

* new. The same thing happens in the mating dance of human lovers and other life-forms. The merging of polar energies results in the creation of offspring ("spring" is an appropriate term, given the energetics involved). This process is repeated among the stars.

Astronomers believe our Sun has a mate (Gender), a "brown dwarf" named Nemesis located about 25,000 times the distance of the Earth from the Sun. The mating of their energetic centers (Polarity) has produced our family of planets, moons, and asteroids. Early in the twenty-first century astronomers had discovered more than fifty such stellar pairs, apparently producing planets in a manner similar to the "lovers" Sun and Nemesis.

Now we have discovered a similar birthing process at the galactic level. Our galaxy has at its center two huge force fields that emit several times as much radiation as our sun and are a strong source of radio waves. These two energetic centers (Polarity) may include a dense, fiery group of young stars and/or a black hole. Thus, they appear to fill the role of "parents" (origin and maintenance of stellar offspring) in our galaxy.

i Given this symmetry, I believe it is not too farfetched to postulate an analogous pair of energy centers engaged in a mating dance of creation at the level of the universe itself. I have somewhat humorously labeled it the "Grand Couple." But this book goes deeper than descriptions of interesting physical analogies. Key to its central thesis of a self-conscious universe is the hypothesis that a certain form of consciousness has manifested itself at each of these levels, from the microcosmic to the macrocosmic.

If that hypothesis is correct, then all forms of manifestation in the physical universe involve an expression of conscious intent, as in the schema presented above. The following chapters present evidence suggesting that the expression of conscious intent coheres some form of subtle energy into morphic fields. These fields possess the ability to concentrate ordinary energy into physical form. The result is that consciousness informs and transcends all organisms. In this manner nontemporal awareness benefits from conscious experience in transitory phenomena, in what I have labeled a "self-learning universe."

Gary Schwartz and Linda Russek, in their book *The Living Energy Universe*,¹⁹ clearly illustrate how memory is retained in all aspects of the universe. Their research shows how memory lives on in so-called inert matter, living cells, and larger systems. With memory access to past experience, each new moment enables a conscious entity to assess the difference between past and present, and experiment against its perception of still unrealized potential. This is the learning process: projecting an outcome, attempting to realize it, and accessing the degree of success. Awareness of the resulting degrees of congruence or incongruence between the actual experience and the original intent leads to self-learning.

I have chosen to speculate that the conscious intention to fully experiment with itself impregnated the subtle-energy womb of the Grand Couple. From that desire came the physical universe with its polarities of energy and matter—or "matenergy," as I prefer to label the two poles. The power of the original expression of intent was strong enough to cause a part of the original force to concentrate itself as the medium of subtle energy. The further coherence of the subtle energies transmuted them into the world of spirits, atoms, molecules, and organisms. The next chapter explores how our universe still vibrates at the microcosmic level from the kinetic energy generated by that initial desire to self-actualize.

Notes

1. Bruce Chatwin, *The Songlines* (New York: Penguin Books, 1988).
2. David Darling, *Deep Time* (New York: Delta, 1989). Most current estimates of the age of the universe range from 15 to 20 billion years.
3. Some believe the same or a comparable being was a source of knowledge for the Toltecs, Mayans, and Incas of the Western Hemisphere. For example, the Mayan calendrical system has several principles similar to the Hermetic ones presented here.
4. This tradition is the basis for the plot of James Redfield's popular book *The Celestine Prophecy*.
5. Three Initiates, *The Kybalion: A Study of the Hermetic Philosophy of Ancient Egypt and Greece* (Chicago: The Yogi Publication Society, 1912).

in turn is easier to change than a physical condition. Therefore, this model suggests that the noumenal force of conscious intent is the most potent power we have to shape future events. Charge up a new idea, and the physical shift will follow.

As we will see later, humans are not confined to this side of the mirror. Through meditation, dreams, and other beyond-the-body states of consciousness, we can "see" this side from the noumenal side of the mirror. Keep in mind that all three (pattern, subtle energy, and matenergy) are just different aspects of one whole (the object, the mirror, and the reflection as an ensemble), but understanding the three facets is essential for the next level of human development.

