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Experience of the Ved

Realization of the Cosmic Psyche by Direct Perception:
Opening Individual Awareness to the Self-Interacting
Dynamics of Consciousness

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Abstract

This article outlines the description, from Maharishi Mahesh Yogi's Vedic Psychology, of experience of the Ved — the perception, within the simplest form of human awareness, of the self-interacting dynamics of the unified field, the field of pure consciousness or cosmic psyche. This realization is described by Maharishi as developing through increasingly refined experience of the field of pure consciousness, cultured by his Transcendental Meditation and TM-Sidhi programs, until one clearly experiences the internal dynamics of the field of pure consciousness, termed the Ved. "Ved" means "pure knowledge." Pure knowledge is knowledge of the unified field of natural law on the level of pure self-referral consciousness — "Samhita" — where knower, process of knowing, and known are unified. Inherent in pure knowledge, according to Maharishi Vedic Psychology, is the complete organizing power of natural law, through which the field of pure consciousness gives rise to all manifest existence. Therefore, with the experience of the self-interacting dynamics of consciousness comes the ability to fully utilize the organizing power of nature for the enrichment of individual and collective life. In contrast to the knowledge of nature's functioning available through the objective approach of modern science, the knowledge of natural law through the subjective approach of Maharishi Vedic Science and his Vedic Psychology directly enriches the life of the knower and his or her environment through the very process of gaining knowledge. Maharishi Vedic Psychology thus emphasizes knowledge of the Self, the field of pure consciousness, as the basis of all other knowledge. This is the foundation of an education which can deliver the ability to make full use of natural law for personal and social fulfillment, and thereby create what Maharishi describes as Heaven on Earth.

This is the sixth article in a series introducing the Vedic Psychology of Maharishi Mahesh Yogi.

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Introduction

Both modern science and Maharishi Vedic Science inform us that the world around us contains deeper strata of natural law than those we perceive on the surface level of physical existence. At the deepest level, the foundation of objective reality is the unified field of natural law, a field of infinite dynamism and self-interaction, the field of pure intelligence in nature. Quantum physics has recently glimpsed this field as the unified source of all matter and force fields (Hagelin, 1987). From the perspective of Maharishi Vedic Psychology, the unified field is identified as the field of pure consciousness, the cosmic psyche (Orme-Johnson, 1988). Although physics provides an intellectual understanding of the unified level of natural law, this knowledge is inferential rather than a matter of direct experience. Maharishi Vedic Psychology, however, adds a subjective means of gaining knowledge that leads to the direct experience within consciousness of the self-interacting dynamics of the unified field of natural law.

This remarkable prospect — that the individual can experience the deepest functioning of the laws of nature — promises to transform the current understanding of the relationship between human life and nature, and to provide new levels of mastery of natural law for the benefit of mankind. The scope of Maharishi Vedic Psychology is thus from abstract principles describing the highest development of human experience to profound practical applications of those principles to enrich human life.

Maharishi Vedic Psychology is the formulation of Maharishi's principles governing the functioning and full development of individual and social life, including the
practical technology to foster this full development, the Maharishi Transcendental Meditation and TM-Sidhi programs. The foundation of this new and yet most ancient psychology is the deepest and most universal level of consciousness, the field of pure consciousness, or cosmic psyche. The source of Maharishi Vedic Psychology is his Vedic Science, which is concerned with the dynamics of natural law expressed in the Ved and the Vedic literature and with their application to raise the quality of human life to an ideal state. The experience of the Ved is a topic which addresses the foundation of Maharishi Vedic Psychology in his Vedic Science. Thus, the present article draws extensively upon the description of the Ved found in Maharishi Vedic Science as well as Maharishi's description of these most fundamental dynamics of natural law.

The article begins with a brief definition the Ved and of experiencing the Ved. It then describes from the perspective of Maharishi Vedic Psychology the stages of development leading to the experience of the Ved. The final two sections discuss the Ved and its relation to human life and to nature more broadly. The first of these sections describes the Ved as a structure of knowledge, termed "pure knowledge," and as the organizing power of natural law inherent in that knowledge. The final section analyzes the relationship between consciousness and natural law from the perspectives of modern science and Maharishi Vedic Science.

**Experience of the Ved: Experience of the Self-Interacting Dynamics of the Field of Pure Consciousness**

Experience of the Ved is the direct apprehension of the self-interacting dynamics of pure consciousness, the unmanifest dynamics of the unified field of natural law (Maharishi Mahesh Yogi, 1986a; Dillbeck, 1988; Orme-Johnson, 1988). This occurs at the deepest level of the individual's awareness in the state of pure consciousness — the experience of the cosmic psyche, the Self. According to Maharishi (1985a), through repeated experience of pure consciousness, the individual awakens to its intrinsic self-referral dynamics, the Ved. As discussed in a previous article on Maharishi Vedic Psychology (Dillbeck, 1988), these dynamics arise from the self-referral quality of pure consciousness. That is, pure consciousness, being awake to itself, creates the distinction between knower (Rishi), process of knowing (Devata), and known (Chhandas) within its unified state (Samhita). Thus, within the self-referral state of consciousness both unity and the seed of diversity are lively. Pure consciousness, being simultaneously one and three, may be understood as being in continual transformation, and these self-referral dynamics constitute the Ved. The mechanics of transformation between one and three are elaborated through an infinity of combinations of the three basic elements of knower, process of knowing, and known within pure consciousness. According to Maharishi these "innumerable qualities of self-interaction" in pure consciousness are the impulses of natural law that structure the infinite variety of manifest existence. In Maharishi's (1986a) words:

> Innumerable tendencies are arising in creation. From this one can imagine there must be innumerable qualities of self-interaction in the self-referral state of consciousness. Vedic Science completely reveals the knowledge of that reality, where the innumerable values of the
knower, the known, and the process of knowing are contained in that sea of consciousness. Thus the perpetual continuum of the self-referral state of consciousness is known to be responsible for the infinite variety of creation. (p. 30)

When one experiences natural law as the dynamics of one’s own self-referral consciousness, according to Maharishi one gains direct access to the deepest internal mechanisms of nature. Through this experience, the individual enlivens the organizing power of these natural laws for the benefit of his or her own life and of the whole environment.

In the West, the Ved has been commonly misunderstood as a set of books. In contrast, Maharishi (Maharishi International University, 1974) has described the Ved in the following way:

Where is the Ved? In India? No. In the Himalayas? No. In any part of the world? No. In any phase of the finite? No. Then where should we look for the Ved?

The Ved itself answers the question of its location. It says: ... in the imperishable transcendental field — pure awareness, pure intelligence, pure consciousness.

What then is the Ved? Is it the books of Sanskrit hymns? Here also, the answer is no. The four books known as Rig-Ved, Sama-Ved, Yajur-Ved, and Atharva-Ved are not the Ved; books serve to record the words of Vedic literature, but they themselves are not the Ved. ... Ved is the home of all the impulses of creative intelligence. How can one come to know the Ved, which is located in the transcendent and which is the home of all the impulses of creative intelligence? By developing pure awareness, the one key to Vedic study. ... The development of pure consciousness is the key to all knowledge and the prerequisite of Vedic study. (pp. 195-196)

Maharishi goes on to bring out the practical value of the experience of the Ved:

What is the purpose of knowing the Ved? The purpose is to live the wholeness of life. ... The study of the Ved has its purpose in structuring the home of all knowledge in one’s awareness. Thereby one owns the home of all the impulses of creative intelligence and gains maximum effectiveness in every action, leading to the most rewarding achievements and to fulfillment — the wholeness of life encompassed in every wave of living. ... That is why, to know Ved, one is advised to develop the holistic value of awareness — unbounded awareness, pure awareness, transcendental consciousness. And on that level of awareness alone can the value of all knowledge be gained; on that level of awareness alone can the significance of the Ved be a living reality. (p. 196)

Because the Ved resides in the transcendental field of consciousness, Maharishi points out that one can know it only by discovering it through one’s own experience of the self-referral state of consciousness, transcendental consciousness.

The Mechanics of Developing the Experience of the Ved

Maharishi describes experience of the Ved as different from the ordinary cognitive activity of the waking state of consciousness. Processes of perception, feeling, thought, and decision involve the reception, transformation, and abstraction of environmental...
information, in interaction with memory from past experiences and the individual's present activity and goals. As described in a previous article on Maharishi Vedic Psychology, pure consciousness is the basis of all the levels of subjectivity or mental activity — senses, mind, intellect, ego — and therefore these levels function with increasing effectiveness as the individual begins to stabilize the experience of pure consciousness and develops towards higher states of consciousness (Dillbeck, 1988). Nevertheless, in the waking state these processes occur at excited levels of mental activity, in which the knower, process of knowing, and known are separate rather than united.

Within the field of pure consciousness, however, the knower (Rishi), process of knowing (Devata), and known (Chhandas) are unified; each is the same pure consciousness (Samhita). Experience of the Ved, unlike thought and perception, takes place entirely within the field of pure consciousness itself, without relying on the senses. Ordinarily, cognitive activity is closely associated with the senses and operates on the basis of sensory information. According to Maharishi, however, when the field of pure consciousness is permanently established at the basis of all mental activity in higher states of consciousness, one can in time experience the internal dynamism of pure consciousness itself.

