerful vehicle for physical and emotional healing. Her blending of science and art reveals existing relationships between form in nature, form in human physiology and behavior, as well as the forms that are present universally in all alphabets. Drawing from her years of solitary wilderness sojourns, biomedical and neuroscientific research dealing with mind/body patterning, as well as her experience in diverse world cultures, including Tibetan Tantric visualization and Cabala, Hirsch addresses the hardwired wisdom of the body as the repository of intuition and intrinsic knowledge – leading toward health and behavior benefiting the greater good.

Additional high-resolution images of Hirsch’s paintings can be seen at www.gilah.com

Keywords: biotheology, Cabala, Hebrew, spirituality, divinity, science, art, Einstein, painting, mysticism, bodhicitta, calcium, healing, feminist art, illusion, nature, pattern, alphabet, Dalai Lama, tantric, Tibetan, thigles, interdependence, white spheres, DNA, aurora borealis, right action, visionary art, form

I was a questioner from earliest childhood. At six I was already writing and publishing essays with titles like "Enigma" in the four languages of my childhood: Yiddish, Hebrew, English and French. These pieces dealt with questions such as "we are at the height of civilization, so why are we still dealing with the problems of love, food and shelter?" I was mystified by the fact that we were so smart, yet so stupid. To continue the multilingual education, I was sent to the Jewish Peretz School, a parochial elementary school in my birth city, Montreal. The school days were structured so that half the day was English and French, the other half in Yiddish and Hebrew. I studied the Torah in Hebrew, but we were not permitted to speak about it in that sacred language. We discussed the Torah in Yiddish. One day, when I was about eight, I asked my male orthodox Torah teacher, "Although the names and pronouns of God are written both as male and female, as well as singular and plural, why do we only talk about 'he'?" My teacher walked down the aisle, grabbed my hair, threw me out, and I was never allowed back into the class.

The incongruity between what I was taught and my reality perplexed me. I found no correlation between text and context, and I was unable to make sense of the "revelations" of the Torah with the abysmal realities of my life. My father, a brilliant scholar, was an invalid from the time that I was eight. Over a period of eight years he lost his body and speech due to complications of a car accident. My mother, who was a teacher, poet and author, was renowned and admired in her community, yet was physically and verbally abusive to both my father and me. Most of my relatives were very ill; there were always financial worries.

By the time I was ten years old, I had read about Albert Einstein being the greatest scientist in the world. I learned that he was Jewish and that he believed in the God of the Old Testament. Seeking an answer to my deep disturbance, I wrote Professor Einstein a letter asking how he could reconcile being the greatest scientist in the world and also believing in the God of the Old Testament, who not only allowed but created wrath and suffering, anger and war. I received a reply

within a week, both envelope and letterhead hand-embossed and slightly askew. On February 24, 1955, Albert Einstein typed:

"Dear Gilah,

Thank you for your letter. Try to form your opinions always according to your own judgment. You have shown in your letter that you are able to do so.

With kind regards,

Sincerely,

Albert Einstein."

and signed A. Einstein

He died less than two months later.

This was not exactly what a ten-year-old wanted to hear. I had hoped for a more pointed answer. But as my life unfolded, I realized these were the wisest words I had ever received throughout my life. This letter became the guide of my life, and this is what I hope to teach. "*Try to form your opinions always according to your own judgment.*"

Had I not had this early instruction from the "smartest man in the world," I cannot say that I would have continued to engage life as I have. "*Form your opinions always according to your own judgment.*" If you perceive something differently from the norm, examine it. Your truth may have viability; the history of civilization is composed of people who have formed their own truths.

I became an artist by accident. My childhood career plans consisted of becoming both a writer and psychologist. I left home at 17 after one year at McGill University in Montreal, continued my education at the Hebrew University in Jerusalem my second year, and married during the third year which was spent half at Sir George Williams University (now Concordia) in Montreal, and the second half at Boston University. I arrived in California to become a student at UC Berkeley in 1964 and had the privilege of being at the center of a changing world. My student life was one of protests *against* the Vietnam war and *for* free speech, while standing for hours in rain or shine on the steps of Sproul Hall; being tear-gassed by the violent Oakland police,

and preventing troops from going to Vietnam by lying on the railroad tracks in Albany (near Berkeley). I was also most interested in the new psychologies as well as the new physics that penetrated the academic community. I had a job at the time as a stringer (art reviewer) for Art News, an international art magazine. I felt that I was being a hypocrite by criticizing work that I did not practice. I took several studio classes and discovered yet another world in which I immediately created unique imagery and began exhibiting my work.

I graduated from UC Berkeley with a BA in medieval history, art history and studio art. My then husband and I both applied to graduate schools. I applied to Stanford in the Clinical Psychology PhD program as well as to the MFA program at UCLA. It was the time of “follow your man,” and while I was invited to both universities, he decided on UCLA. Thus I accidentally became an artist. Even though I was not the kind of artist who had been making art since childhood, and had only a few art classes at Berkeley, by the second year of graduate school at UCLA I was already showing my paintings in the Los Angeles County Museum.

My interest in science continued, and I questioned the relationship between the artist and the scientist. Art emerges from a synthesis between the skill of the artist and the properties of the medium. The scientist works in a similar fashion (Figure 1). The artist knows all phenomena are interconnected in a matrix of light and space; so does the scientist, who also investigates additional qualities of valence, chaos, and quantum. The artist observes natural processes under controlled situations like plein air and the studio; the scientist works under stipulated conditions in nature or in a laboratory. The artist uses frequencies to create illusions of reality, as does the scientist. The artist finds patterns of behavior in natural phenomena, such as the occurrence of seemingly random patterns – for example, alphabetic morphology in nature. The scientist finds patterns of behavior in natural phenomena from electrons to galaxies, and studies the effect of valence from atoms to galaxies. Both use imagination, visualization, and perfect their execution. For the artist the criterion is beauty, and for the scientist, elegance.



Figure 1

The difference is that the *artist brings abstraction into form*, while the *scientist brings form into abstraction*. This was understood by both Leonardo da Vinci and Thomas Jefferson. Earlier, during the Middle Ages, anyone who knew anything, knew everything, and was called a Natural Philosopher. The Industrial Revolution forced streamlining into discrete fields. This compulsory specialization catalyzed an exponentially narrowing vision. While we in the western world may have become technologically more adept, we became generally ignorant and lost the ability to appreciate holistic knowledge while concentrating on tiny portions. It was not until the 1960s, when eastern philosophy became more widely known in the western world, that new attention was paid to older, far-reaching knowledge. The connection between quantum physics and mysticism was understood – and east and west were newly, but tentatively, united.

While artists use media to layer veils of light and shadow to *produce* illusions of form that have

dimension, reflection, refraction and the presence of substance, scientists *explain* the presence of substance by measuring illusions of dimension, reflection, refraction, evident in a matrix of frequency. We complement and need each other.

I began painting seriously at UCLA in 1968, layering light, form, time and space (Figures 2 – 4). By the end of that year, I wanted to conjure concrete form. In painting something as traditional and simple as “still life,” I realized that there is nothing still in life. (*No Exit*, Figure 5). As soon as there is a relationship between any two objects, there is an unstillness, friction, and tension, which is necessary for life. (Creativity is also sparked by psychic tension). Mundane foodstuffs became anthropomorphic in my mind, and I thought of certain ordinary cooking ingredients for stew as the Children of Israel walking across the desert (*Exodus*, Figure 6).

In the beginning of the 1970s, I became politically active. I was involved as one of the founders of the first feminist art movement, the Los Angeles Council of Women Artists, that became the “mother” organization of all other women artist groups. I used everyday foods of the woman's world, such as tomatoes and eggs, as metaphors for women who were trapped by their biology (*The Egg and the Id*, Figure 7). We have made a great deal of progress; otherwise I would not be standing here. The tomatoes became symbols of all of that juicy ripeness and intelligence that was trapped by our biological “ceiling” (*House Arrest*, Figure 8). As an art historian, I admired the medieval images of the Virgin and the *putti* (Italian, *putti* - baby angels) flying over her. I transformed the traditional Virgin into a punch bowl, and the *putti* became peaches (*Miracle of the Peaches*, Figure 9).

I worked with scale and context and rearranged every day food to create memories or associations to an event (*Dante's Centrifuge*, Figure 10). Continuing to alter scale and context, I began to figuratively refract the space to show distortion that might occur if a piece of glass were to be placed over a section of the image (*The Great Pumpkin*, Figure 11). Similarly, I could paint a

“normal” banana split a thousand ways and it would grow all the more tempting and delicious (*Split Banana Split*, Figure 12).

With a growing ability to create illusions, I was confronting the nature of reality. As I grew more facile with the medium, I could present and superimpose various images and qualities of realism. This led me to believe that if this is possible visually, then certainly it is possible to mentally hold various opinions simultaneously, all having validity and truth (*Cool Drool*, Figure 13). If I could create them, I could also refute them – and I could create the illusion of images peeling right off the edges of the artwork (*Flapapple*, Figure 14 and *Mammoth*, Figure 15). I could invoke an image, discard it, and re-invoke it. It became clear that all that I had thought must now be reconsidered. I began to illusionistically curl the image inward, imagining that the canvas had become a metaphor for revealing personality (*Chrysalis*, figure 16 and *Four Square Peeler*, Figure 17).

It was around that time (1970) that I went off to the wilderness for the first time, the beginning of a pattern in my life. That first wilderness experience was marked by a near death experience. I had started from Los Angeles on a warm, sunny day in early December. By the time I reached the high Sierras, I was caught in a blizzard and my van refused to go one inch further when it stopped in a remote location in the middle of nowhere. After the first night in the freezing van, I knew that I had to leave it or I would freeze to death in that steel icebox. With the blizzard still raging, I began to walk away from the van. I trudged through the snow-carpeted forest for most of the day. Eventually I walked along a stream, and then *in* the stream as the water still rushed, meaning that it was warmer than the ground snow.

My last memory was sinking into the snow with a great sense of exhaustion and resignation to my fate. The blizzard, still fully active, buried me where I sat, as deer walked around me and looked askance at the strange presence slowly disappearing before them. The next thing I knew occurred two days later when I was



Figure 2. *Windows Series #6, Light House*
1968, oil on canvas, 60" x 60"



Figure 3. *Windows Series #16, Red Square*
1968, oil on canvas, 48" x 48"

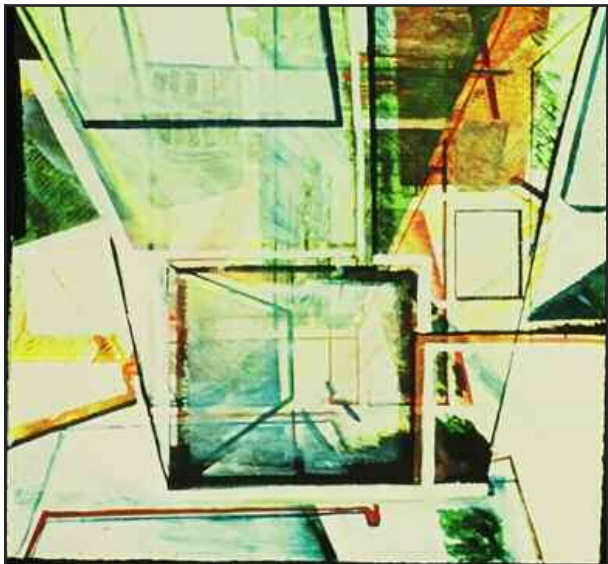


Figure 4. *Window Series #14, Summer in the City (LA)*
1968, oil on canvas, 60" x 60"



Figure 5. *No Exit*
1969, oil on canvas, 36" x 37"