In his book *The Holographic Universe*, Michael Talbot⁶ suggested that—at a level beyond the current concepts of physics—matter, energy, and consciousness blend into a single field. But simply combining that triad obscures a range of unexplained influences and communications experienced by human beings. To explain the ability of the individual's mind to interact with and influence ordinary matter and energy in its body and externally at a distance, another medium must be invoked—the energeial realm of subtle energies. More comprehensive treatment of how the three facets interact comes in chapter 4, but for this chapter, we need to focus on the indirect impact of human consciousness on matter at the microcosmic level.

Mind and Creation

Humans, like all organic beings, possess a level of consciousness-incarnate that we call mind. (The word "mind" throughout this book represents consciousness in an active state.) Considerable evidence demonstrates the power of a human mind to influence the behavior of matter. Here are some examples:

- Deepak Chopra has popularized the earlier-referenced research by Candace Pert that demonstrated the human ability to think neuropeptides into existence.⁷ He has illustrated its role in self-healing.

- Microbiologist Celeste White has summarized significant evidence to indicate that individual human mental effort can have a minute, though vital, impact on the creation and/or manipulation of crucial bits of matter, including DNA sequences. Her review includes methods to reduce the electrical excitability that triggers epileptic seizures; guided imagery to affect the immune system, blood flow, and heart rate; and use of hypnosis to cure genetic illness (warts).⁸
- Robert Becker, in *The Body Electric*,⁹ shows how the expression of feelings or thoughts causes direct current (DC) to flow along the body's nerve sheaths (perineurals). In this instance, the mind shapes waves of energy parallel to its previously described influences on particles of mass.

These examples of physiological and biochemical reactions to conscious intent show that the two basic categories (matter and energy) of physical building blocks are susceptible to the power of one being's mind.

Applying the Principle of Correspondence, one can assume that scaling up the mental/emotional effort (by many individuals concentrating together) likewise scales up the physical effect. Research at Princeton University's PEAR (Princeton Engineering Anomalies Research) Laboratory has demonstrated that effect with physical objects and computer software.¹⁰ The larger the number of people who share and focus the same intention on an object, the greater the effect; but we cannot yet be certain of the ratio of increase. Perhaps five people acting together have as much impact as ten or twenty-five acting separately. (This principle explains why group prayer or community rituals are more powerful than isolated and independent individual efforts to promote healing from a distance.) These experiments demonstrate the interconnectedness of all beings and all dimensions.

One difficulty with the looking glass, or any other physical analogy, is that it still perpetuates the idea of a dichotomy, like that of spirit/matter, brain/mind, or heaven/earth. We must somehow be able to see ourselves, the mirror and frame, and the reflection as a whole within an even larger whole.

For example, a colleague was rapidly deteriorating from an alleged HIV-induced decimation of her immune system, fading in and out of consciousness. One day I gave her a black-and-white photograph I had taken and carefully developed. Seeing it, she sighed and asked how I knew to offer it to her. "That's exactly how I have been feeling," she remarked. The next day she passed from this incarnation. The photo was of a basket of kittens looking at themselves in a mirror. It was impossible to distinguish between the furry, playful animals and their reflections. We need metaphors, like the Zen moon-in-the-water concept: the image in the water is the subject and the moon in the sky is the object, and "moon-in-the-water" is a field jointly created by the apparently separate subject and object. But the metaphor, too, is part of a larger field encompassed by our mind.

Even the process of selecting a metaphor reveals the requirement for some overarching element, like conscious intent. Such an element is necessary to account for a particular choice from among many available options. The simplest answer to the question of how creation works is that conscious intent has the power to collapse infinite possibilities into manifestation.