Maharishi (1983) has described the development toward the experience of the Ved, through practice of the Transcendental Meditation and TM-Sidhi programs, in the following way:

Any knowledge may be viewed as a qualified state of the knower. The phenomenon of gaining knowledge or experiencing is best understood when analyzed as consciousness identifying itself with the quality of the object and experiencing the object as the object is imprinted on the level of consciousness. The process of transcending step by step reduces the intensity of impression of the object, until the finest trace of impression fades away and the consciousness is left to itself completely identified with its own pure nature. This is transcendental consciousness, the self-referral state of consciousness.

Transcendental Meditation unfolds the knowledge of the finer levels of thought through direct experience until the finest qualified state is transcended and consciousness experiences its own self-referral unqualified state.

The practice of Transcendental Meditation provides an opportunity for consciousness to experience its qualified and unqualified status. The practice of the TM-Sidhi program provides an opportunity for consciousness to create qualified states from its unqualified state at will.

It is obvious that the transformation of unqualified pure consciousness into any qualified state must involve the activity of specific laws of nature. As consciousness becomes more and more clearly aware of the process of its transformation, it becomes more and more familiar with the activities of the specific laws of nature which govern this transformation [the self-interacting dynamics of pure consciousness]. As the practice advances, consciousness becomes more and more awake to details of the activity of the different laws of nature, until a state of full awakening is reached in which the diversified activity of the laws of nature does not overshadow the unified state of natural law and consciousness blossoms in its total potential. Functioning from within the range of different laws of nature it remains completely and constantly in tune with the unqualified value of its pure nature.

This is what we call the enlivenment of the total potential of natural law in human consciousness — mastery over natural law, life in accord with all the laws of nature, the field of all possibilities in individual life.

1 This is described in the Vedic literature as atindriyadarshana.
A major point in this quotation is that the realization of the self-referral dynamics of consciousness occurs through a process of increasing clarity of experience of the field of pure consciousness. In order for the individual's awareness to be sufficiently sensitive to cognize these transformations, a process of refinement must take place in the functioning of the mind and body. This refinement is brought about through the practice of the Maharishi Transcendental Meditation and TM-Sidhi programs, which systematically develop stable higher states of consciousness — cosmic consciousness, God consciousness, and unity consciousness.

The development from cosmic consciousness to unity consciousness was described in an earlier article primarily in terms of the experience of the environment (Alexander & Boyer, 1989). Maharishi has also described the development from cosmic consciousness to the state of complete enlightenment, as noted earlier, in terms of the experience of the field of pure consciousness. Pure consciousness is experienced as completely silent during the experience of the Transcendental Meditation program and in the state of cosmic consciousness. In time, and with the repeated experience during the TM-Sidhi program of the transformation of the silent or unqualified state of pure consciousness into its qualified expressions (see quotation above), the internal dynamics of transformation within pure consciousness dawn on the level of direct experience.

Thus, the development of the ability to experience the Ved, according to Maharishi, is through three steps of attuning the individual psyche with the cosmic psyche. The first step occurs through the Transcendental Meditation technique, in which the individual mind, experiencing levels of increasing charm at quieter, less excited stages of thought, transcends the subllest level of thought to experience transcendental pure consciousness, the unified field of natural law. Through regular practice of the Transcendental Meditation technique, the individual gains the ability to maintain the silence of pure consciousness, the simplest form of awareness, in the midst of dynamic activity and throughout the cycle of waking, dreaming, and deep sleep (for a review of research on the experience of transcendental consciousness and the development of higher states of consciousness, see Alexander & Boyer, 1989).

The TM-Sidhi program is the second step of attuning the individual psyche with the cosmic psyche: it provides the technology of consciousness for operating at the junction point between bounded individual awareness and the unbounded field of pure consciousness. Whereas the Transcendental Meditation program provides the experience of the unbounded silence of transcendental consciousness, the TM-Sidhi program trains the mind to perform mental activity at the junction point between the subllest level of the active mind and the silence of transcendental pure consciousness. Maharishi has described the junction point between the active mind and the unbounded silence of pure consciousness as analogous to a threshold of a house, joining the outside (the active mind) and inside (pure consciousness). (A review of research on the effects of the TM-Sidhi program is given in Gelderloos & Berg, 1989).

The third step of attuning the individual psyche with the cosmic psyche occurs in the self-referral state of pure consciousness, taking place completely "inside the house." This is experience of the Ved, in which the unmanifest impulses of natural law are cognized as the "fine fabric" of pure consciousness. Pure consciousness,
which was previously experienced as flat unboundedness of consciousness, is thus found with increasing clarity of experience to contain its own internal dynamics, the self-interacting dynamics of the unified field of natural law (Maharishi Mahesh Yogi, 1985a, p. 64).’ (See Figure 1.)

Experience of the Ved is thus "the emergence of specificity within the generality of the self-referral pure consciousness" (Maharishi Mahesh Yogi, lecture, January, 1983). The specificity of natural law is appreciated in the experience of the Ved as the emergence of the dynamics of one's own pure consciousness, the Self. Experience of the Ved is described by Maharishi (1985a) in the following way:

Ved in its original script is just the whisper of the unified field to itself, and human awareness, settling down to its own self-referral state, very clearly cognizes its own self-interacting activity. (p. 64)

According to Maharishi Vedic Psychology, once the individual has attained the level of development where he or she is capable of perceiving the details of the inner dynamism of pure consciousness — when one is fully "awake" — experience of the Ved happens spontaneously. Maharishi locates the description of this phenomenon within the Ved itself (Rig-Ved V.44.14), in the expression Yo jagara tam richah kamayante — "The hymns seek out him who is awake" (Maharishi International University, 1974, p. 196).

Thus, it is possible for individuals to experience the Ved because the essential nature of the mind is pure consciousness, the cosmic psyche, and pure consciousness, being self-referral, can comprehend its own nature. As Maharishi (1985a) has commented:

The unified field, even though glimpsed by the objective approach of the different disciplines of modern science, is a subjective reality which is open to itself, which knows itself. (p. 59)

**Experience of the Ved: Pure Knowledge and Infinite Organizing Power**

Every scientific discovery of fundamental laws of nature gives mankind new organizing power through the application of those laws in practical life. According to Maharishi Vedic Psychology, the same is true for the dynamics of natural law discovered in the experience of the Ved. In the case of experiencing the Ved, the dynamics of natural law are cognized at their deepest level, the unified field, where the organizing power of nature is greatest. Maharishi refers to this as the "infinite organizing power of nature." In addition, the knower's relationship with the laws of nature is direct, because the laws of nature are experienced as the impulses of the knower's own awareness. Maharishi uses the term "pure knowledge" to describe this knowledge of the

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1 The area of Vedic literature which deals with experience of the Ved is the six Upangas, which are associated with systems of gaining knowledge (Maharishi Vedic University, 1985a, pp. 116-117). In the fourth Upanga, the Yoga Sutras of Maharishi Patanjali, the experience of pure consciousness as silent is described as kaivalya. The Yoga Sutras also describe the TM-Sidhi program (Gelderloos & Berg, 1989). The fifth Upanga, Karma Mimansa, corresponds to a further refinement of experience in which pure consciousness is found to be a field of great internal dynamism — the Ved. The final Upanga is Vedaanta, which expresses the reality of fully developed unity consciousness, in which the silence and dynamism of pure consciousness are experienced as one wholeness, Brahman. Taken together, the Upangas provide means for developing complete knowledge through the complete development of the knower. (See Dillbeck, 1988, for a brief description of the various aspects of the Vedic literature.)
Three Steps of Attunement of the Individual with the Cosmic Psyche

Figure 1. The process of attuning the individual psyche with the cosmic psyche, the unified field, takes place in three steps. The first step is the experience of the unified field through the Transcendental Meditation technique. The second step is the TM-Sidhi program, which enlivens the self-referral field of pure consciousness for the fulfillment of desires. The third step is experience of the Ved, in which consciousness is fully awake to the unmanifest dynamism of natural law in the unified field. This is the level of pure knowledge, in which the infinite organizing power of natural law is available.
self-interacting dynamics of the unified field, experienced in the self-referral state of consciousness. He describes the relationship between pure knowledge and its infinite organizing power in the following way (1986a):

Knowledge in its absolute state is the unified field of all the laws of nature. Ved is pure knowledge, absolute knowledge, and in knowledge is contained the organizing power of nature. The infinite organizing power of nature is contained within the structure of pure knowledge, the Ved. Ved is the lively potential of natural law, which is the unified field. … The total knowledge of this unified field is available in the Vedic literature. (p. 100)

According to Maharishi Vedic Science, there are two areas of the Ved, one devoted to pure knowledge and one to its organizing power. Maharishi (1986a) states:

"Ved" means pure knowledge and the infinite organizing power that is inherent in the structure of pure knowledge. When we study the Ved we find that it is divided into these two areas. Therefore, when we say Ved means pure knowledge, we always mean that Vedic study includes both the structure of pure knowledge and the infinite organizing power of nature inherent in that structure. (p. 26)

The pure knowledge aspect of the Ved, comprising the Rig-Ved, Sama-Ved, Yajur-Ved, and Atharva-Ved (see Dillbeck, 1988), is also known as the Mantra aspect of the Ved. In discussing the pure knowledge aspect of the Ved, Maharishi (1986a) has stated:

Pure knowledge is when consciousness has nothing other than itself in its structure, when the awareness is completely self-referral, when the awareness knows itself. When we say "pure knowledge," we mean that all that there is is knowledge, a solid mass of knowledge. The knower of that is also the same solid mass of knowledge.