*Figure 6. Exodus
1969, oil on canvas, 37 1/2" x 36"*



*Figure 7. The Egg and the Id
1970, oil on canvas, 72" x 72"*



*Figure 8. House Arrest
1972, oil on canvas, 72" x 48"*



*Figure 9. Miracle of the Peaches
1970, oil on canvas, 78" x 48"*

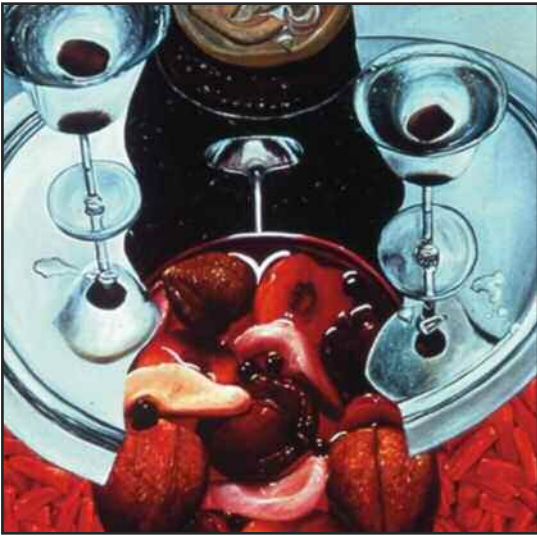


Figure 10. *Dante's Centrifuge*
1970, oil on canvas, 72" x 72"



Figure 11. *The Great Pumpkin*
1969, oil on canvas, 60" x 60"

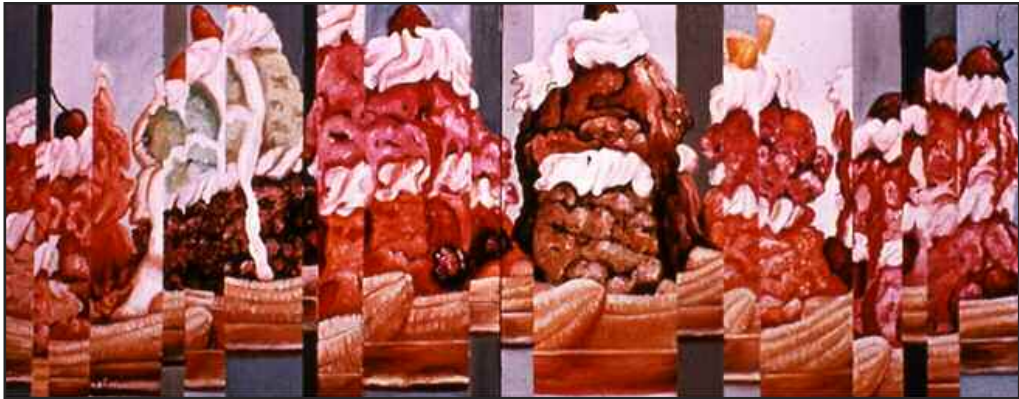


Figure 12. *Split Banana Split* 1969, oil on canvas, 17 1/2" x 74"



Figure 13. *Cool Drool*
1973, oil on canvas, 36" x 36"

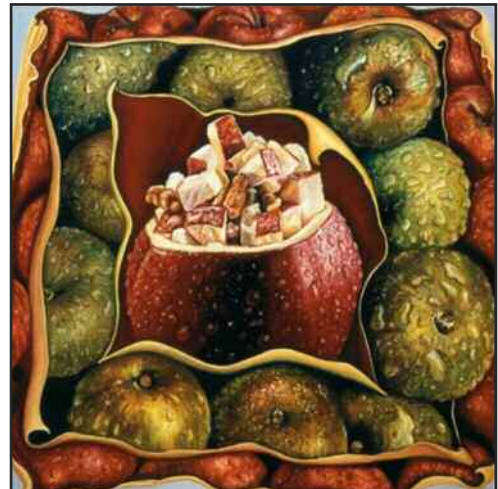


Figure 14. *Flapapple*
1973, oil on canvas, 36" x 36"



*Figure 15. Mammoth
1972, oil on canvas, 72" x 72"*



*Figure 16. Chrysalis
1972, oil on canvas, 60" x 48"*



*Figure 17. Four Square Peeler
1972, oil on canvas, 48" x 48"*

miraculously found by an excited dog who smelled something live under the snow bank where he peed. The dog's incessant barking brought his master, whose van was also stranded in the blizzard. To make a most astonishing and complex story short, I was eventually discovered, more dead than alive, and revived.

After that adventure, I felt I had to examine my spirit and psyche to understand the trajectory of my life. One night I dreamed that I was standing in a motel room in Fresno, California, where I have never been overnight. (*Shakti*, Figure 18) In the dream I stood in front of the washbasin and was looking in the mirror. I began to pull something that looked like a yellow tapeworm from my left thumb. I pulled and pulled, even though I was disgusted and felt that I could not perform this odious task alone. The door opened and a cleaning person entered. "Can you help me with this?" I asked. The stranger replied, "Oh, no, this is something you must do yourself." I realized on waking that the tapeworm is hermaphroditic – every section can reproduce itself. It was clear to me that indeed, this was a quest I had to achieve myself.

I followed the tapeworm, and it was transformed into a serpent, the only creature that can swim in water, live underground, on the ground, in the air, and fly (*Kyrie*, Figure 19). Mythically, it is both terrifying and revelatory, and is perennially looking for knowledge and truth. In the painting *Ode to Subtle Woo* (Figure 20), I saw the bundling and unbundling of relationships, and finally in the painting *Joy to the Mystery of Becoming* (Figure 21), I opened to forces of joy.

I once again re-evaluated "Who am I, where am I," and made myself an orange egg in a little cradle with my name in Hebrew written upon it (*Self-Portrait with Attachments*, Figure 22). How to identify myself? Where is my place in the world? I followed the interior circle and in *Reconciliation* (Figure 23) worked with the Hebrew "Mother letters" of Cabala: *Aleph*, *Mem*, *Shin*. Each of these letters begins the words for air, *Aleph* (red central) water, *Mem* (blue) and fire, *Shin* (orange trident), respectively. I reconciled myself, an

earth person, with the other three elements. It was in this painting that white orbs appeared for the first time. In *Annan* (Figure 24), I painted my right eye looking into my brain. I wrote my names in Hebrew around it as painted pomegranate seeds – *Chassia*, meaning refuge, and *Gilah*, meaning cosmic joy – the first of the five words for joy in the Hebrew wedding ceremony: *gilah* – cosmic joy, *rina* – joy of song, *ditza* – joy of giving, *hedva* – joy of community, *simcha* – joy of celebration. I proceeded to explore the center.

I continued looking inward and looked right into the DNA, and in *Ain Soph* (Figure 25) I wrote the words, *ain sof*, which in common Hebrew means no end, but in Cabalistic lore refers to the limitless outer ring of enlightenment. Finally I looked right into the DNA (*The Duality of At-one-ment*, Figure 26) and found that there is friction at the center. There are at least two revolving elements, and it takes a third, a witness, to recognize the friction and rotation. That third, then, catalyzed the need for a metaphoric triangle (*Toward the Source of Triangulation, Where Being and Balance are One*, Figure 27).

Deepening the exploration, in the painting called *Reflection of Events in Time* (Figure 28), I began to notice that any crossing of DNA created the Hebrew letter *aleph*. In Cabalistic lore, the first letter of the Hebrew alphabet, *alef*, is also seen as the beginning of the universe.

In the congruency between the forms of *aleph* and DNA, I had found a wedding between mysticism and science. I then moved toward understanding form in sound and began to imagine what sounds look like. In the painting *The Sung Sound of Abhh*, (Figure 29), I showed the constriction at the back of the throat when singing the sound of "ahhhh," surrounded by floral forms that also reminded me of Hebrew letters. I began to see through tissue and through marrow (*Light Dancer*, Figure 30 and *Forming*, Figure 31).

In 1980, I developed a total paralysis on the left side of my body, and I had two canvases made to my size: 5-1/2



Figure 18. *Shakti*
1974, oil on canvas, 18" diameter



Figure 19. *Kyrie*
1974, oil on canvas, 48" diameter



Figure 20. *Ode to Subtle Woo*
1979, oil on canvas, 18" diameter



Figure 21. *Joy to the Mystery of Becoming*
1974, Oil on Canvas, 48" diameter



*Figure 22. Self-Portrait with Attachments
1976, oil on canvas, 24" diameter*



*Figure 23. Reconciliation
1979, oil on canvas, 30" diameter*



*Figure 24. Annan
1979, oil on canvas, 30" diameter*



*Figure 25. Ain Soph
1977, oil on canvas, 24" diameter*



Figure 26. *The Duality of At-one-ment*
1979, oil on canvas, 28" diameter



Figure 27. *Toward the Source of Triangulation, Where Being & Balance are One* 1978, acrylic on canvas, 20" diameter



Figure 28. *Reflection of Events in Time*
1978, oil on canvas, 48" diameter



Figure 29. *The Sung Sound of Abhh*
1979, acrylic on arches paper, 13" diameter



Figure 30. *Light Dancer*
1979, oil on canvas, 48" diameter



Figure 31. *Forming*
1979, oil on linen, 36" diameter

feet tall and two feet across. I stood facing the canvas and had someone trace my body onto the canvas. For a year I worked disentangling all the elements that had caused the paralysis (*Through Generation*, Figure 32). After a year, twelve green orbs appeared around the head. At that time I thought they were seeds of growth. On the second canvas I painted the resurgence of the spirit over a full-length self-portrait (*Surge*, Figure 33). At the end of the year I was well, even though the diagnosis had included multiple sclerosis.

Trust intuition as it is found and expressed in body related imagery. I followed the image – I always follow the image – because I know that it is authentic and leads to further truth. I followed the image undersea (*Two Moons of Sea*, Figure 34), and the two moons became seeds of birth (*From Fire Came Man Came Woman*, Figure 35). Within the word created of foliage, the Hebrew word for woman appeared, (*eeshah*), and within that word are the Hebrew words for fire, (*aysh*), woman (*eeshah*), man (*esh*) and god (the letter *yod*). In the following painting (*Moment: 5th Day*, Figure 36), it was if I had arrived at the Biblical marker of the fifth day of creation when the heavens were separated from the earth. Soon after, I painted a six-foot figure emerging from a thicket of reeds (*Emergence*, Figure

37), and suddenly, in the summer of 1981, I actually found myself at a live pond in southern California (the Dorland Mountain Arts Colony in Temecula) where I spent the next three years in great spates of solitary time (*Shy Lily*, Figure 38).

It was at this pond that I began to study the reeds as they grew, broke and fell when their cycles were over. Certain geometric forms appeared in a regular way – angles, triangles, arcs and lines. I was utterly entranced with this natural unfolding as it occurred on a daily, seasonal, and annual basis. I was fascinated by the calligraphic “messages” in the landscape (sequence of 25 paintings from the Dorland Pond Series, Figures 39 through 63).

Over the next three years I began to understand more of this scriptural vision of the universe. There was something about this articulated beauty that was literally drawing me into it. These forms steered and overtook my vision of the landscape. Soon I became hypnotized by the reflection in the pond, rather than that which was reflected. My vision deepened. The longer I spent in isolation with no mirroring of another human being, the more I felt like an untethered, isolated soul.