Conscious Intentions

The ongoing flow of conscious intentions continually shaping matter and energy in our universe never ceases. Making individual choices is like paddling one's canoe in it, taking advantage of eddies and whirlpools, but unable to stop the stream whose origin lies in some unfathomable spring. So the issue for individual conscious beings is how to express intent while in the continuous flow. The answer lies in the moment-to-moment choices people make, at the finite level where there is freedom to choose. To pose no resistance to the current is as much a choice as direct action. The Principle of Cause and Effect works in the act of nondecision as it does in deliberate choice.

Even with a small choice, one can manifest a different emotion (a form of subtle energy) than would occur from

habit (past choices). For example, as mentioned earlier, the simple intention to be happy creates a neuropeptide out of the available stock of the hydrogen, carbon, oxygen, and other atoms in our brain cells. Thus, a single thought, while not redirecting the river, initiates a reaction that affects the human body's "canoe route." We need more research to identify the points where the "paddle" of individual intent can be most effectively inserted in the flow of life.

French scientist Jacques Benveniste and his colleagues, researching homeopathic medicine, found evidence to indicate that a treated liquid continues to have the same effect even after the liquid has been diluted to a point where no physical trace of the antiserum can be found. Their research suggests that something like an energetic trace or residue exists independent of the original material. (Schwarz and Russek in their book give many other examples of memories stored in seemingly inert matter.) If the patterns can be assumed to exist by their continuing effect (like the traces left by virtual particles), there must be a mechanism that communicates their instructions to the material involved.

While we do not yet understand the operating mechanism, such noumenal pattern traces can be projected by computer-generated light waves or by human thought. Rupert Sheldrake's description of morphic fields may explain how these non-matter-bound patterns can have such power. These fields, described as "thought bundles" by Nancy Parker in her fine novel *Omega Transmissions*, contain the invisible, but energized, constructs or patterns necessary for manifestation in the physical realm. Whether it is in the movement of material objects, the creation of a molecule, or the repatterning of genes, the above studies clearly suggest that some type of energy or force transmits the conscious intent to the matter involved.

Through the joint action of trace patterns and morphic fields, matter is influenced by ideas—whether latent memories or newly created ones. A latent memory trace may exist from a creative source outside our space-time or be the result from a long-ago conscious thought developed within our space-time.

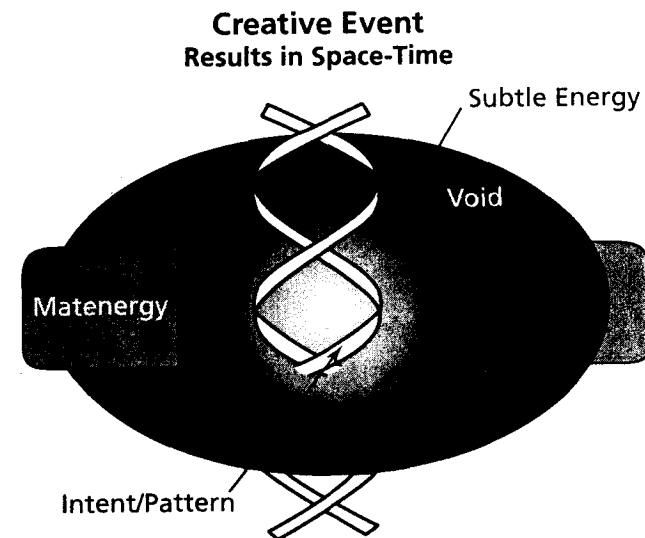
(It could also be a residual from a previous life or shared memories.) A newly created field can come from almost any contemporaneous source.

Given the power of the ongoing river of consciousness, if parents-to-be do not consciously energize their intentions to shape DNA patterning at the time of conception, does the memory of an earlier creative act—embedded in the parents' genes—determine all the zygote's inheritance? The two possibilities appear to be either that all genetic instructions passed from parents to the newborn preexist conception, or that some new patterns are introduced. Thus far, we have only anecdotal accounts of correlations between parental images at conception with subsequent experiences of the child. However, may this be one way that microevolution (caused by conscious intent) occurs within a species?