The knower, the known, and the process of knowing which connects the knower with the known — when these three aspects of knowledge are seated one within the other, that is called Samhita. Samhita is the collectedness of knower, known, and knowledge. There are Rig-Ved Samhita, Sama-Ved Samhita, Yajur-Ved Samhita, and Atharva-Ved Samhita — four Vedas, four Samhitas. This state of pure knowledge, where knower, known, and knowledge are in the self-referral state, is that all-powerful, immortal, infinite dynamism at the unmanifest basis of creation. (pp. 26-27)

Maharishi elsewhere points out that the Rig-Ved is the totality of knowledge of Samhita, knowledge of the three-in-one state of Rishi (knower), Devata (process of knowing), and Chhandas (known). Sama-Ved is concerned primarily with the value of Rishi, Yajur-Ved with Devata, and Atharva-Ved with Chhandas (Maharishi Mahesh Yogi, 1985a, pp. 67-68).

The organizing power aspect of the Ved, comprising the Upanishads, Aranyakas, and Brahmanas, is termed the Brahmana aspect of the Ved. This aspect of the Ved has been described as follows:

The Brahmana aspect of the Ved embodies the organizing power of pure knowledge inherent in the Samhita. The Brahmana is divided into three sections — Upanishads, Aranyakas, and Brahmanas. These three aspects of the Vedic literature respectively express the organizing power associated with the Rishi (knower), Devata (process of knowing), and Chhandas (known) aspects of pure knowledge contained in the Samhita. (Maharishi Vedic University, 1985a, p. 115)
Pure Knowledge

Maharishi describes the pure knowledge or Mantra aspect of the Ved in the following way:

The Mantras are the language of nature in which cosmic intelligence reverberates as the laws of nature. All the Mantras together form the structure of pure knowledge, a lively field of the total potential of the organizing power of nature. The Mantras, being the fabrics of the unmanifest, immortal field of pure knowledge, are eternal and indestructible. The indestructibility of the Mantras extends even to the sequence in which they are available to us in the Samhita. This structure of pure knowledge has such perfect order that each successive verse is a commentary on the previous one. This natural and self-unfolding organization of the Mantras places the total potential of the Ved in its most compact form in its very first expression. This seed expression of the Ved, unmanifest and eternal, blesses every grain of creation with the total potential of pure knowledge residing at its unmanifest basis, from where cosmic intelligence as the nature of pure knowledge displays its infinite organizing power — this is brought to light in the Brahma aspect of the Ved. ("Vedic Science, Fulfillment of Modern Science," 1980)

Maharishi here brings out the principle that the self-interacting dynamics of the unified field can best be comprehended as the Ved sequentially elaborating itself through its own expressions. Maharishi has identified this self-expressed structure of the Ved as the Apaurusheya Bhashya, the Ved’s eternal, uncreated commentary on itself.

In Maharishi’s Apaurusheya Bhashya, each sequentially larger unit of the Ved forms a more elaborated expression of the self-interacting dynamics of the unified field, just as each stage of growth of a tree is a more elaborated expression of the information contained in the seed. This principle has been illustrated by Maharishi in terms of the first sound of the Ved (A), the first syllable (AK), and the first word (AGNIM). (According to rules of Sanskrit pronunciation, the syllable AK becomes AG because of the sound that follows it [N] in the word AGNIM). Maharishi states that just as the remaining sounds of AGNIM "comment" or elaborate on A, so the sequential progression of syllables and words of the first rica (verse) and all following richas and sections of the Ved comment and elaborate on this first expression of self-interacting dynamics. The Ved is elaborated through a nested series of sequentially larger units: sounds, syllables, words, padas (lines), richas (verses), suktas (collections of verses), mandalas (a collection of suktas), and the Rig-Ved, Sama-Ved, Yajur-Ved, and Atharva-Ved, which are themselves collections of mandalas. Maharishi identifies the process of the Ved sequentially commenting upon itself as the process of sequential manifestation of natural law from the unified field. (Refer to Dillbeck, 1988, for a more detailed discussion of the sequential process of manifestation from the unified field as described by Maharishi Vedic Psychology.)

Maharishi’s Apaurusheya Bhashya has been described as follows:

Maharishi’s Apaurusheya Bhashya presents the commentary of the Ved in the sequential progression of the Samhita itself. The first syllable of Rig-Ved, AK, expresses the dynamics of akshara — the “kshara” of “A,” or collapse of infinity to its point value, which is the source of all the mechanics of self-interaction displayed in the sequential unfoldment of the Samhita. From the lively seed of total knowledge expressed in the first word of Rig-Ved,
AGNIM, the totality of the Ved and the Vedic literature unfolds in perfect sequence. Each elaborated stage serves as a commentary on the mechanics of transformation present in the gap preceding it.

The 24 gaps in between the syllables of the first richa are elaborated as the 24 padas in the following eight richas. The 192 gaps between the 192 syllables of the eight richas (2-9) of the first sukta are elaborated in the 192 suktas of the first mandala of Rig-Ved — 191 suktas plus one avyakta (unmanifest) sukta — while the 192 syllables themselves appear as the 192 gaps between the 192 suktas of the first mandala. These gaps in turn are elaborated in the 192 suktas of the tenth mandala. In addition, each of the eight richas (2-9) in the first sukta gives rise in sequence to one of the following eight mandalas of the Rig-Ved (mandalas 2-9). All the four Samhitas — Rig-Ved, Sama-Ved, Yajur-Ved, and Atharva-Ved — are compactly contained in AGNIM and emerge from its four letters: the Rig Samhita from G, the Sama Samhita from N, the Yajur Samhita from I, and the Atharva Samhita from M.

In this precise, step-wise manner, beginning with A, extending to AGNIM, and then to the first richa, to the first sukta, to the entire Rig-Ved, and to all four Vedas, the Ved unfolds sequentially from the totality of knowledge contained in A — the first expression of the Self knowing itself in the state of pure knowledge. (Maharishi Vedic University, 1985b, pp. 1-2)

This quotation also emphasizes that the dynamics of natural law are expressed not only in the actual sequence of sounds of the Ved, but also in the silences or gaps between the sounds. Maharishi explains (lecture, August 6, 1986) that it is actually within the gaps between the sounds of the Ved that the dynamics of transformation between one state and another take place, and from which all dynamics of natural law emerge. Maharishi identifies four stages in the gap between states of natural law. The first, pradhvansabhav, is the collapse of the previous state. The second, atyantabhav, is a stage of non-activity or unmanifest silence. It is followed by a stage of lively transformations or self-interacting dynamics (anyonyabhav), which structure the fourth stage (pragabhav), the emergence of the following structure of natural law (see Figure 2). The particular quality and dynamics of each gap are determined by the initial state that is transformed and the end state that is created. For this reason, different dynamics of natural law are lively in different gaps between the sounds of the Ved. These dynamics are commented upon or elaborated by specific expressions of the Ved, as noted in the above quotation. The discovery of the importance of the gaps in the expression of the Ved is an essential part of Maharishi’s Apaurusheya Bhashya, and constitutes one of Maharishi’s unique contributions to Vedic knowledge. The practical application of this principle will be discussed in the following section.

Because the Ved as pure knowledge is unfolded sequentially, Maharishi states that the totality of the structure of pure knowledge is found in an increasingly concentrated form in its earlier expressions. (Again, this is analogous to a seed, which contains in a concentrated form the information expressed in the tree.) As indicated by the last quotation, the complete structure and dynamics of pure knowledge is present in its concentrated self-referral state in the four aspects of the Ved (Rig, Sama, Yajur, Atharva), and in its more concentrated form in the Rig-Ved (which contains 10 mandalas). It is found in a more concentrated form in the first mandala of the Rig-Ved, in a still more concentrated form in the first sukta, and a still more concentrated form in the first richa; it is found in a yet more concentrated form in the first word (AGNIM), in the first two
The Four Stages of the Gap within the Self-Interacting Dynamics of Consciousness

Figure 2. Maharishi has identified four stages of the gap between two expressions of natural law in the Ved. The first is the collapse of the previous state, pradhvansabhav. The second is a stage of non-activity or unmanifest silence, atyantabhav. Next is a stage of lively transformations or self-interacting dynamics — anyonyabhav. These dynamics structure the fourth stage, pragabhav, the emergence of the following structure of natural law.