Figure 32. *Through Generation*
1980, oil on canvas, 60" x 24"



Figure 33. *Surge*
1980, oil on canvas, 66" x 24"



Figure 35. *From Fire Came Man Came Woman*
1980, oil on canvas, 54" x 43"



Figure 34. *Two Moons of Sea*
1980, oil on canvas, 48" x 48"



Figure 36. *Moment: Fifth Day*
1981, oil on canvas, 66" x 60"



*Figure 37. Emergence
1980, oil on canvas, 66" x 60"*



*Figure 38. Shy Lily, Dorland Pond Series #18
1981, oil on canvas, 18" x 24"*



*Figure 39. Dorland Pond Series #08
1981, acrylic on Arches paper, 14" x 20"*



*Figure 40. Dorland Pond Series #14
1982, egg tempera on board, 16" x 20"*



*Figure 41. Dorland Pond Series #12
1981, acrylic on Arches paper, 14" x 20"*



*Figure 43. Dorland Pond Series #21
1982, oil on canvas, 18" x 35"*



*Figure 42. Dorland Pond Series #74
1997, acrylic on canvas, 24" x 36"*



*Figure 44. Dorland Pond Series #17
1982, oil on canvas, 16" x 22"*



*Figure 45. Dorland Pond Series #61
1984, oil on canvas, 36" x 55"*



Figure 46. *Dorland Pond Series #62* 1984, oil on canvas, 30" x 72"



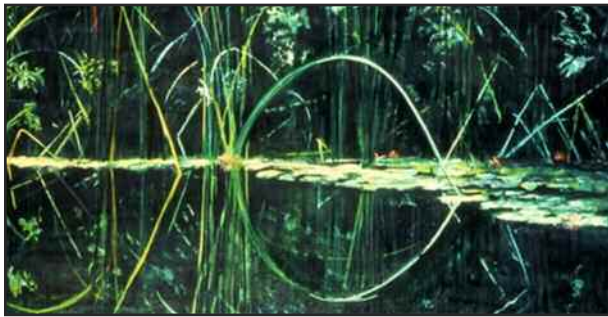
Figure 47. *Dorland Pond Series #35* 1983, oil on canvas, 30" x 72"



Figure 48. *Dorland Pond Series #22* 1982, oil on canvas, 24" x 72"



*Figure 49. Dorland Pond Series #19
1982, oil on canvas, 24" x 60"*



*Figure 50. Dorland Pond Series #34
1983, oil on canvas, 22" x 45"*



*Figure 52. Late Morning, Dorland Pond Series #70
1994, oil on canvas, 20" x 30"*



*Figure 51. Dorland Pond Series #27
1983, oil on canvas, 30" x 40"*



Figure 53. Dorland Pond Series #71 1994, acrylic on canvas, 48" x 72"



Figure 54. Dorland Pond Series #15 1982, oil on canvas, 17" x 40"



Figure 55. Dorland Pond Series #20 1982, oil on canvas, 16" x 35 1/2"



*Figure 56. Dorland Pond Series #36
1983, oil on canvas, 13" x 25"*



*Figure 57. Dorland Pond Series #31
1983, oil on canvas, 15" x 23 1/4"*



*Figure 58. Dorland Pond Series #23
1983, oil on canvas, 26" x 20"*



*Figure 59. Dorland Pond Series #29
1983, oil on canvas, 34" x 53"*



Figure 60. Dorland Pond Series #24 1982, oil on canvas, 30" x 54"



*Figure 61. Dorland Pond Series #25
1983, oil on canvas, 28" x 55 1/4"*



*Figure 62. Dorland Pond Series #28
1983, oil on canvas, 39 1/4" x 28 1/4"*



*Figure 63. Dorland Pond Series #16
1982, oil on canvas, 37" x 30"*

Again, I was concerned with the nature of illusion and reality. What was real? Was it that which was reflected? The reflection? That which sat on the surface of the pond? Was it the stick, or the leaves? I was floating in limbo. The pond had become my teacher and it enticed me further. The pond perfectly reflected both heaven and earth. The surface of the water was reified only by floating leaves, much like human behavior reifies the dynamic of relationships. And soon, the pond, the point of focus for so long, was transformed into a portal into the mysteries of the land.

(For a video to accompany the following section, go to: <http://www.youtube.com/watch?v=tYZdsL62rIA>) I had rounded a corner into life as I daily walked through the natural tunnel into the wilderness. The untrammelled paths and trails yielded confirming information. As I looked intensely at the land, I found the same geometric patterns which had so captivated me in the pond. In an 18-inch area of land, I was struck by the actual proximity of the triangles, arcs and circles, straight lines and crossed sticks forming an X. I painted *Beehive and Rock Vagina* (Figure 64) to scale. However, by this time the seed of a growing idea had germinated. Since paintings can be interpreted and photographs are indisputable, I decided to photograph my findings. I returned to the site over a period of a year and photographed the hole on the left as it kept changing in various light sources over time. It assumed the shape of a bird and later an animal. As I wandered over the land, I was amazed to find the geometry of angles and triangles pervasive in the landscape. I found them in rocks, the branching of roots, sticks as they fell, reeds, trees, and the random crossing of sticks as they fell over each other on the ground. Sometimes I felt the straining of sticks to become angles as they lay angled but not touching. Or was it my need to make sense of it that way? I found groupings of similar shapes lying next to each other, such as roof-shaped sticks next to roof-shaped rocks. I soon began to find wide-angled sticks with rocks or dots below them. Suddenly it was as if I could read a Chinese-like ideogram for house: roof over person. Acutely-angled sticks with stones in their center reminded me of the English letter A. I was

becoming profoundly affected by the forms that jumped at me from the complexity of the landscape. [end of video segment]

In 1985, I spent the summer in the majestic Rocky Mountains of Banff, Canada (Banff Center for the Arts). I was once again roaming the forests during long solitary periods in nature, discovering isolated incidents in light. I was caught and struck by images such as a tiny shoot growing successfully even in the darkest place in the forest (*Hope*, Figure 65). Illuminated anthropomorphic metaphors leapt at me, such as the shock and embarrassment of nakedness where elk had torn off the bark of a pine tree (*Naked*, Figure 66), and human situations such as in the paintings *Attraction*, *Birth*, *Heartbreak*, *Grief*, *The Hand of Nature*, *Veiled Contact*, *Contact*, *Aging Together*, *The Allegory of Marriage: Adjustments in Time and Light*, *in the Wind they Bend as One*; *Dignity*, *The Spirit in the Tree*, and *Learning to Fly in the Forest* (Figures 67 to 78).

(For a video to accompany the following section, go to: <http://www.youtube.com/watch?v=5a0nzuta76E>) I was perceiving particular structural patterns occurring in nature with increasing frequency. This led me to believe that there is no randomness in natural pattern, that a grand design exists, and within it are configurations which become familiar with repeated recognition, and that something within me prompted my recognition of particular events in nature.

READING THE LANDSCAPE

I continued my documentation. By 1985, I was finding letters everywhere in nature. (For a video to accompany the following section, go to: <http://www.youtube.com/watch?v=zm7M6PrvP8k>). English letters such as A, and then letter forms which I recognized in several languages, such as X in English, and *aleph* in Hebrew; Y in English, and *ayin* in Hebrew; R in English, and *taf* in Hebrew. I realized that I was reading the landscape. I researched charts on early alphabets and discovered that north Semitic Hebrew antedated other alphabets and found that this ancient alphabet had undergone



Figure 64. *Beehive and Rock Vagina, Dorland Series #51*
1983, oil on canvas, 8" x 16"



Figure 65. *Hope*
1985, oil on canvas, 24" x 16"



Figure 66. *Naked*
1985, oil on canvas, 24" x 16"



Figure 67. *Attraction*
1985, oil on canvas, 24" x 16"



Figure 68. Birth
1984, oil on canvas, 16" x 24"



Figure 69. Heartbreak
1985, oil on canvas, 18" x 20"



Figure 70. Grief
1985, oil on canvas, 24" x 18"



Figure 71. The Hand of Nature
1985, oil on canvas, 18" x 26"



Figure 72. Veiled
1987, oil on canvas, 25" x 40"



Figure 73. Contact
1987, oil on canvas, 36" x 72"



Figure 74. Aging Together
1985, oil on canvas, 24" x 42"



Figure 77. The Spirit in the Tree
1985, oil on canvas, 42" x 22"



Figure 75. The Allegory of Marriage: Adjustments in Time and Light; In the Wind They Bend As One
1985, oil on canvas, 22" x 16"

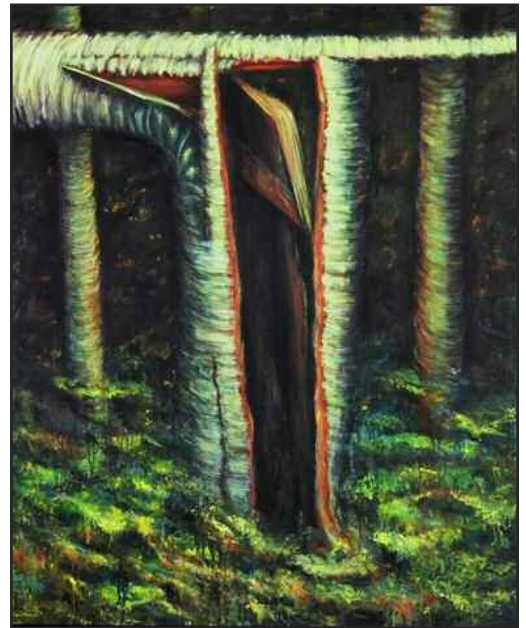


Figure 76. Dignity
1986, oil on canvas, 66" x 54"



Figure 78. *Learning to Fly in the Forest*
1985, oil on canvas, 16" x 22"

50 permutations of the 22 letters over many centuries (Hebrew chart, Figure 79). I began to walk about the landscape with the alphabet chart, and systematically documented the entire Hebrew alphabet and many of its letter transformations through time. The earliest forms are identical to those found in nature and correspond to the extreme left column of this chart. Over the centuries they

have become somewhat elaborated, but still closely resemble their earliest structures.

Tracing my own process, I had become convinced that as early man and woman walked their terrain, any terrain, their eyes peeled for food and foe, there were certain forms in nature that they, as I, noticed repeatedly. These forms affected them physiologically. Optical neural stimulation affected enzyme hormonal production, which changed the emotional state. I conjectured that the emotional affect was positive, since the act of noticing was repeated. With continuous repetition, these simple forms, which I began to call alphabetic morphology, became imprinted archetypally. Consequently, when the time came for the formation of alphabet, these were the forms that were chosen universally. *Form evokes feeling. Feeling conjures metaphor. Metaphor demands expression.* [end of video segment]

Nature had become a field of information. In time I found the entire Hebrew alphabet in all its 27 permutations, illustrating the reappearance of patterns over time.

