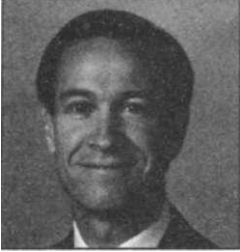

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The Self-Interacting Dynamics of Consciousness as the Source of the Creative Process in Nature and in Human Life

The Mechanics of Individual Intelligence Arising from the Field of Cosmic Intelligence—the Cosmic Psyche

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Abstract

This article outlines, from the perspective of the Vedic Science and Vedic Psychology of Maharishi Mahesh Yogi, the process by which pure consciousness, the field of pure intelligence in nature—the "cosmic psyche"—sequentially gives rise through its self-interacting dynamics to the diversity of subjective and objective existence. Maharishi Vedic Science identifies the field of pure consciousness as the Samhita of Rishi, Devata, and Chhandas—the unified state of knower, process of knowing, and known. The Vedic literature describes all the forms and phenomena of nature as combinations and elaborations of these three components of pure consciousness; thus, the seed of all diversity is located in the three-in-one structure of Samhita. Maharishi Vedic Psychology locates, in the process of diversification from the field of pure intelligence, a sequence of levels or functions of subjectivity, ranging from abstract to concrete—intellect, mind, desire, and senses. These levels can be identified universally, as principles of nature functioning, as well as individually, as aspects of subjectivity. The purpose of Maharishi technology of consciousness is to develop all levels of an individual subjectivity to their most universal stature, for the benefit of the individual and the entire society.

This article is Chapter 2 of *The Vedic Psychology of Maharishi Mahesh Yogi: Fulfillment of Modern Psychology*. The introduction and 10 chapters of this book, which has been written by the faculty of the Psychology Department at Maharishi International University, are being serialized in this and subsequent issues of *Modern Science and Vedic Science*, and will be published in book form by Maharishi International University Press at the completion of the series.

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Introduction

The cosmic psyche—the field of pure consciousness—is not only the starting point of the Vedic Psychology of Maharishi Mahesh Yogi, but also the starting point of the creative process in nature (Maharishi Mahesh Yogi, 1986, pp. 29-30). This field is the unified field of all the laws of nature, known as *Samhita* in Maharishi Vedic Science. This article, the second in this series on Maharishi Vedic Psychology, describes this creative process—how the field of pure consciousness, while maintaining its unified structure, sequentially gives rise through its infinite dynamism to all objective and subjective existence.

An understanding of human creativity, in order to be complete, must include the relationship of individual creativity to the creative process in nature. This is important because the creation of anything that is successful in enriching life must be based on a deep appreciation of the laws of nature. Although creativity is not well understood in contemporary psychology, it is known that creative insights occur at a deep level of the mind that is not usually or easily accessible to the individual. Thus, in order to understand human creativity fully, one would need to comprehend the various levels of human subjectivity and their relationship to the functioning of nature.

As discussed in a previous article in *Modern Science and Vedic Science* (Orme-Johnson, 1988b), Maharishi Vedic Psychology identifies the deepest level of human subjectivity, the field of pure consciousness, as the unified field of natural law from where emerge all the laws of nature responsible for creation. Maharishi Vedic Psychology should thus

concern itself with a number of questions, to provide a complete picture of the creative process in nature and in human life. How do the dynamics of natural law arise from within the field of pure consciousness? How does the field of pure consciousness give rise to individual consciousness? What are the fundamental levels of subjectivity—the basic structure of personality—and how do these relate to the various levels of nature itself? This article discusses these questions, as addressed by Maharishi Vedic Psychology.

The article first describes the creative process in nature from the perspective of Maharishi Vedic Science, which is concerned with the dynamics of natural law expressed in the *Veda* and the Vedic literature (see below). It then describes the process by which the field of pure consciousness gives rise to manifest existence from the perspective of Maharishi Vedic Psychology, which is concerned with states of consciousness, levels of subjectivity, and the application of this knowledge for the improvement of human life. Maharishi Vedic Science and Vedic Psychology are found to be intimately related in that the starting point of the creative process from both perspectives is the self-interacting dynamics of consciousness.