It is interesting to speculate whether since the original appearance of the human species, whose genetic structure represented some "first" intention, there has been deliberate, external intervention (physical or mental). In other words, has some intermediate creative force subsequent to the initial unfolding of the species acted on the human gene pool? The next chapter suggests that the answer is yes. Regardless of the final answer to that question, I think it is reasonable to assume that every current genetic pattern, in any species, is the trace of a bygone creative thought.

Patterns Reflect Intent

The following graphic summarizes my inferences about the interplay of three aspects of our integral universe: the noumenal void (1) where infinite patterns exist; a subtle-energy field (2) where the intentions—expression of pattern—can cohere morphic fields; and matenergy (3) from which the morphic fields concentrate physical forms.¹¹ Only after one potential pattern is selected (by consciousness acting within itself), energized into a subtle form (in the intermediate realm), and manifested (balanced between cohesion and disintegration in the realm of matter and energy) do we have a space-time event.



It would appear that we can draw on a preexisting repertory of the universe's patterns that can be rearranged by human will. (Perhaps they are the precursors of the mythical superstrings of modern physics.) In other words, at least at this point, the universe carries a set of inherent patterns that, when used in varying combinations and with appropriate energy, cause matenergy to manifest. Lynnlaire Dennis, during a near-death experience, perceived a series of intricate shapes and flow patterns that seemed to represent what we know about the inner relationships of the building blocks of life.¹² For several years now a group of scientists have been exploring the implications of using these patterns to understand the fundamental wave structure of the universe.

At this point it might be helpful to clarify possible confusion about the term "energy." In the context of space-time, electrical engineer Thomas Bearden helps us to understand that we use the word "energy" to describe both the capacity for activity and activity itself.¹³ He and others see the capacity as the source. But as both the capacity and its active state are in space-time, as two aspects of a polarity, many agree there is

another form of energy—sometimes called subtle energy. This is what I have described as the nonmaterial force activated by conscious intent that serves as the transforming medium. The concept of a subtle energy linking the two other aspects (physical and imaginal) of our universe implies consciousness is the highest-level “organizer.” Prior to either an intentional or accidental joining of matter and energy comes the truly creative event, when the idea or pattern is first conceived. This purposeful thought or conscious intent that designs the initial pattern must come from the realm of either a local mind or general consciousness.

The experience of a three-faceted universe, where all facets coexist to the point of singularity, and are wholly interdependent, is difficult to model graphically. Michael Talbot and Itzhak Bentov (scientist and mechanical engineer, respectively) believed the holographic model moved closer to explaining the totality of such a multidimensional universe.¹⁴ (Edgar Mitchell, *Apollo 14* astronaut and founder of the Institute for Noetic Sciences, is a current proponent of a hologram concept based on quantum mechanics.) In a hologram, you can literally know the whole from the part, a modern demonstration of the Principle of Correspondence. The smallest fragment of a holographic record can be broken off and still reflect the entire image when subjected to laser light. The hologram itself is a record of “interference patterns,” that is, the way an object breaks up the waves of light from two directions. To make the image visible, the film is illuminated by a laser beam like that used in producing the hologram. The interference patterns then redistribute the laser waves (all the same frequency), revealing the photographed object suspended in a field of space.

The holographic principle is reflected in every human cell (except red blood), where all the DNA instructions for the entire complex of organs lie quiescent, yet capable of giving birth to whatever is ordered—a brain, a kidney, a toe. At the same time, each cell knows its own place, its own purpose. Geneticists involved in genome research believe the 95 percent of DNA formerly known as “junk” may include these instructions. The

inescapable conclusion is that the patterns for any part exist in every part of the universe. Though invisible and unmeasurable, like the holographic laser beam, conscious intent converts their potentiality into actuality.

In the omnipresent noumena, decisions to manifest one part or the other are communicated instantaneously throughout the whole, unlimited by matter, energy, or the speed of light. Physicists demonstrate scientific proof of this capability by separating paired subatomic particles and registering that they react in tandem when either one is individually acted upon. Researchers also have caused one cluster of photons to disappear, only to find a cluster with identical information appear in a new location (the popularly known “Beam me up, Scotty” experiment¹⁵). Similarly, biologists prove the same point when they separate human white cells at great distances from the body and track the cells’ reactions to changes in the donor body’s state.¹⁶ We see the result of the communications; we do not yet understand how it occurs.