Figure 79. *Letters of the Hebrew alphabet transformed over time*

TABLE OF ALPHABETS																															
Old Hebrew										Old Aramaic										Aramaic Hebrew											
Cairo					WHL					Palmyra					Tadmor					Samaritan				Kabbala				Cursive			
Hebrew	Phoenician	Arabic	Latin	Number	Hebrew	Phoenician	Arabic	Latin	Number	Hebrew	Phoenician	Arabic	Latin	Number	Hebrew	Phoenician	Arabic	Latin	Number	Hebrew	Phoenician	Arabic	Latin	Number	Hebrew	Phoenician	Arabic	Latin	Number		
א	𐤀	א	A	1	א	𐤀	א	A	1	א	𐤀	א	A	1	א	𐤀	א	A	1	א	𐤀	א	A	1	א	𐤀	א	A	1	א	
ב	𐤁	ב	B	2	ב	𐤁	ב	B	2	ב	𐤁	ב	B	2	ב	𐤁	ב	B	2	ב	𐤁	ב	B	2	ב	𐤁	ב	B	2	ב	
ג	𐤂	ג	G	3	ג	𐤂	ג	G	3	ג	𐤂	ג	G	3	ג	𐤂	ג	G	3	ג	𐤂	ג	G	3	ג	𐤂	ג	G	3	ג	
ד	𐤃	ד	D	4	ד	𐤃	ד	D	4	ד	𐤃	ד	D	4	ד	𐤃	ד	D	4	ד	𐤃	ד	D	4	ד	𐤃	ד	D	4	ד	
ה	𐤄	ה	H	5	ה	𐤄	ה	H	5	ה	𐤄	ה	H	5	ה	𐤄	ה	H	5	ה	𐤄	ה	H	5	ה	𐤄	ה	H	5	ה	
ו	𐤅	ו	V	6	ו	𐤅	ו	V	6	ו	𐤅	ו	V	6	ו	𐤅	ו	V	6	ו	𐤅	ו	V	6	ו	𐤅	ו	V	6	ו	
ז	𐤆	ז	Z	7	ז	𐤆	ז	Z	7	ז	𐤆	ז	Z	7	ז	𐤆	ז	Z	7	ז	𐤆	ז	Z	7	ז	𐤆	ז	Z	7	ז	
ח	𐤇	ח	H	8	ח	𐤇	ח	H	8	ח	𐤇	ח	H	8	ח	𐤇	ח	H	8	ח	𐤇	ח	H	8	ח	𐤇	ח	H	8	ח	
ט	𐤈	ט	T	9	ט	𐤈	ט	T	9	ט	𐤈	ט	T	9	ט	𐤈	ט	T	9	ט	𐤈	ט	T	9	ט	𐤈	ט	T	9	ט	
י	𐤉	י	I	10	י	𐤉	י	I	10	י	𐤉	י	I	10	י	𐤉	י	I	10	י	𐤉	י	I	10	י	𐤉	י	I	10	י	
כ	𐤊	כ	K	11	כ	𐤊	כ	K	11	כ	𐤊	כ	K	11	כ	𐤊	כ	K	11	כ	𐤊	כ	K	11	כ	𐤊	כ	K	11	כ	
ל	𐤋	ל	L	12	ל	𐤋	ל	L	12	ל	𐤋	ל	L	12	ל	𐤋	ל	L	12	ל	𐤋	ל	L	12	ל	𐤋	ל	L	12	ל	
מ	𐤌	מ	M	13	מ	𐤌	מ	M	13	מ	𐤌	מ	M	13	מ	𐤌	מ	M	13	מ	𐤌	מ	M	13	מ	𐤌	מ	M	13	מ	
נ	𐤍	נ	N	14	נ	𐤍	נ	N	14	נ	𐤍	נ	N	14	נ	𐤍	נ	N	14	נ	𐤍	נ	N	14	נ	𐤍	נ	N	14	נ	
ס	𐤎	ס	S	15	ס	𐤎	ס	S	15	ס	𐤎	ס	S	15	ס	𐤎	ס	S	15	ס	𐤎	ס	S	15	ס	𐤎	ס	S	15	ס	
ע	𐤏	ע	E	16	ע	𐤏	ע	E	16	ע	𐤏	ע	E	16	ע	𐤏	ע	E	16	ע	𐤏	ע	E	16	ע	𐤏	ע	E	16	ע	
פ	𐤐	פ	P	17	פ	𐤐	פ	P	17	פ	𐤐	פ	P	17	פ	𐤐	פ	P	17	פ	𐤐	פ	P	17	פ	𐤐	פ	P	17	פ	
צ	𐤑	צ	C	18	צ	𐤑	צ	C	18	צ	𐤑	צ	C	18	צ	𐤑	צ	C	18	צ	𐤑	צ	C	18	צ	𐤑	צ	C	18	צ	
ק	𐤒	ק	Q	19	ק	𐤒	ק	Q	19	ק	𐤒	ק	Q	19	ק	𐤒	ק	Q	19	ק	𐤒	ק	Q	19	ק	𐤒	ק	Q	19	ק	
ר	𐤓	ר	R	20	ר	𐤓	ר	R	20	ר	𐤓	ר	R	20	ר	𐤓	ר	R	20	ר	𐤓	ר	R	20	ר	𐤓	ר	R	20	ר	
ש	𐤔	ש	S	21	ש	𐤔	ש	S	21	ש	𐤔	ש	S	21	ש	𐤔	ש	S	21	ש	𐤔	ש	S	21	ש	𐤔	ש	S	21	ש	
ת	𐤕	ת	T	22	ת	𐤕	ת	T	22	ת	𐤕	ת	T	22	ת	𐤕	ת	T	22	ת	𐤕	ת	T	22	ת	𐤕	ת	T	22	ת	

(For a video to accompany the following section, go to: <http://www.youtube.com/watch?v=qRYHccUf-r4>. The first form of the last letter of the Hebrew alphabet *taf* is identical to the last form of the first letter of the Hebrew alphabet, *aleph*. The form is a crossing of two strands, a cyclical repetition extension of itself. Is this not the essence of genetic transference? In addition to finding individual letters, I soon found Hebrew letters in combination, much like a child learning to read. At first I saw simple constellations which made no sense. Then, reading from right to left, I discovered words like *yr*, meaning city, *sim* – to place or put, *dahvid*, meaning beloved, and then to my astonishment, found in root patterns in the mountains of northern Canada, the Hebrew word, *ahv*, meaning the female pronoun you. With a dot vowel, this can also be read as *ohv*, the word for letter, comprised of *aleph* on the right and *taf* on the left, the first and last letters of the Hebrew alphabet (Figure 80).

At that point, I believed that I had isolated five shapes that are consistent throughout the evolution of alphabetic form. These shapes are found internally in physiological structure and process, and are rediscovered externally in nature: the line, as found in a portion of a stick, horizon, and upright or prone human. The angle or triangle, as found in the branching of trees and the shapes of mountains. The circle, spiral and a portion of the circle and spiral, which are elaborations on the arc, as found in the sun, moon, circumference of bloom, seashells and half moon. The meander, as found in roots, river patterns and movements of snakes. And, the random crossing of lines, such as sticks, creating an X. [end of video segment]

In Cabala, visualization and meditation on the form of every letter of the Hebrew alphabet, alone or in combination, changes not only the psychophysiology of the practitioner, but is also believed to change the nature of cosmology in the moment.

(For a video to accompany the following section, go to: http://www.youtube.com/watch?v=yi8ymT_9MRw)
Do we see because of what we think, or do we think because of what we see? Through the process of the



Figure 80. The first and last letters of the Hebrew alphabet, "aleph" and "taf" form the Hebrew word for "letter," OHT.

paintings, I had learned that nothing can exist in isolation, that the viability of any one thing is determined by the existence of another, and that all things affect each other and are intrinsically interdependent at the smallest and largest levels. Why do we recognize form? The answer to that seems to reside within the oscillating relationship between perception and cognition. I believe that a mirroring process occurs between the physiological structure of the perceptual apparatus and that which is perceived. In other words, there exists an innate proclivity to recognize that which is fundamentally familiar.

A concept of familiarity means that we discriminate and choose that which fits comfortably in relation to the known, that which is innate at the most basic level of being. This is the first x-ray photograph of DNA taken by Rosalind Franklin in 1953. The shape is that of the first form of the last letter of the Hebrew alphabet, *taf* around 3500 B.C. The embellished X is the last form of the first letter of the Hebrew alphabet, *aleph*, a cyclic repetition extension of itself. Is this not the essence of genetic transference? The helical movement of DNA, the crossing of visual pathways of the optic chiasm in the actual process of vision, the shapes of neurons involved in the process of seeing and cognition in the visual cortex of animals, such as cats, monkeys, and humans, as well as other physiological structural patterns, echo perceived external shapes. [end of video segment] (Figures 81 – 84)

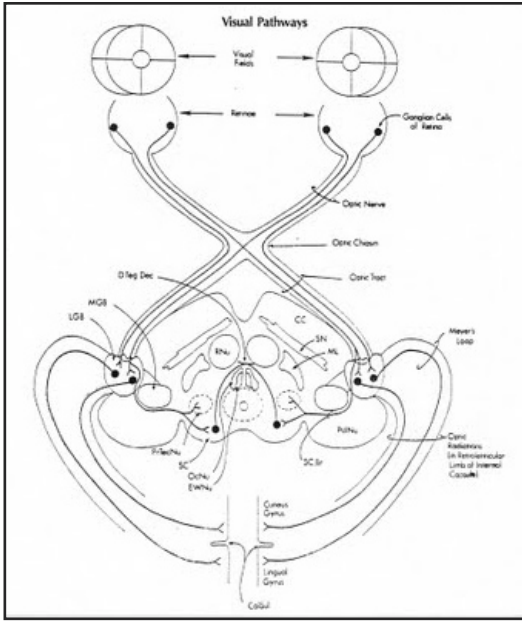


Figure 81. Optic chiasm

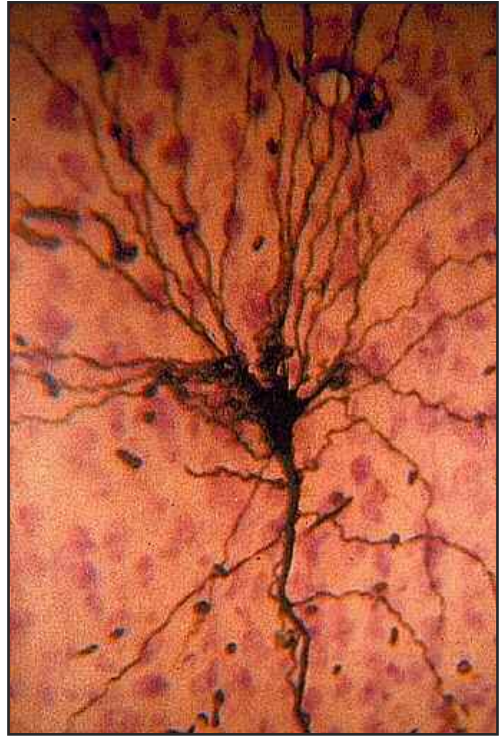


Figure 83. Neuron

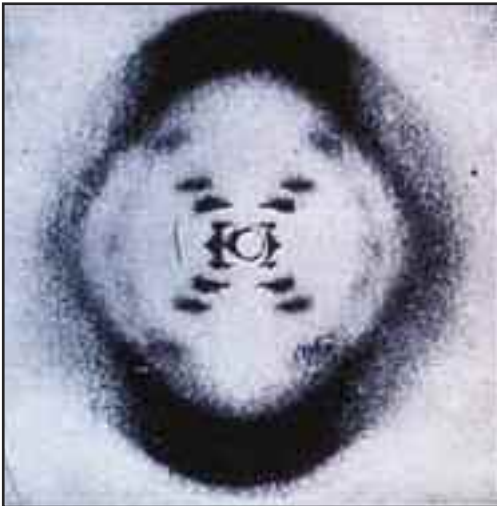


Figure 82. First X-ray of DNA, 1953
Rosalind Franklin



Figure 84. Branch

This laid the groundwork for future ideas. To quote Jeremy Narby: “What if it were true that nature speaks in signs and that the secret to understanding its language consists in noticing similarities in shape” (*The Cosmic Serpent: DNA and the Origin of Knowledge*).

In *The Feeling of What Happens*, Antonio Damasio says, “The organism is involved in relating to some object and the object in the relation causes a change in the organism.” This is much like the Heisenberg Principle.

Certain forms catalyze direct psychophysiological affect in the viewer. Our bodies are delicately entangled with our perceptions. Every emotion precipitates biochemical reactions that change the physical state of each cell of our bodies. In western culture, the only arena in which form is known to directly affect psychophysiology is called pornography.

Form evokes feeling. Feeling conjures metaphor. Metaphor demands expression.

Having lived in many cultures worldwide, I have experienced form used in healing as fundamental, time-honored therapy, as in Tibetan mandalas, Navajo sand paintings, and Balinese dance (Figures 85 through 87). In the West, we are only beginning to know that art and architecture can concentrate the ingredients of beauty and, when used judiciously, can make us feel better.

I spent 1986 and 1987 in fifteen Asian countries. Each time I crossed a border, the rules changed entirely and I learned that belief systems are random, contextual, and convenient. Joy is culturally determined. For example, in one culture, you wish for many husbands, in another many wives, in one you hope for sons, in another, daughters; the gods change every few miles, or even next door. But grief is experienced universally in the same way. Grief is caused by loss of contact, rejection, and abandonment. While cultures vary widely, we are fundamentally more alike than we are different.

The impact of the year in Asia – including my journey to Tibet and an astonishing welcome in McLeod Ganj, India where the Dalai Lama lives – was immense. I realized that my commitment to a specific path that had begun as a small child was reaching deeper levels. Sometime in 1988 I dreamed that I was dressed in ski racer's gear, and was on skis poised in the start position at the beginning of a slalom course which wended its way across the Himalayas. Instead of ordinary slalom poles, Tibetan chortens (www.google.com/search?client=safari&rls=en&q=chorten&ie=UTF-8&oe=UTF-8 for explanation) marked the course. As I am not a skier nor an athlete of any kind, I was perplexed by the image in the dream. I pondered the awe-inspiring Himalayan course in front of me, thinking this is absolutely impossible, when a sonorous, deeply masculine voice thundered from the far ends of the universe and rolled toward me repeating, “You are protected from the incongruities of life; you are protected from the incongruities of life....”