An individual makes practical use of this deepest level of creativity in nature through the process known in Maharishi Vedic Psychology as *sanyama*, the mechanics of the TM-Sidhi program (one of the technologies of consciousness in Maharishi Vedic Science). A subsequent article in this series on Maharishi Vedic Psychology describes in detail this process, which occurs at the deepest level of one's own awareness—pure consciousness.

The article concludes by discussing the relationship between individual human consciousness and the wholeness of the cosmic psyche. This final discussion presents in seed form the essence of Vedic Psychology, by pointing out that it is possible for every person to systematically develop consciousness to its universal level and thereby enrich every aspect of individual and social life.

Part I

The Creative Process in Nature From the Perspective of Maharishi Vedic Science: The Sequential Unfolding of the Self-Interacting Dynamics of Pure Consciousness

Maharishi Vedic Science, as discussed in the previous article (Orme-Johnson, 1988b), states that there is a unified field of pure consciousness at the basis of all existence—all objective expressions of nature and all aspects of subjective life. Modern science, as expressed in unified quantum field theories, has also glimpsed a unified field of all the laws of nature at the basis of all natural phenomena. According to Maharishi Vedic Science, the field of pure consciousness is transcendental or *unmanifest* (Maharishi Mahesh Yogi, 1986, p. 30), beyond the

scale at which the senses operate; similarly, physicists describe the unified field as existing at a scale beyond space and time (Hagelin, 1987, p. 49). Both Maharishi Vedic Science and modern science describe in great detail the sequential transformations by which the unified field gives rise to all of its expressions, all of *manifest* existence that is available to the senses or to their extensions in measurement instruments.

The approach of modern science is objective, using systematic empirical measurements to test theoretical ideas. Maharishi Vedic Science includes both objective and subjective approaches to knowledge. Its subjective approach systematically uses the human nervous system and consciousness as the "instrument" through which conclusions about the functioning of nature can be consistently verified by direct cognition. The objective approach of Maharishi Vedic Science validates these principles through their application to create specific influences in the mind, body, and environment. Although both modern science and Maharishi's Vedic Science describe the underlying unity of existence, it is natural that they use different languages to express their findings about the functioning of nature.

Modern physics has until now approached the study of the unified field as if it could be fully known as an "object" of knowledge. However, Maharishi explains that although it is the source of all objective existence, the unified field must have a different logical status than any other object of knowledge (Maharishi Mahesh Yogi, 1986, p. 96). It can admit of no observer outside itself because it is the completely unified level of nature that contains all expressed values of natural law in seed form. The knowledge of the unified field in modern physics can be based upon inference only and is expressed in the language of mathematical relationships between fundamental laws of nature.

In contrast, Maharishi Vedic Science offers subjective procedures, the Transcendental Meditation and TM-Sidhi programs, through which any individual can directly experience the unified field of all the laws of nature and its internal dynamics within the self-referral state of pure consciousness (Maharishi Mahesh Yogi, 1986, pp. 28-31). (See Orme-Johnson, 1988b, for a discussion of the cosmic psyche, the field of pure consciousness, as the unified field of all the laws of nature). The language of Maharishi Vedic Science, expressing the dynamics of transformation through which the unified field gives rise to all phenomena in nature, is most appropriate for articulating the direct subjective experience of the field of pure consciousness.

As noted in a previous article (Orme-Johnson, 1988b), both modern science and Maharishi Vedic Science describe the unified field of all the laws of nature as an infinitely dynamic source of the creative process in nature. From the perspective of physics, in order for the unified field to create, it must not only exist, but also be lively or have dynamics inherent within it. The fundamental principle of dynamism responsible for quantifying the unbounded field is the quantum principle, through which nature expresses increasing energy at progressively smaller space-time scales; the full

dynamism of nature is found at the Planck scale of superunification (Hagelin, 1987).

