

3

The Synergic Universe

The pattern which connects is a metapattern. It is a pattern of patterns. It is that metapattern which defines the vast generalization that, indeed, it is patterns which connect.

—Bateson (1979)

In our present age we need a worldview which takes into account the fundamental requirements of the age as well as the basic aspirations of man's evolving psyche. We need a worldview which shows how our deepest aspirations are related to the essential structure of the universe.

—Chaudhuri (1977)

Synergic inquiry (SI) was in part inspired by calls from Gregory Bateson (1979) and Haridas Chaudhuri (1977) for new perspectives that connect to the essential structure of the universe. This chapter outlines our arguments for the grand universal pattern that we identify as the synergy principle of the universe and include in the theoretical foundation for the SI methodology. In doing this, we demonstrate the strong connection between the SI methodology and this principle that we take as part of the essential structure of the universe. We believe that the pattern this principle represents is both significant and pervasive and is what gives SI its power as a methodology for social action and change.

We believe that SI's grounding in a grand pattern is significant in terms of the momentum of our time and that the emergence of this methodology itself is part of the pattern that we call the synergy principle. In this chapter, we clarify the pattern that connects, which we see as underlying the evolution of reality, and we present support for our view from a variety of disciplines.

In seeking what Bateson (1979) called "the pattern that connects all the living creatures" (p. 8), we searched for and found metapatterns that do indeed "define the vast generalization" (Bateson, 1979, p. 8). This pattern was then combined with personal experience and used to design and develop a practical methodology that can guide action toward expansions of consciousness and greater capacities for addressing complexity and the need for human systems to change.

Our exploration of this aspect of SI's underpinnings has two layers. One layer is to show this pattern both within and in connections between the philosophical wisdoms of major cultures. The other layer is an exploration of a pattern that logically connects both the natural sciences and the social sciences. We start with the philosophical layer.

The Evolution of Consciousness and the Synergy Principle

Over the long period of human history, many have attempted to create definitions of the universe and reality, resulting in a wealth of divergent perspectives that compete with each other. In the text that follows, we do not focus on the definitions or boundaries that give us a snapshot to represent the immensity; instead, we focus on the dynamic processes within this immensity through which it has been seen to evolve. In other words, we explore descriptors of the basic process through which the universe evolves.

Our purpose here is to identify a significant pattern that is so important that it has the potential to integrate the divergent perspectives that normally compete and thus to eventually reexplain the world. The processes that emerge and result from this pattern have critical implications for human behavior and the effects people have on the world they share. People may ultimately have different perspectives on how the universe evolves, but this process, as described and used within SI, allows people to use the differences between their perspectives more productively.

By developing SI and sharing our work, we are reaching for a broader understanding of truth, one that has the potential to cut across boundaries of culture, class, beliefs, and experience. In this we share Panikkar's (1979)

belief that there is no such thing as a private truth. If we want to identify a pattern that is so large and so powerful that we can claim its broad influence, this pattern must be one that connects to various cultural wisdoms.

In reaching for this kind of broad understanding, we explore literature from a wide range of sources, including Western theories of the evolution of the universe (e.g., Hegel, 1971, 1977; Laszlo, 1987, 1996; Wilber, 1995), Chinese Taoism and the philosophy of the *I-Ching* (Wu, 1985), Buddhism (Smith, 1991), the Indian integral philosophy by Sri Aurobindo (1992) and Chaudhuri (1977), and the emerging interculturalism as represented by the works of Panikkar (Prabhu, 1996) and the voices of a small group of Mohawk and non-Mohawk elders (Vachon, 1995). Because our attempt here is only to identify a metapattern across the range of these sources, we do not discuss the substance of any of this literature in depth.

We start with an old question: What is reality? Given all of the human intelligence that has been applied in attempts to explore this question, it seems clear that reality is elusive and that the totality of it is beyond our comprehension. It is full of mystery, and often it feels like pieces of cloud that are constantly shifting and changing. The *I-Ching*, one of the oldest philosophies of which we still have record and which heavily influenced the rubrics of Taoism, Confucianism, and Zen Buddhism in the East, states the nature of this mystery. As one translation into modern English reads, "The universe is an organic whole, a process of never-ceasing growth. All the existence within this growing context are organically interrelated and form a comprehensive continuum advancing into novelty" (Wu, 1985, p. 60).