I awoke, startled. I asked myself, who talks like that? The dreamer brings the interpretation. I understood then that as long as I stayed on my unique course – my direction, that which I was born to do – I would be protected. If I strayed because of some diversion or distraction – or fear – I would lose the protection. “Incongruities of life” means that which is inconsistent with my path. I had learned to discern the difference.

ALONE IN THE MOUNTAINS

From 1989 to 1990 I spent 16 months alone in Tonto National Forest in the high mountains of northeastern Arizona. I lived in a yurt from May to October (Figures 88 and 89). When it began to snow, I moved into a small wooden house that had lost heat, power and water. Because of the extreme cold I wrapped the outside of the structure in heavy plastic sheeting, trying to curtail the wind. When the temperature dropped below freezing, the pipes under the house burst and the floorboards suddenly split and erupted up into the cabin. The snows grew higher, and the temperature dropped sometimes to 20 below zero. I lived alone in the forest with the great animals – elk, bear and deer. A tiny orphaned bobcat



Figure 85. Tibetan mandala



Figure 87. Balinese dancer

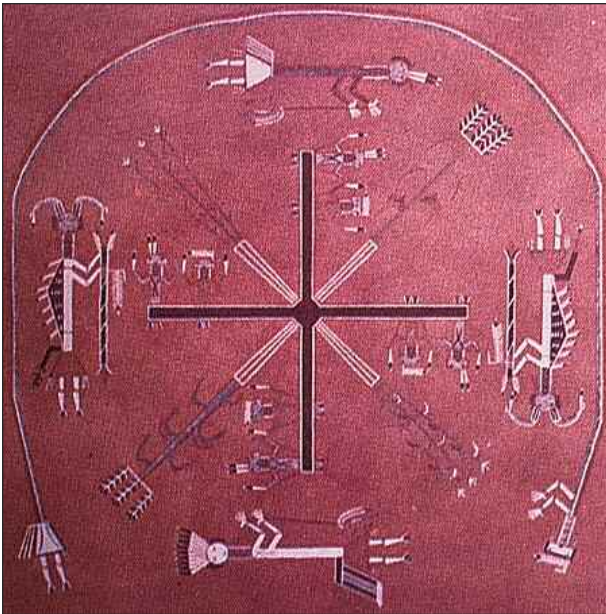


Figure 86. Navajo sand painting



Figure 88. Gilah's yurt in Tonto National Forest



Figure 89. Gilah's shadow on snow in the Tonto National Forest



Figure 90. *Burden into Gift* 1995, oil on canvas, 16" x 32"

kitten arrived and adopted me as his mother. I never fed him. He hunted during the day and returned every night to sleep in my hair. The feral kitten grew enormous, his paw bigger than my head, but he continued to sleep on my bed, his huge paw in my hair, and frequently slid off the narrow bed because of his great size.

Animals with racks came to polish their horns on the plastic which covered the outside of my little house. They knew and accepted me, and I felt comfortable with them. But by January of that year, life had become futile and arduous. With no power, water, or fire, I had to collect great buckets of snow daily for water. Arizona snow is very dry, therefore a large can of snow would yield only several inches of water. All my volition, intention and efforts were concentrated on staying alive. I was continually freezing. I knew that I had to keep moving to keep alive. I, as a human being, had become tabula rasa. I was understanding animals in a new way, and for the first time I recognized myself as an animal as well. We are herding animals just like our animal friends. And *it is only within the herd that we can be heard.*

By January, it was clear that my physical situation was deteriorating. I realized that in addition to the water pipes having burst, propane pipes had broken as well and the noxious gas had begun to leak into the structure. Because I had wrapped the cabin with plastic I had lost all ventilation. I was already feeling the effects of propane asphyxiation. I felt no reason to

go on living and was ready to sleep forever. I had left my life in the city, my relationship, my job and had come to terms with myself at that moment as a creature in the universe. I lay down on the bed in my sleeping bag and dreamed. I saw myself floating above my body on the bed, and next to the bed in the dream was the man who had discovered me many years earlier when I froze in the Sierra. In the dream, the man said to me, "You will get through this one in the snow, too, Gilah." I woke up and realized that my will to live was far stronger than my will to die.

Instantaneously the burden became a gift, (*Burden into Gift*, Figure 90) and all that had seemed arduous and pointless the day before became meaningful and purposeful. I had discovered an impetus to live; I was not sure what would follow, but I felt that something momentous awaited me. I opened holes in the plastic, despite the extreme cold. I gathered snow for water daily and was grateful for the ability to do so.

Every month I drove the treacherous 60 miles of snow-covered roads to the closest town for supplies and simply left the canned goods in the snow on return. While I concentrated on expansion of consciousness in the forest, the rare visits to the (then) tiny town were difficult, as I had habituated as an isolated creature, where only nature sounds hummed and occasionally snapped and roared. Once a week, weather permitting, I walked the several miles of rural snowbound roads to the mail box.

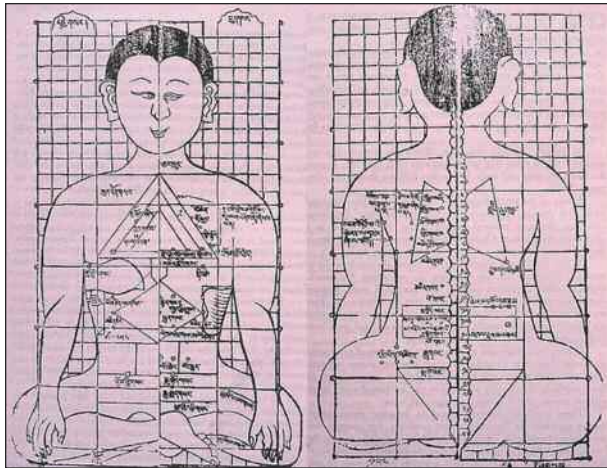


Figure 91. *Tibetan Medicine: Body Energy Systems*

In March of 1990 I received a letter from Dharamsala inviting me to come to the Himalayas, where the Dalai Lama would be giving tantric teachings for the first time. No Dalai Lama had ever presented the formerly secret teachings before. I left my snow-covered mountaintop and arrived in Dharamsala, where I sat with 300 monks to receive the tantric teaching of Bodhicitta (compassion) – instructions for body, speech and mind. We braved the blizzards for six weeks sitting outside the Dalai Lama’s temple in McLeod Ganj, in the upper area of Dharamsala. The temple is very small but the side walls were open wide. Only the older monks sat inside. Everyone else sat cross-legged on the ground outside in the snow. By sheer luck – or was it karma? – I was fortunate to be able to understand the teachings, which were given in Tibetan. During my previous visit to McLeod Ganj, I had given my transistor radio and earphone to a young monk who in the interim had become an amanuensis to the Dalai Lama. As simultaneous translation to English for the teachings was only available by transistor radio and earphone, he returned my radio to me and thus I was privy to the teachings.

The Dalai Lama, assuming the persona of Avalokitesvara, the Deity of Compassion, conducted and taught the Bodhicitta practice, which focuses on a white sphere, the embodiment of compassion. The white sphere is first visualized above the crown chakra. With accompanying mudras and mantras (gestures and sounds), we were instructed to follow this small sphere of compassion as it

traveled through and nourished every cell and every organ of the body, first down one side, then to the sexual organ where we were told to visualize all the Buddhas that ever were and all that ever will be. The sphere is then retracted, traveling up the other side of the body, nourishing all the cells, the organs, and systems of the body. And finally, it is expelled through the crown chakra so that the enlivened bodhicitta/compassion will nourish all sentient beings and the rest of the universe (photo of Tibetan medical images, Figure 91).

Not only did we feel spiritually and emotionally ecstatic, but our bodies were feeling very well during these visualizations. I learned that “Tantric mystic physiology of the subtle body is directly related to the somatic physiology of regular medicine, and the tantric practices of manipulating it bear directly on tantric healing.” (*Gyu-Zhi*, as quoted in *Tibetan Medicine and Psychiatry: The Diamond Healing*, by Terry Clifford.)

According to *Tibetan Medicine and Psychiatry*, “The system of subtle veins and pathways are the channels used and manipulated in Tibetan acupuncture and moxibustion.” This visualization practice nourishes the body, speech and mind. When you feel better, you are kinder, and feel greater compassion to others. You become “other” directed.

During meditation, we were instructed to “have the intention of doing the practice for the sake of the liberation of all beings.” As a healer, “while the physician is practicing medicine, normally he/she is spiritually identified with the Medicine Buddha...” (*Gyu-Zhi*, as quoted in *Tibetan Medicine and Psychiatry: The Diamond Healing*, by Terry Clifford.)

“The thought of enlightenment is said to be the one great thought that always bears positive fruit. It is awakened by the practice of the four boundless meditations: boundless love, boundless compassion, boundless sympathetic joy, and boundless equanimity. The open, endless nature of these positive qualities, generated from the heart, leads to a state of complete meditative absorption (samadhi).” (*Gyu-Zhi*, as quoted in *Tibetan Medicine and Psychiatry: The Diamond Healing*, by Terry Clifford.)

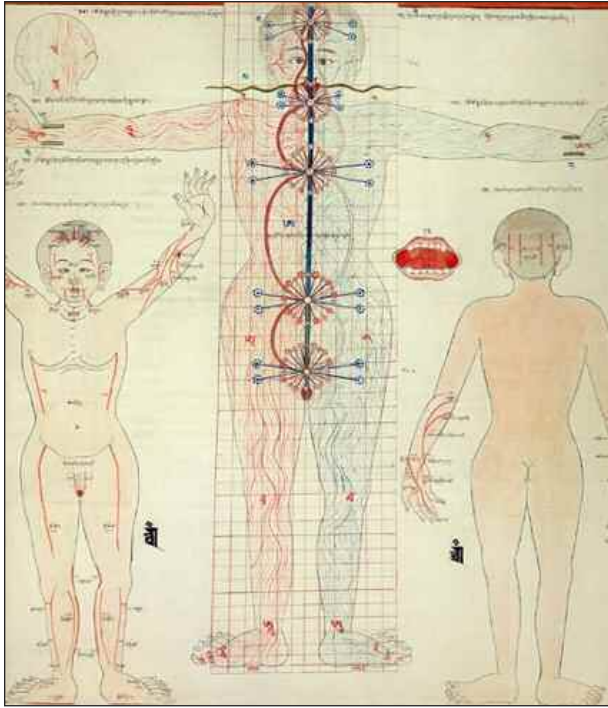


Figure 92. Tibetan Medical Drawing - Thigles.

I learned about Thigles that are visualized as white spheres, vital essences which are of two types, absolute and relative (Figure 92); and I was introduced to the wisdom channel which is the Middle Vein, like the Middle Way. “This vein is not produced by visualization [italics added]. It is *discovered* by visualization and meditation. It is always there. It is the main link between the purely spiritual and purely physical worlds.” (Gyu-Zhi, as quoted in *Tibetan Medicine and Psychiatry: The Diamond Healing*, by Terry Clifford.)

Remember: **form evokes feeling, feeling conjures metaphor, and metaphor demands expression.**

ENCOUNTER WITH TWO BEARS

I returned to my snow-covered mountain forest after the teachings in McLeod Ganj. There were still months of raw winter to deal with, yet I was filled with dedication to life, bountiful philosophy, imagery of compassion and optimism, and a sense of mission for my life. One day I attempted to crunch my way up the mountain trail through the still hip-high unblemished snow. Suddenly two of the dark trees silhouetted against the snow appeared to be moving toward me on the narrow path. It was clear

that I was in the company of two very large, very thin black bears who were emerging from months of hibernation, certainly very hungry. I was confident that I had been accepted by the forest animals for more than a year as another forest animal, and felt no fear. As I had lived with orangutans in northern Sumatra in 1987, I knew not to confront, but immediately squatted down in the snow, pretending to forage. The two bears, now about ten feet away, did the same. Little by little, the three of us moved closer to each other and foraged. And with a most natural next step, we passed each other on the trail, I ascending while they descended, so close that we almost touched.

That moment of interspecies inclusivity in the wilderness remains one of the milestones of acceptance in my life.

I returned to Los Angeles, my home and my position at the university in early September of 1990. Adjustment was extremely difficult. I felt tortured by the din of the city, an invasive noise that never fully quieted. With my mountain hermitage far behind me, I once again immersed myself in the continuing search for knowledge.