Each of these levels of expression of the Ved is structured in the Self, pure consciousness. (See Figure 3.) The dynamics of the field of pure consciousness have their basis in the self-referral state of knower, process of knowing, and known, in which pure consciousness is simultaneously awake to its full range from infinity to a point. The essential means to realize the total potential of natural law is thus to realize the Self. In Maharishi's words (1985b):

Ved is the reality of the unified field, where consciousness is in its self-referral state. In that self-referral state of consciousness, different activities come out as a result of the self-interaction of pure consciousness. In this we have the key to all possibilities in human awareness. Human awareness is just the expression of the Self within. Self is a lively field of all the laws of nature. This is the connection of the Ved with the individual and with the universe. (p. 136)
Total Potential of Natural Law in its Most Concentrated Form in the Self — the Cosmic Psyche

**Figure 3.** The total potential of natural law is contained in its concentrated form in the four aspects of the Ved, and in increasingly concentrated forms in the Rig-Ved, in the first mandala of the Rig-Ved, in the first sukta of the first mandala, in the first richa of the first sukta, in the first word of the first richa, in the first two sounds of the first word, A and K, and in the first sound A. The totality of natural law, contained in each of these expressions, is found in its most concentrated state in the Self, the field of pure consciousness.
MODERN SCIENCE AND VEDIC SCIENCE

Thus, Maharishi explains that the Ved is both the reality of the self-interacting dynamics of the unified field at the basis of the entire universe, and is also a state of experience that develops in human awareness as the individual psyche fully realizes its universal basis in the cosmic psyche. In the following quotation, Maharishi (1980) addresses the structure of pure knowledge both in terms of the unified field at the basis of all existence and in terms of the development of the ability to experience the Ved discussed in the previous section. He describes the structure of pure knowledge as having two characteristics, silence and dynamism. He then identifies these characteristics as modes of consciousness.

The structure of pure knowledge seems to have two qualities to it: one extending outward from where the constancy of all the laws of nature is maintained, and one inwards from where the constancy of the home of all the laws of nature, the constancy of non-change, is being maintained. One quality is transformed into organizing power, creates multiplicity, and is the source of all the laws of nature; and the other quality knows itself, maintaining its own status quo.

In this examination of the structure of pure knowledge, we have two levels, and both are levels of awareness: one silent, the other one where knowledge is not silent, but could be said to be whispering, or warmed up. The structure of knowledge can be defined in terms of the consciousness of the observer which is maintained either by the warmed-up level or by the silent level of the structure of knowledge.

These two structures of knowledge have their own specifications in the two qualities of consciousness. We can begin to realize that there is a quality of consciousness which will have a self-referral value to both of these levels taken separately. The silent structure of pure knowledge and the warmed-up structure of pure knowledge are two modes of consciousness solely dedicated to themselves and they are completely distinct from each other. So there can be a third structure of pure knowledge where the knowledge will be in terms of both of these at the same time ... and that will be the ultimate structure of pure knowledge. (pp. 79-80)

In this quotation, Maharishi describes the levels of experience of pure consciousness, discussed in the previous section on the development of the ability to experience the Ved, as characteristics of the structure of pure knowledge. The experience of pure consciousness as silent is one type of structure of pure knowledge. Pure consciousness as lively with unmanifest dynamism, the Ved, is another type of structure of pure knowledge. Maharishi then describes the structure of pure knowledge in its totality as comprising both silence and dynamism, on the self-referral level of pure consciousness (see Figure 4). These three structures of pure knowledge can be seen to correspond to the three descriptions of pure consciousness found in the last three Upangas ("systems of gaining knowledge") of the Vedic literature:

Yoga establishes the knower in the state of nonvariability of subjective knowledge. Karma Mimamsa brings to light the knowledge of the finest impulses of the laws of nature within the field of consciousness of the knower. Vedanta then unifies the subjective and objective values in the realization of the simultaneous coexistence of silence and dynamism in the nature of the Self. (Maharishi Vedic University, 1985a, p. 117)

This ultimate wholeness of knowledge or wholeness of the Self is fully developed unity consciousness, or Brahman. This is the goal of human development in Maharishi
Vedic Psychology, in which the individual psyche has fully realized its own nature as the cosmic psyche.

Infinite Organizing Power

Maharishi points out that inherent in the dynamics of the unified field, the Ved or structure of pure knowledge, is the absolute organizing power of nature responsible for the creation and maintenance of the huge variety of structures and functions in the universe. He states (1985a):

Structure of Pure Knowledge

Figure 4. Maharishi describes the structure of pure knowledge as having two characteristics. One is silence, and the other is dynamism. These two characteristics or modes of consciousness are described in the Yoga and Karma Mimansa systems of the Upangas. With the full development of consciousness, these two characteristics are realized in one wholeness, described by Vedanta, the final Upanga.
Here is the absolute state of knowledge, where the knower is the knowledge himself, and in that absolute state of knowledge is the infinite organizing power of nature. In the self-referral performance of the unified field, the infinite organizing power of nature is lively. Human awareness opening itself to this beautiful field of all possibilities becomes lively in the field of all possibilities. (p. 66)

The relationship of pure knowledge (the Samhita or Mantra aspect of the Ved) to its infinite organizing power (the Brahmana aspect of the Ved) is discussed by Maharishi Vedic Science in the following way:

The Brahmanas embody the organizing power of pure knowledge inherent in the Samhita. The Upanishads present the details of the value of Rishi, or subjectivity, contained within the Samhita. The Aranyakas elaborate upon the Devata or creativity aspect; and the Brahmanas elaborate upon the Chhandas aspect, which is the created or objective aspect, yet do not exclude the value of subjectivity, the subjective aspect of creativity. Similarly, the Upanishads and Aranyakas, while primarily displaying the organizing power inherent in the Rishi and Devata respectively, include all the three values within their fold.

Each of the four Samhitas — Rig-Ved, Sama-Ved, Yajur-Ved, and Atharva-Ved — has its own Upanishads, Aranyakas, and Brahmanas. These Upanishads, Aranyakas, and Brahmanas of each Samhita bring out the dynamics of symmetry breaking, which is most fundamentally expressed as the emergence of Rishi, Devata, and Chhandas from the supersymmetric state of the unified field, Samhita. (Maharishi Vedic University, 1985b, p. 12)

The Brahmana aspect of the Ved thus expresses the organizing power of the Samhita (see Figure 5).

A remarkable feature of Maharishi Vedic Science and Technology is that the organizing power of natural law can be directly utilized by the individual in whose awareness the self-interacting dynamics of pure consciousness are lively:

It is interesting to see how a few fundamental procedures (yagyas) contained in the Brahmanas corresponding to each Samhita can create any desired results — both on the level of physical objects and on the level of situations and circumstances. (The same principle is seen in the TM-Sidhi program, in which just a few sutras of Patanjali are sufficient to enliven the full creative potential of consciousness and produce any desired result by mere intention.) Thus, the study of the Brahmanas uncovers the mechanics of influencing nature at its most fundamental level. Similarly in physics, the knowledge of a vast range of phenomena is encapsulated in just a few simple formulas. . . .

The descriptions of natural law in Vedic Science are the actual Shruti — that which is heard when the mind identifies itself with this most fundamental level of nature’s functioning, the self-referral dynamics of Samhita, which are cognized in the simplest form of human awareness. The formulas of physics are just an intellectual or mathematical description of the laws of nature, while the formulas constituting the texts of the Brahmanas are the actual impulses of natural law, which not only present the intellectual understanding of the mechanics of creation, but at the same time actualize the creative process and display the organizing power of nature, producing the desired results.

The intimate relationship of knowledge and organizing power is the specialty of the Vedic language, in which there is a perfect identity between the name and its corresponding form, the sound and the object. The projection of the Vedic syllables from that level

See Gelderloos & Berg, 1989, on the TM-Sidhi program for a more detailed description of this process.
The Mantra and Brahmana Aspects of the Ved

Figure 5. The Mantra, or pure knowledge, aspect of the Ved is the Samhita, the self-interacting dynamics of the unified field of natural law. The Brahmana aspect of the Ved contains the infinite organizing power of natural law found in the unified field.
where the "whisper" of nature is eternally going on spontaneously produces the form corresponding to the vibrations of the sound.

Through its self-referral activity, the Samhita gives rise to different values of transformations, which exist in the unmanifest gaps (atyantabhav) between the syllables of the Samhita. The Brahmanas bring to light specific formulas to modify these transformation processes in any desired direction. By applying the systems of Yagyas, the transformation processes (anyonyabhav) located in the gaps can be remolded to produce a different result. One possibility can be made into another; all possibilities are absolutely lively, and from this level anything can be created at will.

The gap is the level of infinite correlation, the level of no friction, where everything has melted and can be molded in any desired way. By striking at this most delicate point in nature, one can accomplish a desire without any doing; a mere intention is all that is needed to transform one value into something else. This is the extreme value of Yogasthah kuru karmani — "established in the Samhita, perform action" — perform on the level of anyonyabhav, the lively field of all possibilities, and produce whatever you desire.