This says that reality, in its totality, is in constant flux and evolution and therefore by nature unpredictable. Ordinary language, limited by its function to describing ordinary matters of life and our daily perceptual world, falls short in describing the mysterious nature of this totality (Wu, 1985, p. 29). In ancient Chinese belief, Tao is the origin of all things. As Lao Tzu elegantly expresses it in his famous saying at beginning of *Tao Te Ching*, "The Tao that can be spoken of is not the absolute Tao." The *Tao Te Ching* later continues,

Tao, being a hollow vessel,
Is never exhaustible in use.
Fathomless,
Perhaps the fountainhead of all existences. (Wu, 1989)

This belief is also shared by philosophers who belong to evolutionary schools of thinking in other cultures. For example, Sri Aurobindo, like his contemporary, Gandhi, is one of the modern-day saints of India. The core of

48 Synergic Inquiry

his teachings address the ultimate unity of all beings and things in the Absolute or Divine. In Aurobindo's (1992) teachings, all that we observe as individuality is a manifestation of Divine consciousness. At that level, all is one, and all is part of an evolutionary process. Within this process, as seen by Aurobindo, first there was matter, then life, and then mind. Each arose out of the other and depends on these prior manifestations for its existence. Each of these steps is a progressive evolution of Divine consciousness. The universe is changing, but in a direction toward greater unity within the diversity of individual forms. Aurobindo sees the human race as being on the leading edge of this evolutionary process. Our purpose, therefore, is to participate in this evolutionary process and to prepare ourselves to be transformed and take on higher forms of consciousness. The consciousness that results from this kind of transformation experiences the unity in diversity, and this then becomes but another step in the evolutionary progression and expansion of consciousness.

Haridas Chaudhuri (1977), a student of Sri Aurobindo who founded a school to bridge Eastern and Western thinking in the United States, took a more philosophical approach in his writings, and he framed the evolutionary progression as a dialectic process. Chaudhuri, who sees dialectics as a process of resolving dualities back into One and advancing from lower to higher organized wholes, writes in *The Evolution of Integral Consciousness*:

Reality's creative urge consists in the movement of energy from the relatively undifferentiated whole toward a continuously increasing self-differentiating of the whole. The human mind's quest for truth is the movement of consciousness from the dynamic tension between opposites toward more and more inclusive synthesis embracing the wholeness of Being. (p. 93)

Buddhism in general is also grounded in the notion that nature has its own evolutionary course and that problems are caused by the way we, as human beings, are stuck within our own constructions of reality, or egos, to such an extent that we are driven by them. Therefore Buddhist practices, especially those of Chan or Zen, have focused on teaching us to unlearn our constructions of reality so that we can participate more fully in the evolving process that we humans share with nature. When we align with nature's process, we will coevolve with harmony and happiness (Smith, 1991).

Emerging schools of thought in the West also share this perspective. In their book *The Universe Story*, Swimme and Berry (1994) explain that the origin of the universe is indeed a mystery, and they assert that we have to tell a new story, one that is refreshing and healthy. They also affirm the evolutionary process, which they say began 15 billion years ago and evolved from

matter to life and then to mind. Wilber (1995), an influential integral philosopher, also takes an evolutionary approach in his explanation of the universe. He addresses the nature of the universe at the beginning of his influential book, *Sex, Ecology, Spirituality*, by writing, “It is strange to discover that the physical universe was manifested out of nothingness around 15 billion years ago; it is stranger that the life world evolved out of the physical world; even stranger mind arose out of life” (p. 1).

The evolving nature of total reality is also deeply rooted in the cultures of Africa. According to Marimba Ani (1994), African descriptions say that the universe is full of spirit that has its own course, refusing to be reduced to any rationalism. Recent voices of feminism also support this view of the universe as having an organic, relational, and evolving nature, saying that the masculine attempt to dominate this reality by confining it to static definitions is nothing but a product of human misconception and ego (Eisler, 1987).