MOVING FROM THE SACRED TO THE SECULAR

I had already determined that recognition is proprioceptive, or hard-wired into physiological systems. Therefore the paradigmatic model of contact and communication must lie submerged in our deeper recesses. If contact and communication is the glue between both animals and humans, valence attracts and stabilizes chemical combinations, and gravity tethers planets and galaxies, I believed there must be a profoundly embedded paradigmatic reflexive model that allows us to perceive positively affective forms.

I began to study cellular behavior, as it seemed to be a discernible unit of life that still tends to live in groups, as do animals and humans. I learned from Dr. Ross W. Adey's research (*Cell Membranes and Cellular Communication*, film) that “cells ‘whisper’ together through their cell membranes that vibrate in the electromagnetic field created by the valence of various facilitating hormones, minerals and neurotransmitters.” Adey found that the presence of calcium is essential for cell whispering. I researched calcium; “Calcium is in a different league from the sodium and potassium ions:

though still quite small, it holds enough information to carry a hormone message..." and "...this ion is within the proteins' grasp." (Quoting Werner R. Lowenstein, Ph.D., *The Touchstone: Molecular Information, Cell Communication and the Foundations of Life*)

Here are images of the cell, and the soliton, the electromagnetic field that must be crossed. (These are still images of cells from a film by Dr. Ross Adey – Figures 93 through 98.) One can see the cells communicating, having a gathering just like we are. The presence of calcium is shown as a white blob. But if these cells cannot communicate across the gap junction, they begin to clone themselves, and they become cancerous. Much like the behavior of cells, the entire human organism must have another who mirrors, but is not a clone. We cannot mirror ourselves, although we may try to as narcissists. If we are physically isolated, we may begin to talk to ourselves. If we are emotionally isolated, we may produce multiple personalities. Our emotional system searches from birth for *resonating contact*, not duplicating or identical sameness.

We look for congruency (as two hands clasped and wrapped inside each other), not identical sameness, (two hands held up against each other). We look for difference, although harmonious, much like a triad in a musical chord, which is necessary to incite healthy growth. The well-intentioned rub of stimulation animates emotional and behavioral evolution, and, I might add, also animates creativity. Creativity needs a bit of tension. Reflection, interdependence and contact are hardwired in our physiological bodies. The focus of consciousness clearly points toward behavior benefiting the greater good, or as the Tibetans say, right action.

THE MYSTERY OF THE WHITE SPHERES

Back to those white spheres. Allow me to remind you that in 1976 the spheres appeared in the painting *Reconciliation*, and in 1980 they reappeared in the painting *Through Generation*, where I was regenerating my body from paralysis. In 1997 I began another series of paintings called *Windows in the Temple of Mind*, (Figures 99 through 102) and white spheres appeared. I wondered where they came from – I could not

interpret them. Perhaps they had something to do with bodhicitta, or with calcium? Were they something like the Chinese miniature ivory sculptures of worlds within worlds? I really did not know. But in this painting, the last of the series, which resembles a woman's body, the white spheres became more articulated.

Soon after, I began a Diamond Series because I felt the form of the canvas more accurately reflected the human body with arms outstretched, much like the famous Leonardo painting. I was looking for equilibrium (*Equipose*, Figure 103) between heaven and earth, water and earth, as well as clear mental/emotional balance. I looked inside the heart (*Delicately Tangled in the Sway*, Figure 104), and white spheres floated in the tangled emotions of love. In the painting *Exaltation*, which is 7 feet tall, the spheres were expressed in certain patterns that seemed familiar (Figure 105).

THE ACCIDENT

On June 29, 1999, I was in Queen Charlotte Islands, a remote archipelago in the Pacific Ocean, two hundred miles off the coast of British Columbia. This isolated place has been the home of the Haida and the Kwakiutl (also known as the Kwakwaka'wakw) Indians for 15,000 years. Recently officially renamed Haida Gwaii (Islands of the People), this unusual group of islands is sometimes called "Tibet of the West" because of its isolation, unique flora and fauna, and traditionally vividly spiritual location. I was on a research expedition, and had taken a rented car over to Haida Gwaii on the eight-hour ferry from Port Hardy, British Columbia. On my last day there, I was driving back to my motel from the final foray on a remote road at about 5 pm. Suddenly the steering wheel pulled to the right, the car rolled three times, crashed into a pole, rolled down a ravine, and I was left crushed, hanging upside down in a demolished car. I would still be there today had not this extraordinary circumstance occurred. A single vehicle had preceded me down that road; the driver was a nurse, who by profession was hypervigilant. She had seen another car in her rearview mirror, and then failed to see it. She returned and saw the wreck far below the road. She drove another two hours to the infirmary – there was no hospital on this island – and she returned with two Haida paramedics.

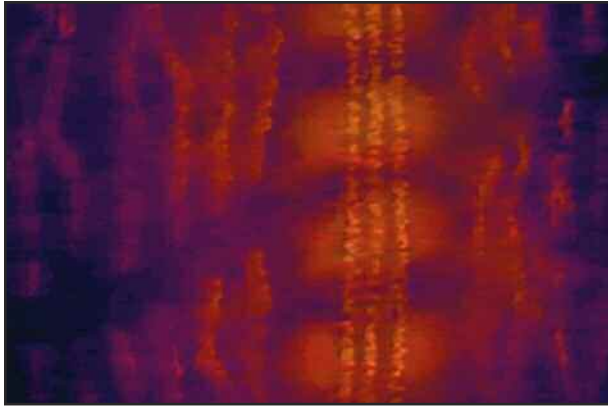


Figure 93. Electrical Impulse Soliton



Figure 96. Gap Junction



Figure 94. Presence of Calcium



Figure 97. Beginning Cloning

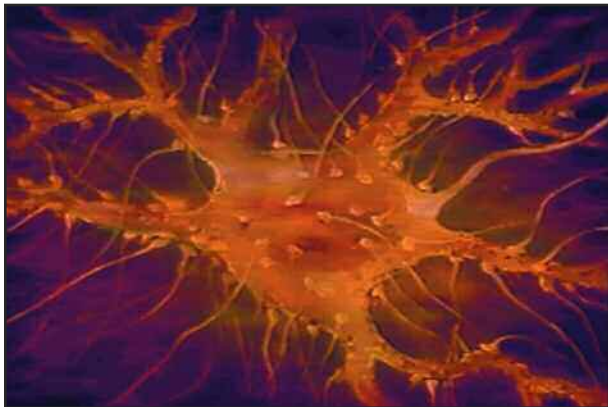


Figure 95. Communicating Cell

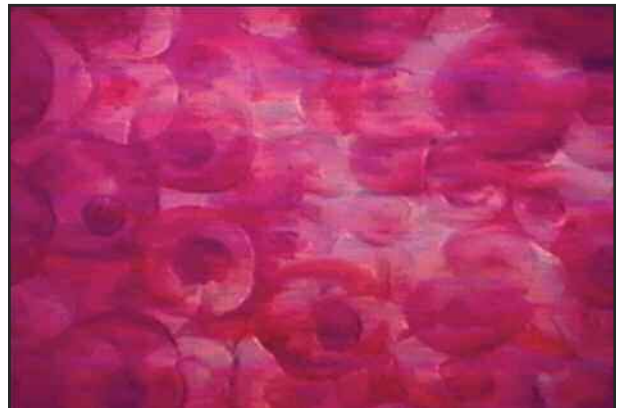


Figure 98. Cells Same (Cancer)



*Figure 99. First Window in the Temple of Mind
1994, acrylic on canvas, 22" x 30"*



*Figure 100. Second Window in the Temple of Mind
1994, acrylic on canvas, 30" x 22"*



*Figure 101. Third Window in the Temple of Mind
1994, acrylic on canvas, 22" x 30"*



*Figure 102. Fourth Window in the Temple of Mind
1994, acrylic on canvas, 30" x 22"*



Figure 103. *Equipoise*
1997, oil on wood, 38" x 38" diamond



Figure 104. *Delicately Tangled in the Sway*
1998, oil on canvas, 42" x 42" diamond



Figure 105. *Exaltation*
1999, oil on canvas, 70 1/2" x 70 1/2" diamond



Figure 106. *Who Will Live and Who Will Die?*
1999, oil on canvas, 85" x 85" diamond

They had just acquired a new “Jaws of Life” machine, with the manual in Japanese. As they said, they found what appeared to be a dead body in the mangled car. They were unable to make head or tail of the manual. I woke up into consciousness hearing the words, “How the #&#! do you get this thing to work?” I knew I was home on earth, that I was very seriously injured, and that I had much work to do. I immediately began visualization, starting with blue ice throughout my body to temper swelling. As the “Jaws of Life” machine was out of the question, I was extracted with the help of lubricating whale oil, given morphine and transported by ambulance to the infirmary.

On the second day, both Haida men came to visit at different times and each told me the same story. While I was in the ambulance, I was narrating a Haida Potlatch ceremony, as if watching a movie. I described the Haida and Kwakiutl women dressed in ceremonial button blankets dancing with the tree and animal spirits and assuring me that I would be all right. This memory still continues to elude me. Because I was not in a hospital, only morphine could be administered. On the fifth day, I decided to leave. This meant getting to a ferry to reach another island, where I managed to board a prop jet to Vancouver, followed by a commercial jet to Los Angeles. I was able to maneuver this alone with targeted intention and morphine to go.

When I got to my doctor’s office in Los Angeles, I was seen as the walking dead. The MRI showed that I had broken all my ribs, sternum, scapula on both sides, three vertebrae, crushed heart, crushed head, broken femur and tibia, and there were 5 millimeters of bone fragments in my spinal cord. The prognosis was dire. I did not have surgery, but came home with a removable body splint made of plastic lace, stays and Velcro. Unable to move, I spent my time visualizing the reconstruction of my body, cell by cell, system by system. With the aid of medical texts, my visualizations were extremely detailed toward the goal of achieving an optimal state for each cell and organ. Within two months I could walk upstairs to my studio and I began to paint seven-foot tall diamond-shaped paintings to affirm the reconstruction of my body from the inside out (*Who Will Live and Who Will Die?*, Figure 106). I “rebuilt” the spinal cord, the ribs and the cells. To my astonishment the

white spheres appeared, organized in a discrete, recognizable pattern, identical to that which I had been taught in the Bodhicitta visualizations (Figure 107). I recognized that this pattern is congruent with acupuncture, moxibustion (Figure 108) and meridian points (Figure 109). I painted the opening of the heart (*Refuge (Chassia)*, Figure 110), so that I could “wrap” my first given name *Chassia* (Hebrew: refuge) around my visualized spinal column. When I was feeling better and stronger, I could turn my vision outward again to see the beauty of flora again, (*Grace (Chessed)*, Figure 111), and I could hold the energy rays radiating to and from my heart, felt it strengthening as it was once more attuned and connected to the healthy rhythms and vibrations of the universe.

I felt – and continue to feel – enormous gratitude for the gift of life, and I hope that the tasks for which I have been spared will be accomplished with grace equal to that which I have been granted. One of the many Hebrew words for grace is *chessed*, which is inscribed in red in the upper part of the painting. During the months of painting *Grace (Chessed)*, I came to a profound understanding of the seeming internal chaos, yet all held together by a strong force/volition at the heart. All is simultaneously substantive, dimensional and transparent, all illuminated by the entire spectrum, revealing a matrix of interpenetrating layers of life. I read later in the Gyu-zhi, “The whole of conditioned existence consists of radiations of energy vibrations emitted as rays or as fields of force and at varying rates of speed and thus solidity, intersecting and interacting in accordance with the harmonics of karmic balance.”

Chessed is pronounced with the accent on the first syllable, with a guttural “ch” as in *chutzpah*, and both e’s as in the word “met.” It is written with three letters: *chet*, *samech*, and *daled*. The English translation of *chessed* is a range of nouns including favor, goodness, love, grace, mercy, charity, kindness, benevolence, benefaction, boon. If the same three letters are read as CHEEsed, (ee as in eel), the meaning changes to the opposite of grace: to deprecate, reproach, sneer at, etc. One of the great beauties of the Hebrew language is that every word is rooted in three letters. With vowel changes, the word means the opposite end of the entire continuum of behavior, thus teaching the range of values within the continuum of extreme positive to extreme negative. (Other examples of this, the words *morah* and *Zohar*; are discussed later.)