In order to understand the dynamism of the unified field of all the laws of nature from the perspective of his Vedic Science, Maharishi emphasizes that two of its properties—*existence* and *intelligence*—must be discussed. The unified field is affirmed by Maharishi Vedic Science to be a field of pure existence—the self-sufficient source of all that exists in nature. It is also identified as a field of pure intelligence—the source of the intelligence or orderliness of nature. According to Maharishi, these two attributes of existence and intelligence also define the unified field as a field of pure consciousness, and they are the basis of its creative dynamism. He states (1972):

This is the first step of progress on the path of intelligence becoming creative intelligence: In its preparation to assume the role of creative intelligence, the unmanifest value of pure intelligence through its own nature, by virtue of its own existence, becomes consciousness. This makes the existence of intelligence conscious, and when existence becomes conscious, that is, aware of itself, intelligence becomes intelligent. This intelligent aspect of the unmanifest value of pure intelligence then assumes the role of creative intelligence. This explains the mechanics of how the unmanifest value of intelligence becomes creative intelligence and transforms itself into many, many manifest values. (p. 8:4)

This statement contains several key ideas. The unified field has existence, which Maharishi has also referred to as "silent Being," the undifferentiated unity of existence (Maharishi Mahesh Yogi, 1966). However, this existence is not inert; otherwise it could not be the source of the creative process in nature. The intelligence aspect of the unified field is described as the seat of activity. Being a field of intelligence as well as a field of existence, it is awake to its own nature; that is, it has the property of *self-referral* consciousness. As noted in a previous article (Orme-Johnson, 1988b), it is the property of self-referral that is responsible for the creativity of pure intelligence, or what Maharishi refers to as *creative intelligence*. That is, existence being awake to itself is the source of diversity or distinction: this wakefulness creates the relationship of observer or knower, process of observation or knowing, and observed or known, the three components of any experience. On the level of the unified field, each of the three is the same pure consciousness. In Maharishi Vedic Science, this is referred to as the *Samhita* (unity) of *Rishi* (knower), *Devata* (process of knowing), and *Chhandas* (known) (Maharishi Mahesh Yogi, 1986, pp. 40-41).

Maharishi (1985a) has described in detail how the self-referral quality of the field of pure consciousness is not only the basis of all diversity observable in nature, but also how it is the basis of the unmanifest dynamics of the unified field, termed Veda:

That self-referral state of consciousness is completely open to itself. We can intellectually see in this characteristic of pure consciousness being open to

itself that it is its own observer. This means that it, within itself, is the observer, the observed, and the process of observation. This is that self-interaction of the unified field.

In that pure consciousness we have three values—observed, observer and observation—and we have one unified state of the three. Here we have one and three at the same time. When we have one and three together in that self-referral state of pure consciousness, there is that infinite contraction for remaining one and there is that quick expansion to become three. When they are simultaneously three and one there is infinite dynamism. This infinite dynamism of the togetherness of three creates its own noise. This noise is the noise of the unmanifest field, which is the unmanifest because it is open to itself—pure singularity but with three qualities, three and one both together. In this togetherness of one and three we find infinity pulsating—infinity pulsating in that state of pure awareness where the awareness knows its unboundedness. Infinity, fully awake within itself, is fully awake to its infinite value. At the same time it is awake to its point value. In this we find the dynamism of infinity converging to a point and a point expanding to infinity. This infinite dynamism of the self-referral nature of pure consciousness causes noise. It is completely an unmanifest noise, but noise nevertheless, just because its very nature is such that it is three and one together. This phenomenon is not open to anyone except itself. In this self-referral, self-interacting state we have noise, though noise is too crude a word. It creates vibrations within itself.

Veda is a clear script of that self-interacting situation of pure consciousness. Nature in its absolutely pure state is very clear in its precise activity, its precise performance, and that is the Veda. (pp. 64-66)

In this passage, Maharishi states that the infinite dynamism of the unified field, which is intrinsic to its nature as self-referral pure consciousness, gives rise, through its self-interaction, to specific and precise patterns of vibration, or dynamics. These are known as the Veda. The infinite dynamism of the field of pure consciousness has its source in the fact that pure consciousness is not only unified, but, being consciousness, is also awake to itself. Being awake to itself, it creates the distinction between knower, process of knowing, and known within itself, and is thus both one and three at the same time. It is unified, yet contains the principle of diversification. It also may be understood as awake to its full range of potential values, from infinity to a point. Maharishi discusses this simultaneity of opposite values within the nature of pure consciousness as constituting a kind of "infinite frequency" of oscillation. Thus, a fundamental form of vibration is inherent within the very nature of the field of pure consciousness, which in turn is transformed into other modes of vibration. It is in the form of vibration that the dynamics of natural law are expressed as the Veda.