This view, also shared by a concerned and articulate group of indigenous Americans, is described beautifully through the voice of Robert Vachon (1995):

It is as if reality were refusing to let itself be reduced to any one principle, vision, experience, thought, concept, myth or symbol. Instead, it is inviting us to an awakening, to going beyond, to letting ourselves be moved, inspired, transformed—respectively—by an ever-new and more open myth that is trying to surface. Let us say that reality is calling us, each and all, to a deep mutation that we are still groping to see and to express, but which we are in the process of living, of discovering and co-creating gradually, together, every day. It is about an ever-open vision, synthesis and horizon. (p. 16)

What then is driving the evolutionary process of reality? If there does exist an underlying process for the evolution of the universe, is it even possible to decipher it? What would be a way to effectively move toward ever-open vision, synthesis, and horizon within this evolution? These questions too have long been addressed by philosophers.

According to the *I-Ching*, “All existences in the universe follow a definite order” (Wu, 1985, p. 50). Human beings are also said to have the capacity to understand this order or the principles and coherent patterns through which reality evolves. Part of our uniqueness as human beings is the ability to become conscious of the evolutionary process of the reality of which we are a part. In other words, although reality is vague and elusive, we can know its way of maintaining order or the principles behind the coherent patterns that form the manifestations of the totality.

A review of the literature from a wide range of Western disciplines shows that the dynamic nature of reality includes a fundamental pattern of

50 Synergic Inquiry

differentiating and integrating that is inseparably bound in a cyclic relationship. (See the later section “Synergic Concepts and Phenomena Across Disciplines.”) This contributes to our assumption that the processes of differentiation and integration are coherent patterns through which reality manifests itself and that the universe evolves through continuous processes of differentiation and integration. Although this perspective is informed by modern Western research, it is not new. It is implied in the *Tao Te Ching*, which says that the Tao manifests itself by differentiating and integrating; this idea is often expressed with a quote from Lao Tzu:

The Way brings forth one.
One brings forth two.
Two brings forth three.
Three bring forth all things. (Wu, 1989, p. 155)

In the *I-Ching*, the terms *yin* and *yang*—the two complementary cosmic forces—are used to describe the processes of differentiation and integration. All things are said to be brought forth by the differentiation and integration of *yin* and *yang*, and this process continues organically and indefinitely. This continuous interaction between *yin* and *yang* is the process of Tao. According to Ani (1994), in African cosmology there also exists a fundamental “twinness” of the universe, the complementary functions of opposites that cooperate to form the proper working of the whole (p. 77).

Through Chaudhuri (1977), Indian integralism also tells us that there is a law of cosmic balance:

According to Indian philosophy, the Supreme Being, the One without a second, becomes many by producing dualities. Herein lies the most hidden secret of all creation and evolution—self-multiplication through polarization of energy. The nondual Being polarizes itself into the fundamental dualities of spirit and nature, mind and matter, God and world, light and darkness, heaven and earth, logos and eros. (p. 93)

A pattern of differentiation and integration is also found in the works of the great Western philosopher Georg Wilhelm Friedrich Hegel. In his encompassing dialectic system, Hegel describes existence as embodying multiple dimensions, which can be integrated into a unitary whole. According to Hegel, all human thoughts about reality are incomplete and therefore contradict each other. However, through a dialectical process, all human thoughts can complete themselves, resulting in a higher state of consciousness. Tarnas (1991) explains:

At the foundation of Hegel's thought was his understanding of dialectic, according to which all things unfold in a continuing evolutionary process whereby every state of being inevitably brings forth its opposite. The interaction between these opposites then generates a third stage in which the opposites are integrated—they are at once overcome and fulfilled—in a richer and higher synthesis, which in turn becomes the basis for another dialectical process of opposition and synthesis. (p. 379)

Hegel's dialectical philosophy has shaped the direction of Western philosophy (Tarnas, 1991), just as the philosophy of the *I-Ching* has influenced human thought in the East. In this way, Western approaches to understanding reality now appear to be converging with Eastern approaches called metaphysical philosophy. These processes of differentiation and integration as coherent patterns are also identified in matter, life, and mind:

These two processes are very obvious in the physiosphere (atom integrating differentiated particles, molecules integrating differentiated atoms, etc.) and in the biosphere (e.g., the progressive differentiation of the zygote and the progressive integration of the resultant parts into tissues, organ systems, organism), but they are also rampant in the sciences of the noosphere. Even psychoanalysis is on the board. Gertrude Blanck and Rubin Blanck, for example, pioneers in psychoanalytic developmental psychology, have persuasively argued that the aggressive drive is the *drive to differentiation*, and Eros is the *drive to integration*, and disruption of either one results in serious pathology. (Wilber, 1995, p. 69)

Futurist Charles Johnston (1991) has similar views and writes, "The creation of polarities is inherent to the workings of formative process" (p. 33). He asserts that creation is innately dialectical, that it cannot happen without separating the new from the old context. Within his creative system framework, integration is seen as the second half of the creative process. "Creation starts with unity, buds off new form—creating duality in the process—then with time re-integrates to a new, larger unity" (p. 32). As a result of this process, "polarities begin to bridge, and gradually a new, more integral whole comes to life" (p. 32). In other words, the polarities are integrated into a larger whole.

In a similar vein, the eminent systems thinker Ervin Laszlo (1996) summarizes both the classical disciplines and the emerging systems sciences into a general theory of evolution. In his model, which covers a period of 15 billion years, evolution starts with particles, atoms, molecules, and macromolecules, to evolve into protobionts, organisms, ecosystems, and ultimately social-cultural systems. The evolutionary process he describes is characterized by cyclic periods in which critical instability (i.e., differentiation) alternates with stability (i.e., integration). As evolution continues, the level of complexity increases.

Swimme and Berry (1994) tell a similar story in much greater detail, saying that in the process of differentiation and integration the cosmos evolves with increasing complexity and novelty. The outcomes that we call synergy are a product of these coherent processes of differentiation and integration as the universe evolves. First, newness or novelty is produced; this is the beauty of evolution. Second, in addition to the new complexities generated, our systems also seem to develop more capacities and abilities. New systems capacities, ones that would have been inconceivable in terms of the systems' parts, are generated. In other words, the combined effects that are developed go beyond what those parts could do alone. We call this process of differentiation and integration that leads to new and novel outcomes the synergy principle of the universe. In our view, it is a significant pattern that deserves attention, and we make it the underpinning of our methodological processes and practices.

Synergic Concepts and Phenomena Across Disciplines

The evolutionary process of differentiation and integration, or the notion of synergy, is a ubiquitous phenomenon. Although usually neither named that way nor recognized, it is an integral part of our personal lives. For example, many of the fruits, vegetables, and grains we eat are hybrids, or products of synergy. We also find it as a law within basic mathematics, as in the equation $(a + b)^2 = a^2 + b^2 + 2ab$. We have two different elements, a and b , that synergize with each other: The $2ab$ is a new outcome that did not exist before. It is because of this law that Einstein bridged the difference between matter and energy, making atomic energy available to us. Dozens of synergic phenomena have been identified in such scientific disciplines as systems dynamics, dissipative structures, and chaos theories, and Peter Corning (1995a, 1995b, 2003) asserts that synergy is a unifying concept for all sciences. We in SI use those synergic phenomena that have relevance to our practices to help us learn to embody natural processes in ways that improve our capacities to engage the contemporary world creatively.

In the following pages, we use examples from various theories and practices that relate to a variety of contexts and disciplines to demonstrate these patterns of differentiation and integration that have been addressed by philosophers. In doing so, we show the connections between practical applications and the philosophical exploration of the evolution of consciousness.

To be concrete, *differentiation* refers to a process in which an entity, perspective, identity, or whole is clearly distinguished from its context or environment (see Figure 3.1). *Integration*, on the other hand, refers to the