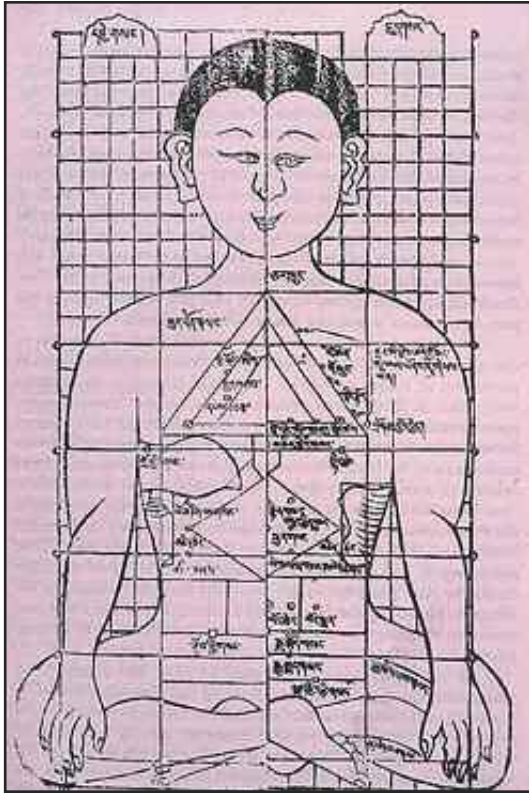


Figure 107. Tibetan Medicine: Body Energy Systems

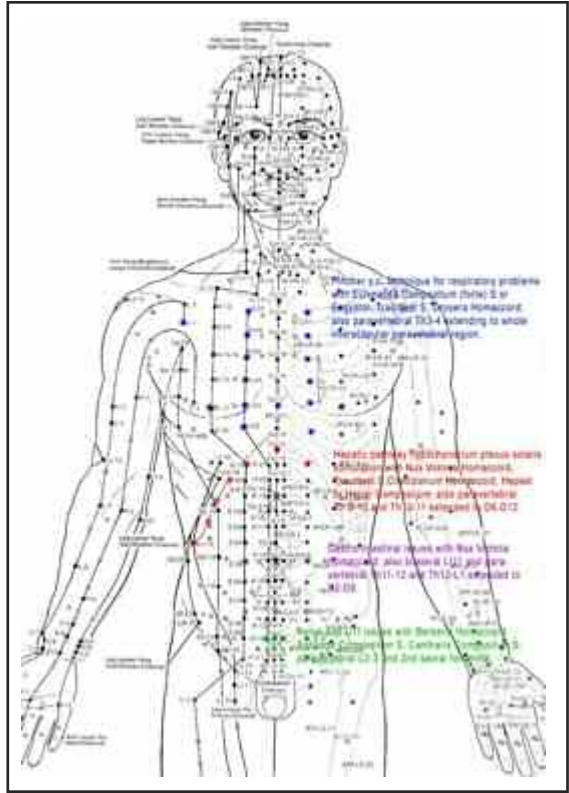


Figure 108. Acupuncture and moxibustion points

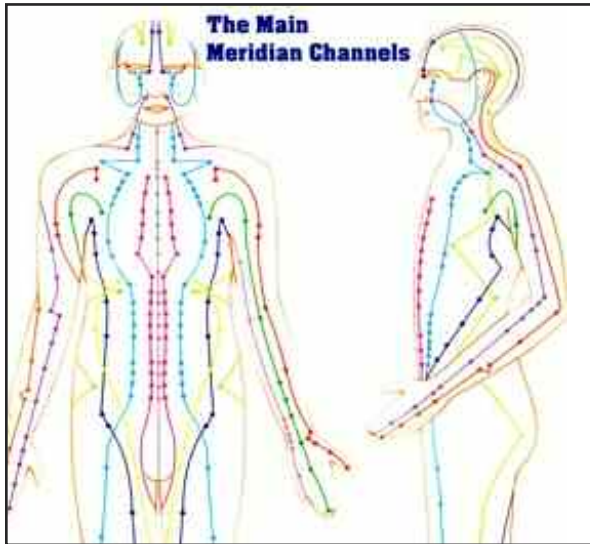


Figure 109. Meridian points



Figure 110. Refuge (Chassiah)
2000, oil on wood, 27" x 27" diamond

As I experienced tremendous gratitude for the gift of life, I realized that the grace I had been given had to be returned in service to others (*Gratitude (Hodaya)*, Figure 112). I painted veils of light as they became skins over my body (*Light as Space as Skin*, Figure 113). The Hebrew word for light is *or*, which is the homonym for the word for skin.

Lastly I painted *Wind/Spirit (Ruach)* (Figure 114). The Hebrew word *ruach* means both spirit and wind. With each breath, the wind/spirit flows through us and nourishes all atoms, molecules, calcium spheres, and worlds; we are perpetually, inextricably connected. Each breath is a choice to live and give life to others.

THE MYSTERY OF THE WHITE SPHERES

What about those spheres? I recalled the Tibetan tantric teachings. I had an idea that calcium had been combined with Bodhicitta at the inception of the visualization technique. I had been to Tibet and knew that the Himalayas were the “baby mountains” in the Tibetan language, (most recently under the sea) – and that there was a high mollusk/calcium content in the meager vegetation that was eaten by yaks. Yak meat, cheese and milk are the mainstays of the concentrated protein Tibetan diet. Tibetans are generally very healthy in body, mind, and spirit.

I mailed my hypothesis to my friend Kuno, (Ngawantdhondup Narkyid), the Official Biographer of His Holiness, Dalai Lama in Dharamsala (Figure 115). My letter was forwarded to the late Geshe Tsultrim Gyeltsen (Figure 116), who answered with both a phone call and a letter: “First, there are two types of Bodhicitta: [The first is] the mind which perceives the great enlightenment of Buddhahood: it is a consciousness and is the real Bodhicitta. The bodhicitta which you are referring to, coming from the crown chakra down through the wind channels etc, is the second bodhicitta, the physical, white bodhicitta which is merely named bodhicitta. The first Bodhicitta is not directly related to calcium. The physical, white bodhicitta and calcium are connected because both are related with elements of the body. If calcium helps to support the health or well being of an individual, then it does indirectly relate to the first Bodhicitta in that it sustains a practitioner's ability to remain healthy and to

continue to meditate on the first Bodhicitta. The great compassion though, is the true cause of the real Bodhicitta, which is the mind aspiring to great enlightenment in order to benefit all sentient beings.” (Note: “B” refers to compassion, and “b” refers to the mineral calcium.)

I was affirmed in my conviction that form can be medicine. I noticed that the words meditation and medication vary by only one letter. And those letters – t and c – stand for tender care, the delivery system that makes the difference.

By examining the interdependence and connectivity between biochemistry, physiology, psychology and behavior, I saw that all things are interrelated. Even in terms of aesthetics, beauty is literally in the eye of the beholder. A healthy retina is harmonious in image; while a pathological retina is visually, aesthetically discordant (Figure 117).

According to Elaine Scarry, in her book *On Beauty and Being Just*, “Beauty is a compact between the beautiful being (a person or thing) and the perceiver. As the beautiful being confers on the perceiver the gift of life, so the perceiver confers on the beautiful being the gift of life... Each welcomes the other...”

She also writes, “The mutuality of beauty is connected to justice... (or)... pact... A single word, “fairness,” is used both in referring to loveliness of countenance and... to the ethical requirement for being fair, playing fair, and fair distribution.”

BEAUTY AS BODY/MIND IMAGING

Dr. Andre Novac sent me his newly-considered model of the autonomic nervous system composed of the sympathetic and parasympathetic systems. When they are aligned, they wrap around each other like DNA. When they are not working properly (obstructed or in “chaos”), they are isolated, lying in parallel, non-communicating lines.

Similarly, Gordon Shaw, PhD found the “Mozart quotient,” recognizing that the EEGs of his most brilliant patients echo the notations of Mozart's most sublime music. Form that is considered beautiful, both internal and external, deals with positive affect, as it prompts



Figure 111. *Grace (Chessed)*
2000, oil on canvas, 85" x 85" diamond



Figure 112. *Gratitude (Hodaya)*
2000, oil on canvas, 85" x 85"

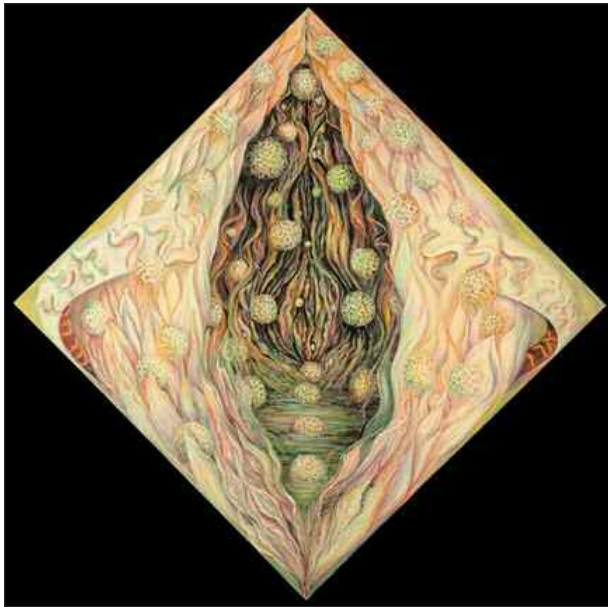


Figure 113. *Light as Space as Skin*
2000, oil on canvas, 68" x 68" diamond



Figure 114 *Wind / Spirit (Ruach)*
2001, oil on canvas, 17" x 17"

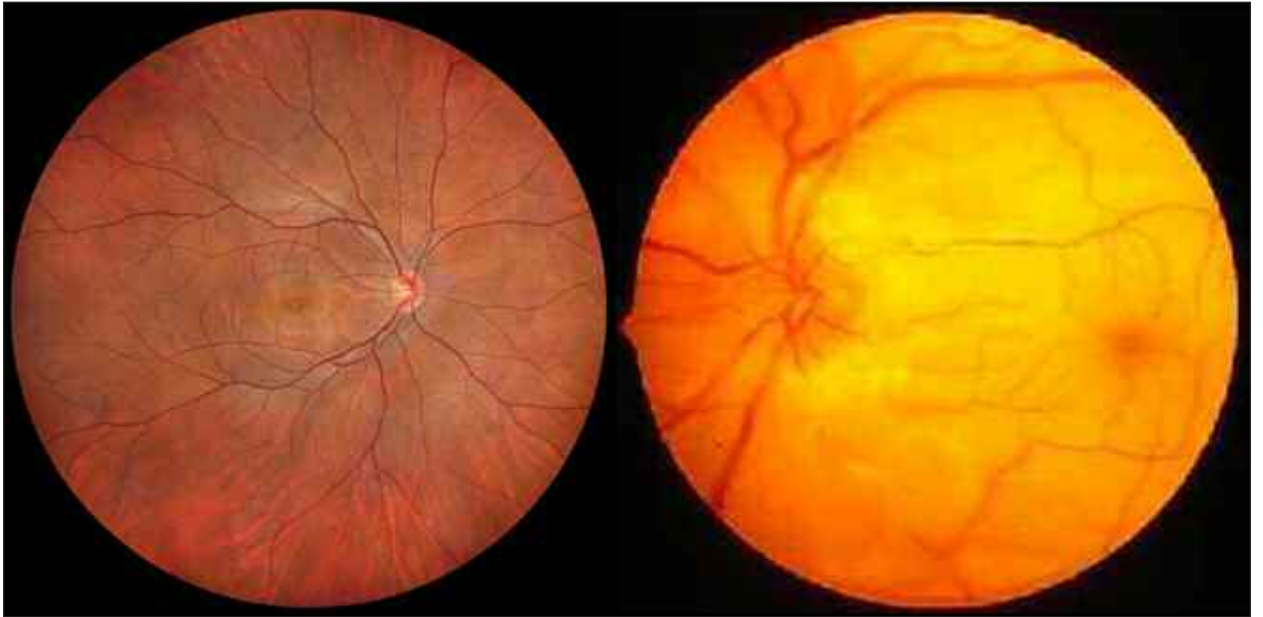


Figure 117. Healthy retina on left; pathological retina on right.