Maharishi (1985a) states that the sequence of transformations within these dynamics of the unified field is responsible for the sequential emergence of all the phenomena of nature from this field, a creative process that is going on at all times in nature:

The unified field progresses sequentially. There is the sequential progression of the unified field into the specificities of life, the space-time boundaries of life. It is always a sequential development.

Sequential development means that the whole tree is found in the seed. The whole tree is found in the first stage of sprouting of the seed, and in the second stage of sprouting, and in the third stage of sprouting. As the tree grows, the total tree is contained at every level. This is Vedic literature. It unfolds as natural law unfolds, from its total basis in the unified field to its specific expressions. Like that, sequentially developing, the whole infinite diversity of the universe is created and maintained and kept self-referral. (p. 62)

This passage expresses two principles that are central to Maharishi's analysis of how nature sequentially emerges from the unified field. These principles underlie two of Maharishi's unique and unprecedented contributions to the understanding of the Veda and its further elaborations in the rest of the Vedic literature. The Veda and the Vedic literature have previously been understood in the West as ancient texts of only historical significance. However, Maharishi has brought to light that the true nature of the expressions contained in these texts is the most fundamental dynamics of natural law—the self-interacting dynamics of the field of pure consciousness. Because these dynamics form sequences of vibration or sound, they can be "heard" or cognized and have been written down in antiquity in books. Maharishi emphasizes, however, that these sounds are not the creation of authors or speculations of the human mind, but rather are experienced within the field of pure consciousness as its own inner dynamics, irrespective of place and time.

The first principle of Maharishi's analysis is that the totality of the dynamics of natural law is expressed at each sequential stage of development. This is the key to Maharishi's description of the sequence of dynamics of natural law found in the Veda, namely, that each stage of expression of the Veda is a further unfolding of the totality of natural law contained in seed form in the unified field. The Veda is therefore a sequential, self-expressed description of, or commentary on, the process by which the unified field of all the laws of nature gives rise to diversity. Thus, Maharishi has noted, the meaning of the Veda is elaborated by the sequence of its own expressions. He has named this discovery the *Apaurusheya Bhashya*, the eternal "uncreated commentary" of the Veda. That is, the Veda is not written by an individual; rather, it is the "script" of the self-interaction of the unified field, in which each subsequent expression is a more elaborated articulation of what has come before. On the basis of this fundamental principle, Maharishi locates the complete self-interacting dynamics of the cosmic psyche in the very first expression of the Veda, AGNIM (Maharishi Vedic University, 1985a, pp. 104-105).

The second principle found in the above quotation from Maharishi refers to the Vedic literature, which contains the descriptions of the dynamics of natural law from the perspective of Maharishi Vedic Science. This principle is that the entire Vedic literature, in addition to the Veda itself, represents a further sequential unfolding of the self-interacting dynamics of the unified field, leading ultimately to the whole infinite diversity of the universe. Based on this principle, Maharishi has identified the sequence of transformations by which one aspect of the Vedic literature gives rise to

another, as well as the specific principles by which the dynamics of natural law contained in the Vedic literature emerge from the self-interacting dynamics of the unified field (Maharishi Mahesh Yogi, 1986, pp. 27-28).

The Sequential Unfolding of the Whole Vedic Literature From the Self-Interacting Dynamics of Consciousness

The previous section discussed how the unified field of all the laws of nature, described by Maharishi Vedic Psychology as the field of pure consciousness, gives rise to dynamics of transformation, the Veda. These dynamics of transformation are described as a type of vibration. According to Maharishi, the vibrations, or sounds, of the Veda are nothing other than the sequence of transformations by which the unified field progressively unfolds the diversified structures of natural law. In this account, the first sprouting of diversity occurs because pure consciousness is completely open to itself, thus structuring the relationship of observer (Rishi), process of observation (Devata), and observed (Chhandas) within the unified state of pure consciousness (Samhita).

This section describes how all parts of the Vedic literature have their source in this three-in-one structure of the field of pure consciousness. It further explains that the step-by-step expression of the self-interacting dynamics of consciousness may be located not only in the sequence of sounds of the Veda but also in the sequence of sounds of the entire Vedic literature. The sequential development of the Veda and the Vedic literature, as outlined in this section, should not be understood as taking place over time; rather, they provide a structural analysis of the continual dynamism of natural law from its unified basis to its increasingly differentiated expressions.