Commonalities
<p>Differentiation refers to a necessary process in which a new entity—perspective or identity—is created, distinguishing itself from the other context or environment.</p>
<p><i>Biology: Griffiths, Miller, Suzuki, Lewontin, and Gelbart (1993)</i> Selfing is a process to produce different individuals with most homozygous state possible. In so doing, identical alleles at corresponding chromosomal loci are produced, which is a precondition for hybrid to happen.</p> <p><i>Individuals: Kegan (1994)</i> “Before we can reconnect to internalize, or integrate something with which we are originally fused, we must first distinguish ourselves from it” (p. 326).</p> <p><i>Relationships: Johnston (1991)</i> True partnership starts with two persons being independent, differentiated wholes.</p> <p><i>Teams: Mouton and Blake (1984)</i> In assessing problematic situations, team members are asked to do ranking. Then, they are required to express the rationale for their ranking and to question each other’s assumptions. In so doing, different mental models underlying different individuals’ ranking are revealed.</p> <p><i>Organizations: Lawrence and Lorsch (1967)</i> Successful organizations differentiate themselves in how they specialize their work to best respond to the demands of their environment: “As organizations undertake more complex tasks, they tend to complicate internally by differentiating new organization units” (p. 213).</p> <p><i>Organizations: Savage (1996)</i> Effective organizations in the new era need to differentiate along three aspects—technology, information, and people—each having important function to successful management.</p> <p><i>Societies: Ouchi (1984)</i> Japan was able to differentiate valuable Eastern wisdoms from Western strengths, clarifying the two alternatives.</p> <p><i>Cross-/intercultural relations: Adler (1997)</i> In the cultural synergy process, culturally different individuals describe the problematic situation from their own cultural perspectives, that is, surfacing their cultural assumptions that drive attitude and behavior.</p> <p><i>Globe: Thompson (1989)</i> A healthy ecology requires differentiated opposites to coexist. Otherwise, the ecology will be catastrophic.</p>

Figure 3.1 Process of Differentiation Across Theories

process whereby differentiated entities work with each other (see Figure 3.2). The outcomes usually produced by these processes of differentiation and integration are characteristics and capacities beyond those of the individual parties involved (see Figure 3.3).