From the perspective of physics, the value of anyonyabhav can be located in the superfield at the singularity level in physics. This is the ultimate level of quantum mechanics, where all possibilities are lively in the infinite dynamism of the unified field. Transformations that are impossible at more superficial and expressed levels of nature [e.g., leptoquark transformations] are effortlessly accomplished at this scale. (Maharishi Vedic University, 1985b, pp. 15-16)

Two important concepts brought to light by Maharishi, which are discussed in this quotation, are the relation between sound and form in the Vedic syllables and the mechanics of using the dynamics of sound or vibration on the level of pure consciousness to create specific effects.

Language, the means by which knowledge is expressed, has two aspects, meaning and sound. In the waking state of consciousness, the organizing power of language is usually understood to be derived from meaning alone. Meaning symbolically denotes objects and the relationship between objects, and the organizing power results from transferring the information encoded in the symbolism of the name into the world of events, as when the equations of physics are translated into applied technology. Maharishi Vedic Science, as well as modern science, indicates that organizing power is also found directly embodied in sound. Physics has shown that sound, and more generally any flow of energy, can carry information that creates structure. For example, when a bowstring is played while it touches a steel plate on which is sitting a pile of sand, the sand will organize itself into a specific form, called a "Chandli pattern," based upon the quality of sound and the point of contact with the plate. A much more fundamental expression of the process of vibration giving rise to form is found in quantum field theory, whose central principle is that any material particle can be understood as the superposition of waves or vibration. Ultimately, all force and matter fields are the modes of vibration of the unified field of natural law (Hagelin, 1989).

According to Maharishi Vedic Science, the impulses of the Ved directly embody in their vibratory quality the organizing power of nature, the dynamics of the total potential of natural law. Maharishi identifies the Vedic sounds created by these dynamics as the fundamental flows of energy that structure all of creation. Inherent within the pattern of these vibrations, expressed as sounds, are the order and energy that express themselves in the fundamental forms of nature. The direct expression of the Ved
as sequences of sound explains why it is described by Maharishi as the "language of
nature." Maharishi states that the Vedic impulses contain in "seed" form the informa-
tion and organizing power through which the laws of nature create the infinite diversi-
ty of expressed forms in the universe. This infinite creativity is possible because the
medium within which the Vedic impulses or sounds operate, pure consciousness, is the
unified field.

The direct relationship between sound and form in the language of nature allows hu-
man awareness to make full use of the infinite organizing power of natural law. Maha-

rishi Vedic Science specifies two technologies for utilizing the infinite organizing
power of natural law inherent within the language of nature, the inner technology of the
TM-Sidhi program and the behavioral technology of Vedic yagyas.

The first, the TM-Sidhi program, is the technology of consciousness that trains one
to project an intention from the level of the junction point between localized awareness
and unbounded awareness, between individual psyche and cosmic psyche (Gelderloos &
Berg, 1989). When the practice of the TM-Sidhis is perfected, with the development
of complete enlightenment, Maharishi states (1986a, p. 74) that the individual can
make full use of the dynamics of natural law at this level of existence for the fulfill-
ment of desire.

The second technology for making use of the infinite organizing power of nature is
that of Vedic yagyas or, in Maharishi’s words, Vedic engineering. As noted in the
above quotation, these are precise behavioral procedures or performances, which utilize
the formulas of the language of nature contained in the Brahmanas of the Ved. Accord-
ing to Maharishi, as described in the above quotation, the yagyas work by making use
of the transformation processes of natural law found on the level of the unified field. He
locates the source of these dynamics of transformation (anyonyabhav) in the gap be-
tween particular expressions of the Samhita, where one expression of the self-
interacting dynamics of Ved gives rise to another.

Maharishi Vedic Science states that both technologies, when performed from the
level of the self-interacting dynamics of pure consciousness, are effective in using the
organizing power of natural law to produce predicted effects. Because the infinite organ-
izing power of nature is only available on the level of pure consciousness, these technol-
ogies are most effective in fulfilling desired intentions when performed by individuals
who have the ability to project thought and action from this level. According to Maha-

rishi, once one gains the ability to have awareness effortlessly fluctuating with the im-
pulses of the language of nature that vibrate at the basis of creation, then the full organ-
izing power of natural law is spontaneously available for use. One does not have to go
out of one’s own inner nature, but acts fully from within pure consciousness, the unified
field of natural law, to achieve any practical result in daily life.

With this analysis of how the organizing power of pure knowledge can be utilized
for human progress, it is clear why, as indicated at the beginning of this chapter, Maha-

rishi has always emphasized direct experience of the Ved. Education in science and all
other disciplines today is based only upon intellectual understanding of natural law. In-
tellectual understanding of natural law, although necessary, is not sufficient to directly
nourish the life of the student. Studying the Vedic texts will not provide the organizing
power of the Ved, which is available only on the level of pure consciousness, the level from which nature itself creates. Maharishi therefore emphasizes developing pure consciousness as the first priority so that the organizing power of the Ved can be used spontaneously in daily life.

In this regard, Maharishi (1985b) states:

The enlivenment of the structure of pure knowledge in the Self is and should be the sole focus of education, the sole focus of training whereby the total organizing power inherent in the Self is kept lively all the time so that the whole force, the whole impetus of organizing anything is coming from that total potential of natural law within oneself. The support of nature for one's thoughts and desires — this ability to have the thoughts and desires come out fully supported by natural law must be enlivened by education.

The present system of education everywhere lacks this efficiency, this effectiveness of enlivening the field of total knowledge within. And this is so very beautifully available in the structure of pure knowledge which is Samhita, the Ved, the very structure of the Ved. So the study of Ved is the study in the field of consciousness. ...

Ved is pure knowledge, and pure knowledge is infinite organizing power. So we can talk of infinite organizing power in human awareness because of the Vedic literature and because of the discoveries of modern science. This has given us that strength, that stamina, to come out with this package of knowledge and make it such that it is available for all generations to come so that every individual enjoys freedom with the ability to do things correctly and do things successfully, society is most perfectly orderly, and governments are on that level of efficiency through which nature's government governs the universe. All these beautiful possibilities come up now with this package of knowledge in our hand today. (pp. 140-141)

Consciousness and Natural Law:
The Perspectives of Modern Science and Maharishi Vedic Science

Maharishi has brought a new understanding of the Ved to the West, and, in fact, to India as well. Maharishi's vantage point is unique because his knowledge of the Ved is based on direct experience, and is also due to his familiarity with the methods and discoveries of the scientific disciplines in this century. By virtue of these two, it is clear to Maharishi that reality, whether investigated by the objective approach of modern science or the subjective and objective approach of his Vedic Science, is fundamentally the same. The genius of Maharishi's contribution to these two streams of knowledge has been first, to re-enliven the empirical basis of ancient Vedic Science in the direct experience of the unified field of natural law, and second, to provide a framework through which the languages of these two very different approaches could be meaningfully related.

Maharishi has explained that, for centuries in India, there was no effortless subjective technology to experience the unified field widely available. This led to the misunderstanding that one had to withdraw from daily activity to gain enlightenment and led to a decline of India's great culture and its quality of life. With the loss of cultural integrity and national strength came foreign domination. Even so, the culture maintained a clear knowledge of the central importance of the Ved for the highest levels of individual

A subsequent article in this series on Maharishi Vedic Psychology will describe its application to create an ideal society.
and social life. Vedic pandits, whose ideal role Maharishi has described as making use of the organizing power of natural law found in the sounds of the Ved for the improvement of human life, passed on the recitation of the Ved over generations, maintaining the impulses of the Ved on the level of speech, if not on the level of direct experience. Maharishi (1986b, p. 50) has termed the Vedic pandits "the remnants of the Vedic civilization, the most ancient civilization in the world," and has commented (1985a) on the role of these individuals in the following way:

Fortunately, the Vedic pandits from the timeless traditions have preserved these impulses of nature, and this is the Ved. Ved is not written by anyone; it is not a composition. It is the self-interacting rhythm of the Ved that is responsible for the perfect orderliness that we see in the activity of nature. (p. 78)

When Western scholars became familiar with the Ved, they sought to understand it in their own terms, emphasizing not the sound of the Ved but its written form and possible translated meaning. In contrast, in clarifying the nature of the Ved, Maharishi has pointed out that its existence as the dynamics of the unified field can be located at any point in nature at the level of the unified field rather than in a specific text or geographic or cultural setting. For this reason, Maharishi (1985a) emphasizes that the essence of Vedic study is the development of consciousness to the level of experience of the Ved:

The study of the Ved is not through the books of the Ved. They are a guide for the teacher. The study of the Ved is from what is inscribed within the pure consciousness of the individual student himself.

It is the consciousness that is researched, and on the basis of that research of the individual student, the Ved unfolds. That means that natural law unfolds in consciousness, and as natural law sequentially unfolds more and more support of nature will come to life. A time must come when total natural law will be fully unfolded in one's awareness and will be guiding all progress of thought, action, and behavior....