Maharishi (1985a) describes how the self-interaction of the unified field, which is both one and three (observer, process of observation, and observed), sequentially gives rise to parts of the Vedic literature:

The whole Vedic literature is dedicated to bringing out these three values in terms of Rishi, Devata, and Chhandas. There is one Veda, called Rig Veda, which is the totality of all knowledge. Knowledge means knowledge of the three. There are three Vedas basically attributed to the three values of Rishi, Devata, and Chhandas. They are Sama Veda, Yajur Veda, and Atharva Veda. These three values of Rishi, Devata, and Chhandas have been expounded as three aspects of the Vedic literature: Upanishads, Aranyakas, and Brahmanas. (pp. 67-68)

The previous section noted that the Veda, through the sequence of its sounds, sequentially elaborates the self-interacting dynamics of consciousness. In the above passage, Maharishi points out that sequential elaboration is true not only for the primary Veda, *Rig-Veda*, which is described as containing a complete account of the three *aspects* of pure consciousness, but also for the other three Vedas—*Sama-Veda*, *Yajur-Veda*, and *Atharva-Veda*. It is also true for the *Upanishads*, *Aranyakas*, and *Brahmanas*, aspects of Vedic literature expressing what Maharishi

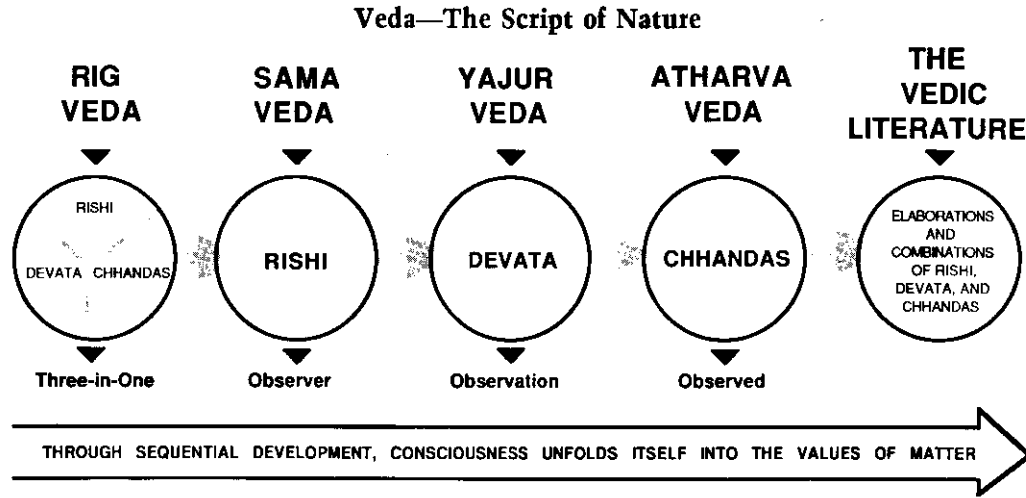


Figure 1. Maharishi Vedic Science describes the self-interaction of the unified field at the basis of nature's functioning. This whisper of the unified field to itself, the language of nature, is called the *Veda*. Consciousness in its pure state, fully open to itself alone, experiences itself as this self-interacting reality of nature. This is the field of pure knowledge, where consciousness knows itself to be the knower, the known, and the process of gaining knowledge—all three values simultaneously in one. Veda is a clear script of this self-referral state of pure consciousness, the togetherness of observer (*Rishi*), observation (*Devata*), and observed (*Chhandas*). The whole Vedic literature is dedicated to bringing out the details of the three-in-one structure of pure knowledge. *Rig-Veda* is the totality of all knowledge—the knowledge of the three-in-one. *Sama-Veda* is basically attributed to the value of *Rishi*, *Yajur-Veda* to *Devata*, and *Atharva-Veda* to *Chhandas*. All the other aspects of Vedic literature expound these three values, connecting them to the individual in terms of the Self, the mind, and the body, and detailing the perpetually self-referral transformation through steps of sequential development by which consciousness, the Self, gets into the value of matter, the body. Knowledge has organizing power. In the field of pure knowledge, the Veda—the infinite organizing power of nature—is lively. By opening one's awareness to the Veda, one harnesses nature's infinite organizing power, bringing the full support of nature to every phase of activity and to the nation as a whole.