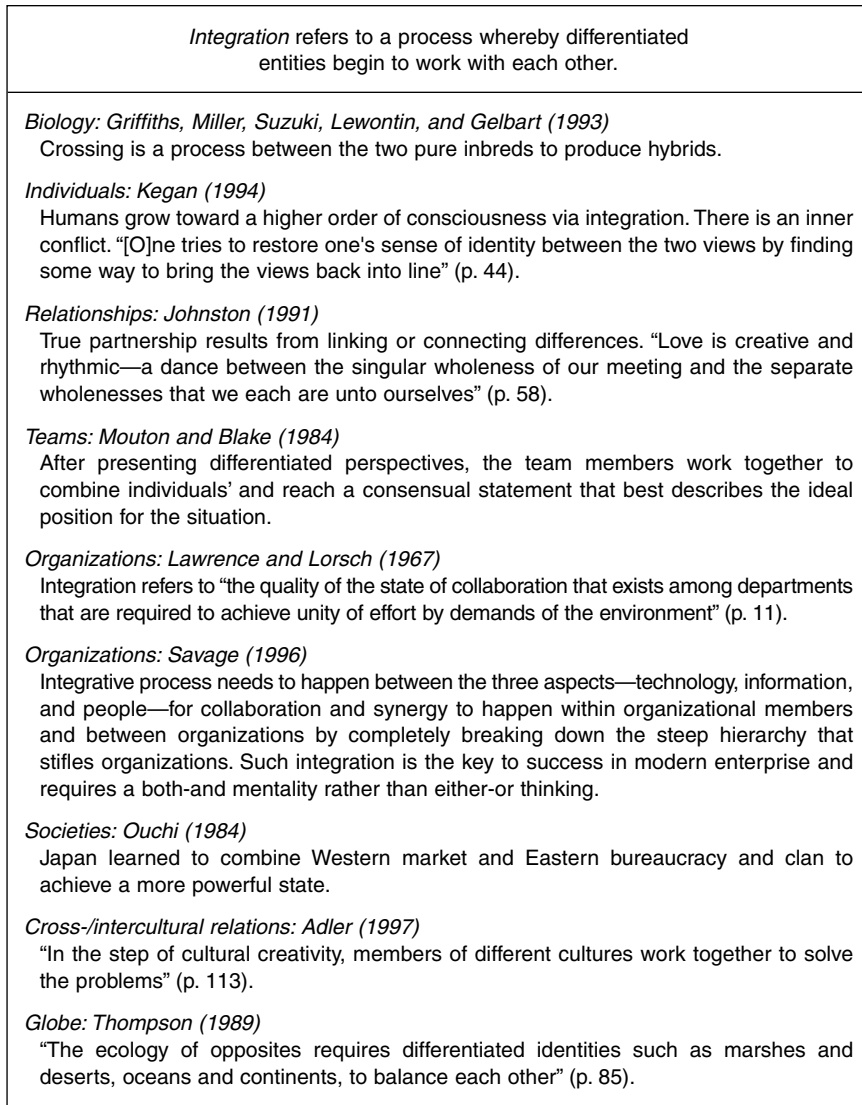


Figure 3.2 Process of Integration Across Theories

In the process of creating genetic hybrids, differentiation is called *selfing*. This is a purifying process in which closely related individuals are bred with each other to create the most genetically similar (homozygous) inbreds possible. At the level of the genes, this process of inbreeding produces identical variants (alleles) of the same gene at corresponding chromosomal

Synergic outcomes refer to the results of processes of differentiation and integration that go beyond what can be acquired by individual parties alone.

Biology: Griffith, Miller, Suzuki, Lewontin, and Gelbart (1993)

Crossing between the two inbreds produces many new, different combinations from which the best hybrid is chosen. Such a process simply produces more possibilities from which we can choose according to our needs.

Individuals: Kegan (1994)

Humans grow toward a higher order of consciousness via integration. "Such radical mental 'behavior,' dislodging one's identity with one's own categorical viewpoint, can lead to a whole different order of consciousness" (p. 44).

Relationships: Johnston (1991)

When different individuals come together, something harmonious and new will emerge.

Teams: Mouton and Blake (1984)

The team attempts to reach a consensual statement that best describes the ideal position for the company. In this process, a new statement that goes beyond—and embodies everybody's perspective—is developed.

Organizations: Lawrence and Lorsch (1967: 157)

"These conflicts must be resolved to the satisfaction of all parties and for the general goal of the enterprise" (p. 157).

Organizations: Savage (1996)

Integrative process leads to creativity, innovation, and a new broadened vision.

Societies: Ouchi (1984)

Japan learned to combine both Eastern and Western strengths to achieve a more powerful and healthy state than any individuals are capable of.

Cross-/intercultural relations: Adler (1997)

In the step of cultural creativity, members of different cultures create synergistic alternatives to solve their problems. "The answer should be compatible with, but not imitative of, the cultural assumptions of all represented groups. It should be novel and transcend the behavioral patterns of each of the root cultures" (p. 113).

Globe: Thompson (1989)

"There is, of course, conflict and disagreement, but like the relationship between the ocean and the continent that drives the gaseous clouds of rain that are neither sea nor land but both, the relationship of opposition, say between electronic Artificial Intelligence and neurophysiology, or between cognitivism and connectionism, is a creative one in which even the thunderstorms change the soil with the nitrogen the next generation requires" (p. 85).

Figure 3.3 Synergic Outcomes Across Theories

loci instead of the differing (heterozygous) variants that are more normal. This differentiation is a necessary precondition for hybridization (Jugenheimer, 1985); if the two parents are not sufficiently different, they will not produce a hybrid.

When two differentiated inbreds are crossed or mated with each other, hybrids, or new and novel variants, are produced. These hybrids variants have not existed before. The crossing of the two inbreds can produce hybrids with many new qualities. The variety of hybrids obtained is exponential, and most of them have qualities that go beyond those of their parents. As a result of this process of alternately inbreeding and interbreeding, new breeds of plants and animals are produced. We emphasize again that these are breeds that did not exist before.

According to Kegan (1994), something similar occurs within individual human development, and the act of differentiation is an important step. In Kegan's model of the developmental processes, the shift from a lower order of consciousness to one of a higher order starts with this process of differentiation. An example is the way an individualistic person differentiates himself or herself from others by having a strong sense of self-identity. Although Kegan sees this as a necessary stage, he believes this kind of consciousness is institution based and thus absolutistic. Individuals grow and move toward a higher order of consciousness by integrating different views. For example, in contrast to the absolutistic stance of the institution-based consciousness, an evolved person has the capacity of interpenetration of self and other and interpenetration of form and process.

Kegan (1994) proposes that the processes of differentiation and integration result in human growth and transformation. He also posits that individuals with a higher order consciousness are more capable of dealing with the demands of contemporary societies than are the individualistic identities of a typical Western adulthood. Moving outward from the level of the individual to that of interpersonal relationship, differentiation is found to be an important process, one that is necessary for true love or friendship.