The reality of the unified field, the Ved, the total potential of natural law is not a foreign reality to anyone. It is only hidden deep inside. It has only gone out of our awareness, and to bring it to our awareness is the purpose of study....

What will Vedic study provide? It will provide thorough intellectual understanding about the unified field. This is the first generation that has a chance of verifying the reality of intellectual understanding of the unified field within one's own consciousness with the objectively derived knowledge of the unified field from the different disciplines of modern science.

We have today such a beautiful and perfect means of reliably unfolding the total potential of natural law within ourselves, a means which no generation in the past has had. It is a very, very beautiful moment in the history of evolution because today the total potential of natural law is available. (pp. 62-64)

The recitation of the Ved and the performance of yagyas (described in the previous section) is done only by individuals who are trained from childhood in these skills. Training in recitation of the Ved is, by tradition, passed on from generation to generation through family lines (shakhas). Maharishi has noted that the ancient ideal of this tradition of education is fulfilled when the Vedic pandits have added to their education the development of higher states of consciousness through the Transcendental Meditation and TM-Sidhi programs, as is the case in the educational program of Maharishi Ved Vighyan Vishwa Vidya Peeth, Maharishi Nagar, India. On the foundation of direct experience of the field of pure consciousness and the awakening of awareness to the self-interacting dynamics of consciousness, the role of the Vedic pandits, according to Maharishi, is to utilize the impulses of the Ved and their inherent organizing power to enliven the evolutionary trends of natural law in the life of the whole society.
Maharishi thus states that the unique opportunity for knowledge of natural law available today is that not only the objective approach of modern science but also the subjective and objective approaches of his Vedic Science are available at this time. According to Maharishi, the observable laws of nature have their source in the dynamics of consciousness, and thus there should be consistency between the general conclusions of modern science and those of his Vedic Science. Yet Maharishi (1986a) also states that the approach of Vedic Science, which takes into account the need for the development of consciousness in order for knowledge to be complete, offers knowledge that is more effective in directly enriching human life:

There has been so much wrong understanding about the Ved during the past several hundred years. But credit goes to this scientific age, because the objective approach of modern science has now uncovered the reality of pure subjectivity — the self-referral, self-interacting unified field, which is the Ved. The objective approach reached its goal and rang the bell of eureka! when it gained knowledge which is no longer objective but is pure subjectivity. The world of scientists should know that the objective approach comes to an end there. Many more discoveries may be made on the surface, relative levels of existence, but the goal of physics has been reached.

Today the most advanced level of modern science needs a complete approach to investigation, which includes the other two values of knowledge — the value of the knower and the value of the process of knowing. All knowledge about the knower, the process of knowing, and the known is available in the most systematic manner in the Vedic literature. Every aspect of the Vedic literature is dedicated primarily either to the knower or to the process of knowing or to the object of knowing. All three values are uncovered in their totality in Vedic Science....

For centuries Vedic Science has been misinterpreted and misunderstood. But now modern science has dipped into the reality of the unity state of life at the basis of the infinite diversity in creation. If human intelligence is to proceed on the more fulfilling levels of knowledge and existence on earth, now is the time for the complete knowledge of life to be brought to human awareness. Vedic Science is that most fundamental, complete value of science, which has in store all the future progress of the world. (pp. 31-35)

Now is the time for scientists to investigate into the total reality of life without excluding consciousness. Today, those who exclude consciousness are not with the times, they are far behind. (p. 28)

Maharishi thus emphasizes that modern science, in the discoveries of unified quantum field theory, has glimpsed the unified field of natural law. He points out that this is the same field — the field of pure consciousness — described in great detail by the Vedic literature. However, the incomplete scientific method of the past, which lacked a systematic subjective approach to gaining knowledge of natural law and improving the quality of human life, must now be expanded for science to rise to fulfillment. It is the complete subjective and objective approach to knowledge of Maharishi Vedic Science that fulfills this need.

The next section reviews the empirical evidence supporting the relationship of consciousness and natural law outlined by Maharishi Vedic Psychology. Following that, parallels between the description of natural law found in Maharishi Vedic Science and in modern science are discussed.
Research Indicating Growing Knowledge and Organizing Power of Natural Law through the Experience of Pure Consciousness

Scientific research has so far assessed effects of the first two of the three steps of attuning the individual psyche with the cosmic psyche described earlier in this article — the Maharishi Transcendental Meditation and TM-Sidhi programs. As noted previously, the first of these three steps is Transcendental Meditation, during which one experiences pure consciousness, a field of infinite silence, the self-referral state of awareness. In the TM-Sidhi program, one learns to think and act from the field of pure consciousness, thereby enlivening this field in one's awareness. In the third step, experience of the Ved, Maharishi describes how one directly experiences the infinite dynamism of natural law in the field of pure consciousness, the unified field of natural law.

The large body of scientific research on the Transcendental Meditation and TM-Sidhi programs indicates that even in these first two steps, prior to experience of the Ved, the individual develops in the direction of gaining the pure knowledge and infinite organizing power of natural law. Growth in the direction of pure knowledge means that the experience of the self-referral state of pure consciousness directly develops the awareness of the knower, so that he or she can more completely comprehend the functioning of natural law. Table 1 gives examples of major research findings demonstrating that through the regular practice of the Transcendental Meditation and TM-Sidhi programs one develops more accurate and comprehensive cognitive capabilities.

Growth of the infinite organizing power of natural law means that life at all levels — physiological, psychological, and sociological — is holistically nourished. According to Maharishi Vedic Psychology, such flowering of life as a whole can only occur from the unified field of natural law, where the total organizing power of natural law is found. Table 1 also outlines evidence that the Transcendental Meditation and TM-Sidhi programs, by enlivening the field of pure consciousness in individual and collective consciousness, allow the organizing power of natural law to support and enrich these levels of life. In particular, the Maharishi Effect, the influence of coherence radiating in society from a small group of individuals participating in the Transcendental Meditation and TM-Sidhi programs, demonstrates the profound capability of the technology of Maharishi Vedic Science to enliven the organizing power of natural law to enrich human life at the national and even global scale (see Orme-Johnson & Dillbeck, 1987, for a review of this research).

Correspondence Between the Principles of Maharishi Vedic Science and those of Modern Science

The profound parallels between the principles of Maharishi Vedic Science and those of the modern sciences, and the ability of Maharishi Vedic Science to illuminate the deepest discoveries of modern science, provide further theoretical support for Maharishi's description of natural law in relation to the field of pure consciousness. This section elaborates the contribution of Maharishi Vedic Science to the understanding and application of natural law in modern science in terms of two topics: consciousness and natural law, and knowledge and organizing power.
TABLE 1
SCIENTIFIC RESEARCH INDICATING THE DEVELOPMENT OF PURE KNOWLEDGE AND ORGANIZING POWER OF NATURAL LAW

<table>
<thead>
<tr>
<th>PURE KNOWLEDGE</th>
<th>Authors</th>
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<tbody>
<tr>
<td>Increased Intelligence</td>
<td>Cranson, in press; Dillbeck, Assimakis, Raimondi, Orme-Johnson, &amp; Rowe, 1986; Dixon, in press; Shecter, 1978; Tjoa, 1975</td>
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<tr>
<td>Broadened Comprehension</td>
<td></td>
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<tr>
<td>Increased Field Independence</td>
<td>Dillbeck et al., 1986; Pelletier, 1974</td>
</tr>
<tr>
<td>Improved Memory</td>
<td>Miskiman, 1976; Dillbeck &amp; Szal, in press</td>
</tr>
<tr>
<td>Improved Learning Ability</td>
<td>Dillbeck, Orme-Johnson, &amp; Wallace, 1981</td>
</tr>
<tr>
<td>Improved Concentration and Comprehension</td>
<td>Nataraj &amp; Radhamani, in press</td>
</tr>
<tr>
<td>Increased Cognitive Flexibility</td>
<td>Dillbeck, 1982; Alexander, Langer, Newman, Chandler, &amp; Davies, 1989</td>
</tr>
<tr>
<td>Increased Creativity</td>
<td>Travis, 1979</td>
</tr>
<tr>
<td>Improved Intellectual Performance</td>
<td></td>
</tr>
<tr>
<td>Increased Academic Achievement</td>
<td>Kember, 1985; Nidich, Nidich, &amp; Rainforth, 1986; Nidich &amp; Nidich, 1989</td>
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<th>ORGANIZING POWER</th>
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<tr>
<td>Physiology</td>
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<tr>
<td>Reversal of Detrimental Effects of Aging</td>
<td>Alexander et al., 1989; Goddard, 1989; Wallace, Dillbeck, Jacobe, &amp; Harrington, 1982</td>
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<tr>
<td>Reduced Medical Care Utilization</td>
<td>Orme-Johnson, 1987</td>
</tr>
<tr>
<td>Increased Stability and Flexibility of the Nervous System</td>
<td>Dillbeck &amp; Bronson, 1981; Levine, 1976; Orme-Johnson, Wallace, Dillbeck, Alexander, &amp; Ball, in press</td>
</tr>
<tr>
<td>Increased Coherence of Brain Functioning</td>
<td>Orme-Johnson, 1973</td>
</tr>
<tr>
<td>Increased Autonomic Stability</td>
<td>Appelle &amp; Oswald, 1974; Holt, Caruso, &amp; Riley, 1978</td>
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<tr>
<td>Increased Mind-Body Coordination</td>
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<tr>
<td>Psychology</td>
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<tr>
<td>Increased Integration of Personality</td>
<td>Berg &amp; Mulder, 1976; Brooks &amp; Scarano, 1985; Gelderloos, 1987; Nidich, Seeman, &amp; Dreskin, 1973; Seeman, Nidich, &amp; Banta, 1972; Turnbull &amp; Norris, 1982</td>
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The self-interacting dynamics of consciousness and natural law. Maharishi (Maharishi Vedic University, 1985a) identifies the following richas of the Ved as central to understanding the self-interacting dynamics of consciousness and natural law from the perspectives of both his Vedic Science and modern science:

Richo akshare parame vyoman
Yasmin deva adhivishve nisheduh
Yastanna veda kimricha karishyati
Ya ittadvidus ta ime samasate

(Rig-Ved 1.164.39)

The verses [richas] of the Ved exist in the collapse of fullness
(the Kshara of A) in the transcendental field,
In which reside all the devas, the impulses of creative intelligence,
the laws of nature responsible for the whole manifest universe.
He whose awareness is not open to this field,
what can the verses accomplish for him?
Those who know this level of reality
are established in evenness, wholeness of life. (p. 101)

Maharishi’s translation of the first line of this verse notes how the Ved exists as the inherent dynamism of the unified field. The infinite dynamism of the field of pure consciousness has its source in the self-referral nature of pure consciousness. As quoted earlier, "The first syllable of Rig-Ved, AK, expresses the dynamics of akshara — the "kshara" of "A," or collapse of infinity to its point value, which is the source of all the mechanics of self-interaction" (Maharishi Vedic University, 1985b, p. 1). That is, pure consciousness is infinitely dynamic because it is awake to its full range from infinity (represented by A) to point (represented by K). (See earlier articles on Maharishi Vedic Psychology: Dillbeck, 1988; Orme-Johnson, 1988.) The simultaneous existence of the two contrasting values of infinity and point within pure consciousness can be understood, according to Maharishi, as an infinite frequency of transformation between the two, in which infinity "collapses" to a point and the point expands to infinity. Thus, the
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<th>Table 2</th>
<th>Analysis of Key Theories from Physics, Mathematics, and Physiology</th>
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<tr>
<td><strong>Physics — Superstring Theory</strong></td>
<td>In heterotic superstring theory, force and matter fields are generated by spontaneous compactification (collapse) onto a Calabi-Yau space or orbifold, leading to the topological breaking of an internal gauge symmetry down to a grand unified subgroup. As the dynamics of the superstring field appear only at the Planck scale, they are effectively unmanifest. At observable distance scales, the dynamics of natural law are approximately described by an ordinary super-symmetric quantum field theory of point-like particles. All the fundamental particles and forces arise as the massless modes of vibration of the underlying superstring field. The gravity superfield and the gauge superfields result from the direct product of the left-moving modes and solitons with right-moving modes. The gravity, gauge, and matter superfields together span the five fundamental categories of quantum fields responsible for the whole manifest universe; the spin-3/2 gravitino, the spin-1 gauge fields, the spin-1/2 matter fields, and the spin-0 sparticles.</td>
</tr>
<tr>
<td><strong>Mathematics — Set Theory</strong></td>
<td>The principles of set theory describe the progressive unfoldment of greater and greater infinite totalities starting from the null set. This process of generating sets is based upon the collapse of a finite or infinite totality of sets to a point value—a single element of a new set. The infinite totalities and processes described by set theory transcend the boundaries of the finite localized expressions of nature in space and time and must be located in the infinite, unbounded field of consciousness. The principles of set theory embody the organizing power that creates the mathematical universe from the null set as well as the organizing power that structures mathematical knowledge, on the basis of logical analysis of collections of objects. The organizing power embodied in the axioms of set theory is capable of generating all known mathematics — all mathematical structures can be located in the set theory universe, and all proofs can be validated on the basis of the principles of set theory.</td>
</tr>
<tr>
<td><strong>Physiology — Molecular Genetics</strong></td>
<td>Principle of transcription—the DNA molecule contains the totality of biological knowledge within an organism. This knowledge is expressed when a specific portion of the DNA molecule is transcribed or copied into messenger RNA through the process of complementary base pairing. DNA stands for the transcendent field of physiology in that it is metabolically non-active and stable in itself, and yet it is the basis for the regulation of the metabolic pathways and activities of the organism. The most fundamental physiological value of information is available in the physical structure of the codon, a sequence of three nucleotides in messenger RNA. The sequence of each codon and their specific arrangement in messenger RNA is specified by the information contained within in the functional units of DNA, the genes. The genes, by determining the specific sequence of codons in messenger RNA, are responsible for generating structural and functional proteins in every cell of the organism. These proteins both act as essential components for many anatomical structures and regulate basic physiological activity.</td>
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</table>
EXPERIENCE OF THE VED

IN TERMS OF THE RICHO AKSHARE VERSE OF THE RIG-VED

Before superstring theory, quantum gravity was beset by apparently insurmountable problems resulting from severe ultraviolet divergencies. In superstring theories, the massive string modes provide an effective high-frequency cut-off, rendering the theory free of divergencies.

In previous unified field theories based on extended supergravity, the spin-1 and spin-1/2 components of the N=8 gauge supermultiplet are apparently too few to account for the rich structure of elementary particles and forces at the electro-weak and grand unified scales.

Theorists acquainted with the internal gauge structure of the heterotic string and its spontaneous compactification to four dimensions can explain the emergence of an entire grand-unified family of gauge forces along with complete chiral generations of quarks and leptons.

Superstring theory presents a profound holistic vision, in which all the diversified aspects of natural law are not separate from the unified field itself. All the fundamental particles and forces are modes of vibration of the self-interacting unified superstring field.

Without the knowledge of set theory, rigorous mathematics would be restricted to finitistic arguments and constructions—mathematical procedures that can comprehend, relate, and manipulate only a finite number of distinct elements at one time.

Restricted to finitistic methods, most of modern mathematics could not have been developed—including the fields of analysis and topology. Fields such as these require the transcendental concepts of set theory to formulate their most fundamental principles (axioms).

All branches of modern mathematics employ the language of set theory to express their basic concepts and principles, and systematically employ the principles of set theory to analyse in an exact way both finite and infinite collections of elements.

By providing a common language and a common criterion of right knowledge for all areas of mathematics, set theory provides a foundation for a grand unification of mathematics in which all mathematical knowledge and activity are integrated in a single, coherent whole.

Defects in the transcription process, due to an insufficient or faulty transfer of information from DNA to messenger RNA, disallows the knowledge contained in DNA to be properly utilized and leads to the formation of an RNA with an incorrect sequence of nucleotides.

The proper transcription of messenger RNA ensures that the sequence of nucleotides in the DNA is copied through the process of complementary base pairing in the correct corresponding sequence of nucleotides in messenger RNA, thus enabling the complete information in DNA to be properly expressed.

The proper transcription of messenger RNA enables correct information from DNA to be utilized for the construction of properly functioning proteins—the essential organizers and regulators of balanced biochemical activity. This provides the essential basis for effective and integrated physiological activity.
dynamics of transformation of the field of pure consciousness have their basis in akshara. The Richo Akshare verse goes on to state that the laws of nature are the dynamics of the unified field, and that the real usefulness of the knowledge of natural laws comes from direct experience of these dynamics, the Ved.

According to Maharishi, this verse of the Rig-Ved identifies a fundamental reality of the relationship of consciousness and natural law not only at the level of the unified field, but also as reflected in the various expressions of natural law studied by the sciences. On the basis of this insight, charts have been developed by scientists and Vedic scholars at Maharishi European Research University and Maharishi International University, in which the structure of the most fundamental laws of nature discovered by physics, mathematics, and physiology, as well as other disciplines, has been analyzed in terms of this Vedic verse. Table 2 (see pp. 142-143) gives examples of this analysis from each of these three disciplines.

Maharishi has also stated that the Richo Akshare verse of the Ved is applicable in a general way to understanding how the direct cognition of the dynamics of natural law in the Ved, or pure knowledge, brings fulfillment to the goals of the objective approach of modern science. This is emphasized in the following quotation, in which Maharishi (1980) uses an alternative translation of the word "akshara" ("indestructible") to emphasize the immutable character of the unified field of natural law rather than its internal dynamism:

The first two words, richo akshare, describe the flow of pure knowledge, the flow of Ved, which, it says, is in the indestructible, non-changing field of Akshara. We see the same thing in the structure of scientific law, which is seated in the non-changeability of the law, on the ground of non-change. Even though the law administers change, it has its seat in non-change. It is a constant and therefore it becomes a law. The hymn [verse] of Rig-Ved calls the law Richas, and the flow of law is in Akshara, in the indestructible.