terms the "organizing power" of the field of pure consciousness, which is responsible for organizing all the diverse streams of natural law in the entire universe (Maharishi Vedic University, 1985a, p. 115). That is, the *Upanishads*, *Aranyakas*, and *Brahmanas* are further elaborations of the three components of knower (Rishi), process of knowing (Devata), and known (Chhandas), as are subsequent expressions of the Vedic literature (see Figure 1). Maharishi (1985b) comments on how all the parts of the Vedic literature are expressed in sequence:

Perfect precision and order in perfect sequence is available in the arrangement of the Vedic literature: the Samhitas [the four Vedas], the Upanishads, the Aranyakas and Brahmanas, the Shiksha, Kalpa, Vyakaran, Nirukta, Chhandas, and Jyotish; the Nyaya, Vaisheshika, Sankhya, Yoga, Karma Mimansa, and Vedanta, the Itihasa, Puranas and Smritis; and the Upavedas—Ayur-Veda, Gandharva-Veda, Dhanur-Veda, and Sthapatya-Veda. These are the different aspects of the Vedic literature, which, organized in this sequence, give us the sequential progression of the whole body and behavior and the whole universal creation—all well regulated in the evolutionary direction. (p. 136)

In Maharishi's account, the Veda and the Vedic literature thus express the dynamics of transformation of the unified field of all the laws of nature into the diversified structure of natural laws. The source of these dynamics is the unified state of knower, process of knowing, and known—the Samhita of Rishi, Devata, and Chhandas—where the one is continually being transformed into three, and three back into one.

Maharishi has described the principle by which one aspect of the Samhita of Rishi, Devata, and Chhandas is transformed into another. This principle is expressed in the third and fourth *sutras* (aphorisms or verses) of the Yoga Sutras, one part of the *Upangas* of the Vedic literature. These two sutras include, respectively, the following: "*Svarupe Avasthanam*" or self-referral consciousness (literally, "remaining in its own nature"), and "*Vritti Sarupyam*" or, in Maharishi's words, "what you see, you become." The meaning of the latter expression is that consciousness identifies with, or takes the form of, its object. In this regard, Maharishi (1977), has noted:

Attention is the flow of consciousness. It flows both within its own unmanifest nature and outward towards greater levels of excitation.... Attention is the link between subject and object; when it goes towards objects, consciousness takes on the form of the object. (p. 152)

The current discussion refers to the unmanifest or unified level of Samhita, where pure consciousness is both subject and object, or knower, process of knowing, and known.

Thus, even within the unified self-referral level of pure consciousness, the Samhita of Rishi, Devata, and Chhandas, the principle of transformation is inherent in the nature of the subject-object relationship. As one of the aspects of pure consciousness knows or is awake to another, it is transformed into the other. The mechanics of transformation of one aspect of Samhita into another produces vibration, as noted in the previous

section, and it is the sequence of vibrations or sounds that forms the specific sequence of the Vedic literature.

For example, at the most fundamental level of transformation, the self-interacting dynamics of the Samhita of Rishi, Devata, and Chhandas constitute the *Rig-Veda*. Maharishi further points out that the specific transformations of Rishi, Devata, and Chhandas into Samhita are responsible for the sounds of the *Sama-*, *Yajur-*, and *Atharva-Vedas*. Similarly, the transformations of Samhita into the three aspects of Rishi, Devata, and Chhandas constitute the sounds of the *Upanishads*, *Aranyakas*, and *Brahmanas*.

At a further level of elaboration, the transformations between pairs of the three elements of Samhita (e.g., Rishi into Chhandas) are the transformations that are expressed as the sounds of an aspect of the Vedic literature known as the *Vedangas*. The *Vedangas* (literally, "limbs of the Veda") express the knowledge that enables "the Veda in its expressed form to be preserved, known, and used" (Maharishi Vedic University, 1985a, p. 116). A still more elaborated set of transformations is between each of these combinations associated with the *Vedangas* and the unified state of Samhita; these transformations constitute the *Upangas*. The *Upangas* are aspects of the Vedic literature that express, from six different approaches, how to create in awareness the complete state of knowledge of the unified field. Finally, the complete set of transformations associated with the Rishi, Devata, and Chhandas aspects are expressed, respectively, in the areas of the Vedic literature known as the *Itihasas*, *Puranas*, and *Smritis*. The *Itihasas*, *Puranas*, and *Smritis* "respectively illustrate the Rishi, Devata, and Chhandas aspects of the Samhita in their most concrete and diversified expressions" (Maharishi Vedic University, 1985a, p. 117).