Current theories positing explanations of this holographic communications phenomenon include Irish physicist John Bell’s 1964 assertion that the primary substance of the universe is nonlocal (exists everywhere), and British physicist David Bohm’s belief that an invisible field connects all matter and events in the universe.¹⁷ This field is assumed to exist outside the domain of ordinary reality, clearly part of the other side of the glass in the mirror. It acts—like the Christian Holy Spirit and the Hindu Brahman—as the breath of life for cosmic beings.

The holographic construct, to some extent, raises a question about the Big Bang theory with which we must grapple (and for which quantum mechanics offers no easy explanation). Recall this book’s opening chapter’s descriptions of that “incomprehensible first second.” How could the potential for everything that is now contained in the universe have survived in unconnected fragments blown apart 15 billion years ago? Yet its present entirety is still wholly represented within each infinitesimal part. This fact illustrates the Principle of Correspondence, where microcosm reflects macrocosm and vice versa.

Deliberate patterns of thought energize the cells in the body to return to a state of wholeness that effectively eliminates the virulent symptoms. The mental message communicated to the cells is that they can and should reject this or that as an outsider. Such natural responses avoid the side effects of typical allopathic blockbuster doses that frequently do more harm than good. Conscious intent, by precipitating the response of the whole system, enables the body to reject the disease patterns.

This chapter exemplifies the metascientific approach by integrating cutting edge research from the physical sciences with innovative studies of the interactions of consciousness and subtle energies with the material realm. It demonstrates ways in which conscious intent influences the microcosm of particles and cells and suggests how subtle energies facilitate that interaction. The result is an expanded vision of the potential humans have to consciously participate in the natural system and their ongoing development.

Notes

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PART 2

Consciousness Manifests Itself

By now I hope you agree with me that our universe and our history are much more complex than we ever imagined. This section explores the nuanced multidimensionality of humans in the context of a conscious, self-directing universe. It takes a nonhomocentric view of reality, where humans are only one group of actors in a cosmic drama, minors aspiring to the big league of self-learners.

The implications of recent discoveries in frontier science, when integrated with insights into nature from ancient but highly advanced sources, suggest that the universe as a whole arises from the state we call consciousness. Many experiments like those covered in part I point to consciousness as both the origin and arbiter of developments in physical reality. *Homo sapiens'* study of nature, including their own experience of it, intimates that all levels of reality have some degree of awareness of what happens to them and something of the cause. On the basis of this awareness of cause and effect, all conscious entities (even viruses) can engage in adaptive behavior. This

makes it possible for any level of consciousness to assess the results of its intention (or purpose, even if only to survive) against the reactions of all other levels. In other words, an individual conscious entity (or a collective of entities, such as a species) can learn whether a specific intention can work in the context of the whole universe, and if not, what will work.

If such learning can result from the interaction of local consciousness with energetic and material existence, then it is not unreasonable to infer that universal consciousness learns from the synthesis of the self-learning from all the parts. Further, if all those self-learning parts derive from one singular consciousness, then the conscious universe in its entirety must be self-learning.

With increasing awareness of self and environment, it is normal for *Homo sapiens* as conscious beings to seek the code that will reveal how they fit into the whole. Part 1 gave us a sense of the universe from the microcosm to the macrocosm. It also reviewed what we have discovered of an extended human history in our solar system. Now let's attempt to understand how humans as conscious, organic beings function as a part of the larger system. Part 2 attempts to fit the human piece of the puzzle into the model of a self-learning universe.