Where is the indestructible? It cannot be in the relative just because it is non-changing, and non-change does not have its breath in the relative. It belongs to the transcendental value — parante vyoman — it transcends all activity. Here is the seat of the non-changing, on the ground of which is the flow, the structure of the law. ...

The hymns of the Ved, the expressions of the laws of nature, have their seat in the indestructible field of consciousness. Someone who does not know this field of consciousness is not able to associate the indestructibility with the law, and if the law is not indestructible, self-sufficient, and constant, then it is not of much value for all times. The emphasis here is in the knowledge of the indestructible, in the knowledge of the non-changing field.

Further on the hymn says, "He who knows the indestructible, the field of non-change, is seated in evenness of life." That means, he is seated in all the laws of nature at once. He whose awareness has gained that level of evenness, his awareness is lively in terms of all the laws of nature. So here is a lively picture of the structure of pure knowledge in the self-referral value of pure consciousness. (pp. 77-78)

Maharishi indicates in this passage that although every law of nature is a non-changing principle, the reality of non-change at the basis of that law can only be known, in modern science, through inference from the changing expressions of that law. He points out that the non-changing reality of natural law, at its unified basis, can only be completely known and applied to enrich human life when the consciousness of the knower is established in the structure of pure knowledge.
**TABLE 3**  
PURE KNOWLEDGE AND ORGANIZING POWER

Maharishi Vedic Science and his Vedic Psychology identify two fundamental aspects of natural law, pure knowledge and organizing power. This chart shows how these two fundamental aspects of natural law are described by Vedic Psychology and also by the disciplines of physics, mathematics, and physiology.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Pure Knowledge</th>
<th>Organizing Power</th>
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<tbody>
<tr>
<td>Maharishi Vedic Psychology</td>
<td>The structure of pure knowledge, the Ved, is the self-interacting dynamics of the field of pure consciousness, at the basis of all expressions of natural law.</td>
<td>The self-interacting dynamics of the unified field contain the complete organizing power of natural law, responsible for all the observed expressions of nature.</td>
</tr>
<tr>
<td>Physics</td>
<td>The Lagrangian of superunified field theories embodies the complete knowledge of the unified field, the structure of its interactions, and all its symmetries. These symmetries, which unite all forms of matter and energy, remain unseen at ordinary scales of energy, time, and distance.</td>
<td>The complete dynamics of the unified field are contained in the Hamiltonian of the unified field, the quantum-mechanical operator which, though itself time-independent, governs the behavior and time-evolution of the field.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Set theory is pure knowledge in that it is non-empirical knowledge at the basis of mathematics. All mathematics can be unfolded by the rules of logical inference from the axioms of set theory, which describe the dynamics of intelligence functioning within itself.</td>
<td>In the sciences, the abstract language of mathematics is applied to quantify all the laws of nature governing creation.</td>
</tr>
<tr>
<td>Physiology</td>
<td>The DNA molecule, present in all cells, contains in unexpressed form the totality of knowledge of all physiological structures and functions. It is the pure knowledge of the living system, the information at the basis of the creation, maintenance, and evolution of all aspects of the organism.</td>
<td>The DNA molecule contains the organizing power that governs the development and behavior of all physiological systems of the organism. This organizing power is unfolded through the processes of transcription and translation.</td>
</tr>
</tbody>
</table>

Knowledge and organizing power of natural law. Another aspect of the unified field that is highlighted by Maharishi Vedic Science and Vedic Psychology, and which also can be found in the disciplines of modern science is the distinction between pure knowledge and organizing power. As illustrated in Table 3 and Figure 6, each of
Pure Knowledge and Organizing Power of the Unified Field of Natural Law

EXPRESSIONS OF NATURAL LAW

**Maharishi's Vedic Psychology**
- Creation of any manifest result

**Physics**
- Changing and non-changing states of all physical fields

**Mathematics**
- Application of mathematics

**Physiology**
- Development and maintenance of the organism

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**Organizing Power**
- Relationship between name and form in the language of nature—the Ved

**Pure Knowledge**
- Experience of the structure of pure knowledge—the Ved

**Hamiltonian of the Unified Field**

**Lagrangian of the Unified Field**

**Quantifying the Laws of Nature**

**Pure Mathematics Based on Set Theory**

**Transcription and Translation**

**The DNA Molecule**

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TOTAL POTENTIAL OF NATURAL LAW

Figure 6. The infinite organizing power of the language of nature is inherent in the structure of pure knowledge, the Ved, on the level of the field of pure consciousness. Each of the disciplines of modern science also displays the organizing power inherent in the knowledge of its unified basis.
the disciplines of physics, mathematics, and physiology has found a unified source of the expressions of natural law, and the qualities of pure knowledge and organizing power apply also to this unified basis of natural law.

All knowledge has organizing power, as is evident from the immense impact of scientific technology on modern life. At the same time, the technologies of modern science and Maharishi Vedic Science differ in significant ways. One of these differences, noted earlier, is that technologies derived from each of the disciplines of modern science use only isolated laws of nature. In contrast, the technologies of Maharishi Vedic Science directly employ the organizing power of the field of pure consciousness, the unified field. Therefore, when used by one who has developed the ability to function from this level of nature, Maharishi states that these technologies are far more powerful.

Another major difference between the technologies of Maharishi Vedic Science and those of modern science is that because the technologies of Maharishi Vedic Science function from the holistic level of the unified field of natural law, which structures the evolutionary development of all of existence simultaneously, they are always totally life-enriching in their application. According to Maharishi, they spontaneously produce a holistic evolutionary effect from the level of the unified field, the level from where all of nature is sustained. In contrast, the organizing power of the technologies of modern science, based on fragmented knowledge of natural law, has the inherent danger of upsetting the balance of life rather than fully enriching life. Unfortunately, the potential dangers of this approach have been repeatedly borne out, as seen for example in side effects in medicine, imbalances produced in the ecology, and the immense destructive potential of modern weapons.

Thus, Maharishi clearly points out that the infinite organizing power inherent in pure knowledge, the Ved, while supporting the progress of each of the sciences, is more direct, powerful, and progressive than the organizing power contained in the partial knowledge of natural law unfolded by the disciplines of modern science. Because Maharishi Vedic Science functions from the all-comprehensive and completely balanced level of the unified field of natural law, it is capable of correcting the innumerable imbalances created by the scientific age by fostering systematic and holistic growth of individual and collective life (see Table 1 above).

Conclusion

Maharishi Vedic Psychology describes experience of the Ved as the direct cognition of the self-interacting dynamics of the field of pure consciousness, the unified field of natural law. Maharishi has identified stages of development of experience of the field of pure consciousness, or cosmic psyche, leading to the clear experience of the self-interacting dynamics of consciousness. Pure consciousness, through the Transcendental Meditation technique, is first apprehended as a state of pure silence. The TM-Sidhi program gives one the further experience of transforming at will the unbounded silence of pure consciousness into specific expressed or qualified states of consciousness. In time, Maharishi notes, the individual gains the ability to experience the internal dynamics of transformation within the field of pure consciousness (the Ved), the laws of nature.
MODERN SCIENCE AND VEDIC SCIENCE

responsible for its expression into all the specific modes of consciousness and all the phenomena of nature.

Maharishi refers to the Ved as pure knowledge, because it exists in the self-referral level of pure consciousness, in which consciousness knows itself. Pure consciousness awake to itself is the three-in-one state where knower (Rishi), process of knowing (Devata), and known (Chhandas) are united (Samhita). The intrinsic dynamism of this self-interaction of pure consciousness, the inner dynamics of the unified field, is the Ved. Inherent within this structure of pure knowledge is the infinite organizing power of the unified field, which is responsible for all the diverse expressions of the laws of nature studied by the disciplines of modern science. Becoming fully awake to the Self, the field of pure consciousness or cosmic psyche, is all that is necessary for the Ved to become a living reality in individual awareness, and for the individual to gain mastery of the organizing power of natural law for the holistic and balanced development of the individual and society.

The huge range of expressions and applications of natural law, even as described by the current scientific literature, could never be known or used by any one person in a lifetime. This is a great frustration to the aspiration of every young student to gain all that knowledge has to offer. However, as Maharishi has noted, although it is not possible to know all the laws of nature, it is possible to be all the laws of nature. Maharishi states that the study of all aspects of natural law can be reduced to the knowledge of the Self or cosmic psyche — the full awakening of the individual to the self-interacting dynamics of the unified field. The central theme of Maharishi Vedic Psychology is: Know that by knowing which nothing remains to be known (the Self), and thereby enjoy the fruit of all knowledge. The fruit of all knowledge is that one's thought and action, spontaneously in accordance with the full range of natural laws from their unified basis, bring greatest success to one's own aspirations and also fully support the interests of all others. Such an education, available through Maharishi Vedic Science (S.L. Dillbeck & M.C. Dillbeck, 1987) frees life from mistakes and suffering, creating the basis of a heavenly state of life on earth.

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