In Johnston's (1991) creative system framework, we find something similar to Kegan's (1994) clarification of the processes of differentiation and integration. From Johnston's perspective, two parties (it doesn't matter whether they are lovers or friends) have to go through a process of differentiation. Otherwise, the relationship will not be meaningful and lasting. In other words, these two parties each have to know themselves as distinctive, separate wholes. As the relationship progresses, the two must continue to grow and to differentiate from each other. Without differentiation, the relationship falls peril to what Johnston calls the unity fallacy. This refers to the phenomenon of two persons in a relationship that does not allow them to have different individual identities. Within the unity fallacy, "love is being one together; girls are girls and boys are boys (and girls are better); all you need is love."

There is an interrelated process that produces the more integral view recognized as understanding. True love or friendship comes from people

helping others to become what they want to become rather than stay who they are (Johnston, 1991). Thus, according to Johnston, the differentiated wholes of two lovers or friends also need a more integral whole between them. Integrated lovers or friends experience a new whole that is bigger than the sum of their independent, distinctive wholes, and the new whole continues to expand and transform; through this, the two separate wholes, or individual lovers or friends, continuously find new meaning in each other.

The process of differentiation is also critical to Mouton and Blake's (1984) team development theory. *Differentiation* here refers to creating different mental models or meaning perspectives. In one of their major educational designs, the clarifying attitudes design, team members are asked to make judgments about team or organizational performance and to use these to bring their underlying assumptions to the surface. In doing so, diverse perspectives about complex situations are differentiated. In this process, team members present and discuss their differentiated perspectives. They then work together to develop the consensual statement that best describes the ideal attitude for the team or the company in the future. During this process, majority vote is discouraged, and team members are encouraged to make the effort to reach a consensus.

Integration of all individual perspectives results in a consensual statement that goes beyond what could be made by any single team member. Once the team agrees on the soundest statement, the team members examine the differences between the actual attitude and the ideal one. Team members discuss how each wants to change his or her behavior to be consistent with the consensual description of the ideal attitude. The group then moves to develop a shared norm of conduct. In doing this, team synergy is achieved.

The importance of synergy as a team learning strategy was also addressed by Kasl, Marsick, and Dechant (1997). In their team learning model, the highest team learning mode is a synergistic learning mode in which "members have acquired a deep understanding of the creative potential in teams."

Moving still further outward, away from the level of the individual to the level of whole organizations, Lawrence and Lorsch (1967) find that organizations differentiate within themselves to respond to the demands of their environments: "As organizations undertake more complex tasks, they tend to complicate internally by differentiating new organization units" (p. 213). In response to increases in the complexity of their environments, organizations have to design and develop new departments; these contain the new job specializations that deal with the new levels of variety. Conflicts then arise, and the differentiated departments need to work together to integrate with each other.

Firms use differing methods to achieve integration. These may range from using the hierarchy or chain of command to creating integrating committees

58 Synergic Inquiry

or teams to assigning individual integrators to managers using unofficial channels to achieve integration. The key is to find the approach that facilitates resolution of the conflicts. These conflicts must be resolved to the satisfaction of all parties and for the general goal of the enterprise. Those involved must have strong capabilities to deal with interdepartmental conflict, and resolution must take place at the level that has the required knowledge about the environment.

For Lawrence and Lorsch (1967), the processes of differentiation and integration lead to the satisfaction of all of the parties involved and to the achievement of the general goal of the firm. Differentiated functions deal with components of the organizational environment, and integration of the differentiated functions ensures that necessary collaboration will take place. Conflicts caused by differentiation are confronted and dealt with, rather than being allowed to escalate or to otherwise stifle change.

Although Lawrence and Lorsch's (1967) work is not new, its value lasts. In his new book, *Fifth Generation Management*, Charles M. Savage (1996) continually exemplifies the pattern of differentiation and integration, despite arguing for more integration. In his thinking, modern enterprises need to differentiate along three dimensions—people, technology, and information—each of which is essential for effective management. Meanwhile, integrative process needs to happen between the three aspects—technology, information, and people—for collaboration and synergy to occur among organizational members and between organizations by completely breaking down the steep hierarchy that stifles our organizations. Such integration is a key to success in modern enterprise and requires a both-and mentality rather than the traditional either-or thinking. Savage calls for a new process—work as dialogue—which almost exemplifies the SI process in terms of steps and strategies. In his argument, companies with such an integrative process among three differentiated aspects are more creative, innovative, and effective.