To do that, in chapter 4 we first look at the three facets of reality in relation to organic beings. Remember, the three facets introduced in part 1 are the noumena (consciousness), the energeia (subtle energies), and phenomena (physical). We review how physical beings are both composed of those facets and interact with the three external to themselves. We develop an understanding of the powers of sensing and creation at all levels, and how beings use the subtle senses to expand their grasp of the universe. In chapter 5 we look at the realm of universal mind, and how individuals are embedded in and relate to the whole, at how general consciousness connects all beings in a mutually supportive system. Chapter 6 deals with how universal consciousness concentrates part of itself into a local form (the process of incarnation) and how the resulting individual maintains its integrity in space-time and beyond. The implication of the predominance of consciousness among the three facets is highlighted for human learning and development.

A Three-Faceted Reality

The universe, from the conventional scientific perspective, is unidimensional: everything is part of and limited to the material realm. Even most multidimensional-physics models are limited to matenergy and various concepts of space-time. Many philosophers think of the universe in dualistic terms: mind and matter. Some religions see three parts: body, mind, and spirit. Metascience offers another concept: a multifaceted universe with all elements interactive and conterminous. In this idea of an integral universe, all facets are dependent on one another—one part cannot exist as it is without all the others.

In a three-faceted universe where consciousness is supreme, conscious beings, by definition, include all three facets (noumena, energeia, and phenomena). This means *Homo sapiens* and all other life-forms comprise and interact with consciousness, subtle energies, and ordinary matter and energy to varying degrees. In my view, the subtle-energy facet is the realm of emotional charges.

Activities of the universe involving matenergy can be perceived by the physical senses, but other levels of reality require more subtle senses. The next leap in human knowledge needs an integration of all ways of knowing. A review of the full range of human experiences, including those now often called anomalous, reveals the need for a more expansive intellectual framework to understand interactions between individual

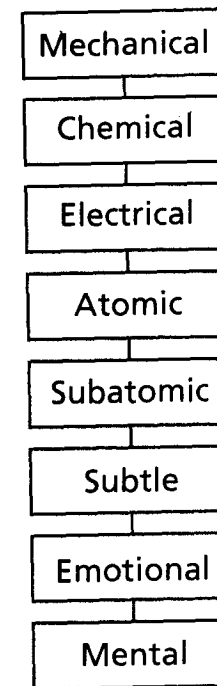
Jewish Kabbalah point to the same insights in esoteric knowledge. As seen in chapter 2, the discipline of particle physics has identified the basic triadic nature of the subparticle level.

That is why I contend that a combination of these metaphysical and scientific concepts helps create a broader science: a metascience with a more comprehensive approach to knowing. Metascience points to theories that postulate an intermediate or subtle-energy field with its own set of forces responsive to permutations of thought or ideas. It can enhance our understanding of the processes that, to use the concepts of quantum mechanics, collapse a potential pattern of reality into experienced or observed reality.³

* As we saw in chapter 2, the phenomena and energiea first exist in potential form, to be activated by conscious intent. This means subtle energy and ordinary energy and matter exist in inchoate states until consciousness imprints them with its patterns. These patterns then manifest themselves from unformed energiea and phenomena as perceptible entities, shaped by the subtle and physical senses. (This is consistent with the anthropic concept in physics that material reality does not exist until conscious beings perceive it.) This is why human emotions (energeial-level events) are determined by preexisting beliefs (noumenal-level intentions). Our metascientific challenge is to understand the dynamics of transformation of subtle and ordinary energy from its potential (state of rest) to its kinetic (action) state.

* Scientific knowledge of all energy spectra is still fragmentary, with our understanding becoming more diffuse as we move from top to bottom on the continuum shown below. We think we understand gravity in the mechanical arena⁴ and chemical energy expressed as heat in the conversion of matter, but the other areas seem less certain as one moves down. For example, Robert Jahn of Princeton University hypothesizes that consciousness interacts with the material realm through a quantum wave function, but it is unclear where that interaction fits on such a spectrum in terms we can verify.