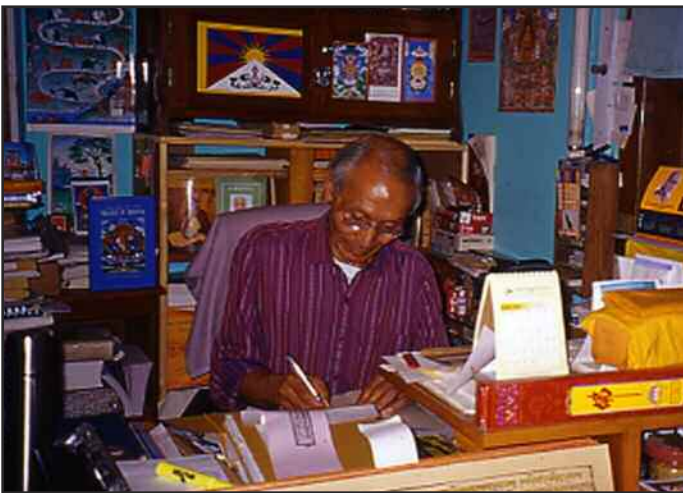


Figure 115. Ngawangbondup Narkyid – “Kuno,” Official Biographer of the Dalai Lama



Figure 116. Geshe Tsultrim Gyeltsen, 1924 - 2009



Figure 118. *Then Who Does Play Dice With The Universe?*
2006, acrylic on archival board, 16" x 12"

evolutionary behavior, such as contact, communication, care, compassion, justice, attunement to the interdependent nature of all things, promoting health and well-being.

Einstein once said he believed in God as a “superior reasoning power, which is revealed in the incomprehensible universe.” He also said: “I cannot believe that God plays dice with the Universe. God is subtle but he is not malicious.” *Then who does play dice with the universe?* (Figure 118) I am reminded of the Hebrew word, *morah*, that means both terror and revelation. The root is *or* (light), which when conjugated becomes to see, to reflect; and the homonym is teacher. It is the perspective that we bring to a situation that yields either terror or revelation. (*Then and Now*, Figure 119)

I lived with the Eskimo for ten days in Nunavut in 2006. (My Eskimo host, Bill Lyall, who invited me to Nunavut and is one of those who helped establish the Canadian territory of Nunavut, explained to me in no uncertain terms that the people in Cambridge Bay, where I was visiting, prefer to be called Eskimo rather than Inuit.) Lying on the tundra under the Aurora Borealis, enveloped by the cosmic light and sound show, was certainly the most sublime experience of my life (Figures 120 through 125). When each of the veils of color touched the ground,



Figure 119. *Then and Now*
2007, Acrylic on Birch Panel, 31/4" x 11"

a sound was emitted in the related frequency as it was translated from one form into another. Light, shadow and sound were one. The Cabala says that Adam was created as the shadow of the reflection of the substance. The more clearly we understand the nature of the reflection, the more profoundly we understand the nature of the substance. (Figures 126 – 134, *Returning to the Past, I Will Miss You Most of All...*, *Emanations in the Landscape*, *Erin, Passing Through*, *Sou Chow Chi*, *Within Light, Moment of Recognition, Revelation*)

The name of the key work in the Cabala, *Zohar*, means splendor. The same word, when pronounced *zahir*, means be careful – pay attention, be aware (*Zohar Zohir*, Figure 135). Until you are ready, you cannot unravel the mysteries. You have to be emotionally and spiritually prepared for the “splendor” (*Riding Bareback on Each Other’s Souls*, Figure 136). Whether the strings of “string theory” or the white spheres of bodhicitta, the atoms of life that we breathe in and out of each other hold the universe together, we are all riding bareback on each other’s souls, and share the responsibility for “right action.” Divinity is in humanity, and spirituality is in behavior. As we accept the gift of life with each breath we become the personae who animate the universe, and we both create the illusion and manifest the vision of a compassionate universe. (Figures 137 – 140, *Birdman’s Proposal*, *Aurora Contapunta*, *Aurora Impassionata*, *A World of Compassion*)

Thank you.

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Figure 120. Aurora Borealis



Figure 121. Aurora Borealis



Figure 122. Aurora Borealis



Figure 123. Aurora Borealis



Figure 124. Aurora Borealis

Figure 125. Aurora Borealis



Figure 126. *Returning to the Past*
2004, acrylic on archival board, 9 1/2" x 10 3/4"



Figure 128. *Emanations in the Landscape*
2004, acrylic on archival board, 9 1/2" x 10 3/4"



Figure 127. *I Will Miss You Most of All...*
2004, acrylic on archival board, 9 1/2" x 10 3/4"



Figure 129. *Erin*
1998, oil on canvas, 72" x 48"

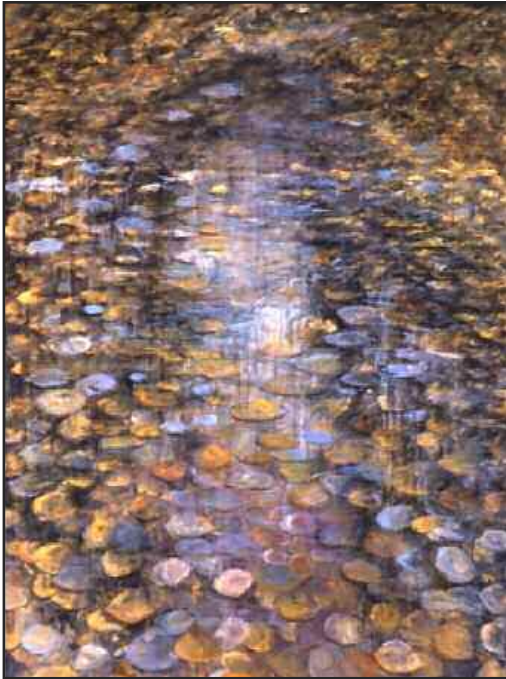


Figure 130. Passing Through
1995, acrylic on canvas, 48" x 36"



Figure 132. Within Light
1992, acrylic on canvas, 40" x 78"



Figure 133. Moment of Recognition
1986, oil on canvas, 36" x 60"



Figure 131. Sou Chow Chi
1988, oil on canvas, 66" x 80"

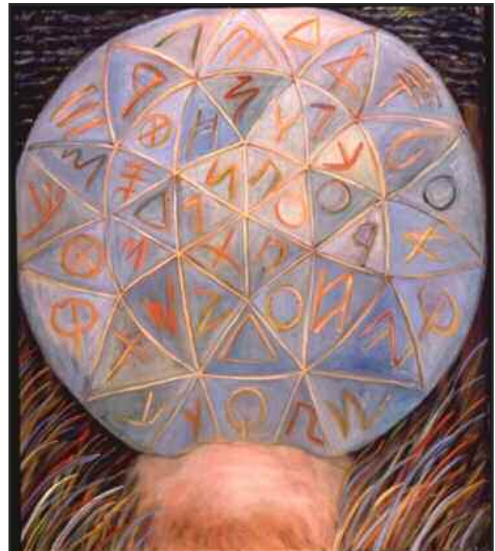


Figure 134. Revelation
1985, oil on canvas, 85" x 72"



*Figure 135. Zohar / Zohir
2005, acrylic on canvas, 85" x 85"*



*Figure 137. Birdman's Proposal
1999, oil on canvas, 36" diameter*



*Figure 136. Riding Bareback on Each Other's Souls (911 Series)
2002, oil on canvas, 48" diameter*



Figure 138. *Aurora Contrapunta*
2008, acrylic on canvas, 60" x 63" 4 panels



Figure 139. *Aurora Impassionata*
2008, acrylic on canvas, 78" x 48"

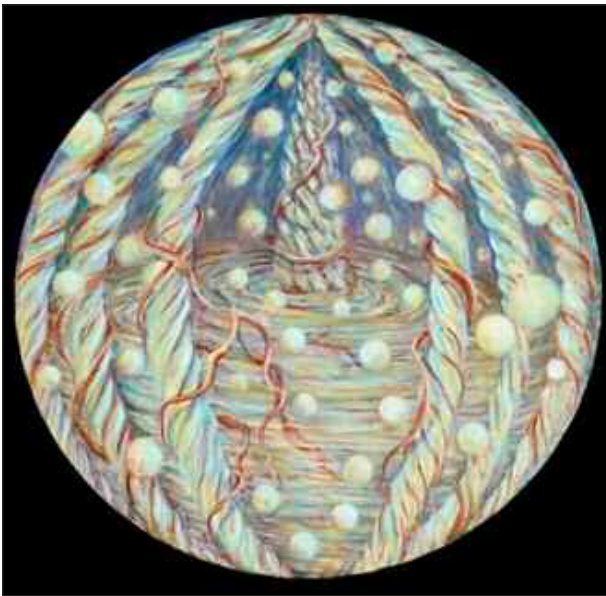


Figure 140. *A World of Compassion*
2007, acrylic on canvas, 12" diameter

This paper is based on Gilah Yelin Hirsch's address, presented at the Twentieth Annual ISSSEEM Conference, Evidence-Based Spirituality for the 21st Century (June 25 - 31, 2010).

BIO: Gilah Yelin Hirsch is an internationally recognized multidisciplinary artist, writer, filmmaker, theorist, lecturer and facilitator. Her work spans the realms of art, architecture, theology, philosophy, cross-cultural medicine and psychiatry, psychoneuroimmunology, anthropology of consciousness, science of consciousness and world culture. Hirsch is the recipient of numerous grants and awards including the National Endowment for the Arts, Rockefeller Foundation Bellagio Fellowship, and the International Society for the Subtle Energies and Energy Medicine's Elmer and Alyce Green award for her "innovative blending of science and art." While Hirsch resides in Venice, California and holds the position of Professor of Art and Chair of the Art and Design Department at California State University, Dominguez Hills (Los Angeles), her encompassing and broad-based work requires frequent and extensive travel worldwide.

CORRESPONDENCE:

Gilah Yelin Hirsch • gilah@linkline.com • www.gilah.com

BIBLIOGRAPHY

Adey, W. Ross (1922 - 2004), *Cell Membranes and Cellular Communication* (film), (Loma Linda VA Medical Center, CA).

Clifford, Terry, *Tibetan Buddhist Medicine and Psychiatry: The Diamond Healing*, foreword by HH Dalai Lama, introduction by Lokesh Chandra, (Motilal Banarsidass Publishers, New Delhi, India, 2003).

Damasio, Antonio R., *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (Harcourt, Inc., New York, NY, 2000).

Hirsch, Gilah Yelin, *Cosmography – The Writing of the Universe* (DVD), (Gilah Yelin Hirsch, Los Angeles, CA, 1995).

Hirsch, Gilah Yelin, *The Traveling Exhibition: Gilah Yelin Hirsch* (Gilah Yelin Hirsch, Los Angeles, CA, 2010).

Loewenstein, Werner R., *The Touchstone of Life: Molecular Information, Cell Communication, and the Foundations of Life* (Oxford University Press, New York, NY, 1999).

Narby, Jeremy, *The Cosmic Serpent: DNA and the Origins of Knowledge* (Jeremy P. Tarcher/Putnam, New York, NY, 1999).

Novac, Andrei, "Model of Sympathetic and Parasympathetic Systems," as diagrammed for Gilah Yelin Hirsch, late 1990's.

Scarry, Elaine, *On Beauty and Being Just* (Princeton University Press, Princeton, NJ, 1999).

Shaw, Gordon and Raucher, Francis, *The Mozart Effect: Music/Brain Research* (University of CA, Irvine, 1993).

The Zohar, translation and commentary by Daniel C. Matt, Pritzker Edition (Zohar Education Project Inc., Stanford University Press, Stanford, CA, 2004).

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