Again addressing the level of whole groups, this time societies, Ouchi (1984) states that clarifying the unique strengths of each group is an important step. A more powerful state is achieved when different groups combine their efforts (integration), enhancing collaboration between groups. The integration of market, government, and clan leads to a powerful hybrid that can act in ways that transcend existing possibilities. Ouchi's studies of the Japanese show that they learned to use the strengths of both their own Asian wisdom and that of Western societies to produce the societal hybrid that made Japan one of the most powerful economic players in the world.

Looking at intercultural relations in a way that is similar to Mouton and Blake's (1984) synergogy, Adler (1997) describes the creativity that comes

from developing and enhancing distinctive cultural perspectives. This is done by bringing to the surface underlying cultural assumptions, values, and beliefs. As a step toward cultural synergy, culturally different individuals work together to resolve problems. The first step is for people to describe a problematic situation from their own cultural perspectives. In this way both cultural similarities and cultural differences can be identified. According to Adler,

the cultural synergy process involves role reversal—this approach assumes that all behavior is rational and understandable for the perspective of the person behaving, but that cultural biases lead us to misunderstand the logic of another cultural behavioral pattern. (p. 112)

In this stage of the process, members of each culture attempt to “wear” the cultural scheme of the other cultures and to behave in their cultural ways. In so doing, cultural differences and similarities surface. The different perspectives generated by this process are then treated as sources for cultural creativity, and culturally different individuals begin to genuinely explore with each other to find new alternatives, that is, creative solutions to the problems.

As a result of this integration of culturally diverse perspectives, members of different cultures create synergistic alternatives to solve their problems. According to Adler (1997), synergistic alternatives are new and novel: “The answer should be compatible with, but not imitative of, the cultural assumptions of all represented groups. It should be novel and transcend the behavioral patterns of each of the root cultures” (p. 113).

Moving still further outward to the level of the ecological vantage point, Thompson (1989) tells of how the four cultural ecologies of the West (Riverine, Mediterranean, Atlantic, and Pacific-Space) make their shifts when the new mentality differentiates itself from the old mentality. With a notion similar to Kuhn’s (1970) paradigm shift, Thompson (1989) asserts that each shift requires a change in the structure of the world narrative, in the very manner in which a “world” is brought forth. In other words, each shift starts with differentiation. Likening this to the differentiation or complexity found at the biological level, Thompson (1989, 1991) further argues that differentiation will increase diversity, and thus innovation, to maintain ecological sustainability.

Linking human, cultural, and environmental ecology, Thompson (1985) tells us that ecology requires that opposites coexist. This ecology of opposites implies that the divisions between opposites are no more than artificial constructs. At a higher, more inclusive level, there is a larger whole made up of opposites that need each other:

60 Synergic Inquiry

An ecology requires the balance that comes from diversity, marshes and deserts, oceans and continents, and it is the same for an ecology of mind. If one single ideology were to triumph to become a monocrop, it would be monstrous and generate a “complexity catastrophe” that would be needed to maintain the openness to innovation that is basic to life. (Thompson, 1989, p. 75)

The differentiation and integration of opposites produces conditions the whole ecology needs to continue. Integration produces an ever-expanding ecological container in which creativity can flourish and possibilities expand. The small institute and the large institution should not be seen as yet another either-or dyadic set because the little and the large require one another. The little tends to be creative, and the large reproduces those innovations in a stable system (Thompson, 1991).

We believe that we have identified a significant process—the synergy principle—which drives the evolution of reality. It is a pattern that penetrates all major aspects of the known universe. We also believe that when humans are in synchronicity or alignment with the universe, they are also evolving with harmony, newness, and novelty. Conversely, when people are out of alignment with this universal pattern, they are stuck socially and ecologically. From our position, the challenge that remains is to learn how to embody the synergy principle so that people can coevolve with the universe. It is this challenge that SI sets out to meet.