Energy Continuum



The common forms of energy all occupy the phenomenal realm (electrical, nuclear, solar, muscular, etc.). But new concepts of energy beyond the electromagnetic spectrum have become necessary to understand various phenomena. Research with scalars—waves that continue to reverberate whenever matter is removed from space—now leads to progress in the development of so-called free energy technology. Scalars have been considered cosmic waves by some, because they are believed to be faster than the speed of light, leaving no trace in the material realm. The term “tachyon” has been used to designate them, and the term “zero-point energy” (ZPE) is also used by some to refer to this mysterious energy.

Waves like the above, but not part of the electromagnetic spectrum, may be the subtle energies of the energiea. I employ the term “subtle energy” when referring to any energy assumed to be in the energeial realm, because it avoids

confusion with the ordinary energy of the electromagnetic spectrum (which can be either wave or particle).

In the model offered here, subtle energy or *energeia* arises from consciousness, as *matenergy* appears to rise from *energeia*. But new experiment designs are needed to test how an idea (from the noumena) acts on subtle energy (from the *energeia*) that in turn shapes *matenergy*. Recall that *matenergy* denotes a polarity of matter and energy, two ends of the same dimension in the phenomenal realm.

Metescience research projects should begin with the assumption that energies in the *energeial* and the *noumenal* realms, like the phenomenal, possess both potential and kinetic states. Therefore, the research design must incorporate the possibility of spontaneous, nonlinear conscious response. Perhaps the ancient Tao philosophy (expressed in the Tai Chi Chuan school of Chinese martial arts) which says Wu-Chi, the state of nothingness that holds the potential for both static and dynamic states,³ requires mindfulness in its use.

In its potential form, physical energy is force waiting to be released, whether a precariously balanced rock, a piece of wood or food, or an atom. In my three-faceted model, embodied (incarnated) emotions are derived from potential subtle energy, and local mind derives its potential from general consciousness. In our four-dimensional world, kinetic energy involves vibration in space-time, be it in the rebounding billiard ball or a surge of electrons. The pulsing of prayers and telepathic transmissions, like the movement of air molecules and the flitting of electrons, are manifestations of kinetic energy.

The important point here is that all levels of energy transformation from potential to kinetic involve the expressive aspect of some form of communication. Each is ultimately caused by an expression of intent.

When humans understand that various forms of energy and matter come from conscious events, we open the doors—using the receptivity of all our senses—to greater expression of our inner power. The making of imaginal choices creates thought patterns (morphic fields, as in the popular hundredth monkey theory) that energize physical reality. Between ideas and their

manifestation lies the interface where the subtle energies of the emotional realm (*energeia*) await activation by mental patterns. (As we'll see later, this interface has an expressive—yang—and a receptive—yin—side.) These concentrated emotions, in turn, activate the media of electromagnetic, mechanical, and chemical energies to affect the phenomenal realm.

The earlier discussion of the role of ideas and emotions in the creation of neuropeptides offers an illustration of this sequence. The fully conscious being in a multidimensional, feedback-using universe requires multilevel senses to act as gateways between the realms. The following review of different categories of senses illuminates how the three realms interact, providing feedback to one another. This feedback loop, revealing the effects of initial intentions and adaptations, is essential in a self-learning universe.

A conscious entity demonstrates its self-learning nature when its mind (noumena) receives subtle-energy messages (energeial emotions) of an impending deterioration in cell functions (phenomena) and changes its mental polarity from negative to positive. This shift of attitude (noumena) gives rise to positive emotions that stimulate molecular change in cells. And the circular learning process continues as long as one remains fully aware of the interactive levels of sensing.

Five Physical Senses

In her book *A Natural History of the Senses*,⁶ Diane Ackerman uses the written word in a sensual exploration of a world teeming with physical stimuli that define the limits of our material world. Humans luxuriate in a flood of wonders that, while sharpening their focus, actually limits their experience. Given the quality of interaction available within the rich material environment, it is no wonder that many of us end up stopping there.

The five ordinary senses are the entry points through which data from the relatively dense material plane connect with our physical bodies. At the outer perimeter of the physical body, these specialized cells receive input from the external environment and send it to the brain for analysis. Some of