Maharishi Vedic Science thus provides a profound and unique understanding of the Vedic literature. In this understanding, the Vedic literature expresses the sequential unfoldment of the self-interacting dynamics of the unified field of natural law, articulating the enormous variety of combinations of the three aspects of pure consciousness, knower, process of knowing, and known. Maharishi (1986) comments on the immense richness of possible combinations of self-interaction of the elements of Samhita:

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)

The Sequential Unfolding of Natural Law from the Perspective of Modern Science

Maharishi's description of how the unified field of all the laws of nature gives rise to all aspects of the Vedic literature is similar in its structure to the conclusions of unified field theorists; both describe how the dynamics of natural law emerge sequentially from a unified basis. In unified field the-

ories, the breaking of fundamental symmetry groups describes how the various observed force and matter fields are sequentially expressed from one unified field (Hagelin, 1987). For example, the $E_8 \times E_8$ symmetry group of 10-dimensional superstring theory is sequentially broken to less and less complete symmetries associated with each of the less complete levels of unification in nature, such as the $SU(2) \times U(1)$ symmetry of the electro-weak unification (Green, 1986). Maharishi Vedic Science identifies how the dynamics of natural law responsible for manifest existence, found in the Vedic literature, arise as the set of all possible combinations of transformations of the elements of the "three-in-one" state of pure consciousness, Samhita. Hagelin (1987) also notes:

One of the most obvious and basic structural similarities between pure consciousness and a supersymmetric unified field (i.e., a superfield or superstring field) is the "three-in-one" structure of pure consciousness, in which the observer, the observed, and the process of observation are unified.... A parallel structure is found within a supersymmetric theory, in which bose fields (e.g., force fields) and fermi fields (e.g., matter fields) are united through the agency of supersymmetry. Here, the bose fields may be compared to the intelligence or "observer" aspect of the unified field, the fermi fields can be compared to the material or "observed" aspect, and the process of observation can be found in the dynamical principle of gauge supersymmetry, which connects and unifies the two. From this perspective, the unified field or superfield itself corresponds to the Samhita of Maharishi Vedic Science. (p. 77)

The discipline of mathematics, within the framework of modern science, has served to connect the functioning of human intelligence to the functioning of nature. Scientific understanding consists of mathematical models, products of the abstract functioning of the human mind, that conform in their structure and functioning to that of nature itself. It is thus interesting to note that the transformations of natural law from their three-in-one source identified by Maharishi Vedic Science have also been noted within the structure of mathematics (Weinless, 1987). All of mathematics can be derived from set theory. The primordial relationship of set theory is the *membership relation*, the relation between a set and its elements, which are also sets. The membership relation is thus the relationship between two complementary aspects of the set concept: a set as a conceptual wholeness (Rishi value) and a set as a point value within another set (Chhandas value). A deep principle of set theory—the *reflection principle*—describes the way the ultimate unified mathematical wholeness, the universe of sets, gives expression to the self-referral value of the membership relation. This principle of self-referral transformation underlies the deepest axioms of set theory, which in turn lie at the source of the sequential unfoldment of mathematical knowledge.

In physiology, the unified source of all expressions of natural law is the genome, the totality of knowledge contained in DNA (Wallace, 1986, pp. 35-47). The sequential transformations by which DNA gives rise to the numerous physiological systems and functions of the organism arise

from the threefold relationship of genetic information (the intelligence aspect, or knower, of living systems), complementary base pairing (the activity principle, or process of knowing), and the sequence of nucleotides (the material structure, or known).

Maharishi Vedic Science and the disciplines of modern science thus each describe the creative process in nature as a sequential unfoldment of natural laws from an underlying unified wholeness. Moreover, in each case, the threefold structure identified by Maharishi Vedic Science as the Samhita of Rishi, Devata, and Chhandas can be located at the source of dynamics of transformation within the unified wholeness identified by each discipline. Table 1 (section A) summarizes the description, from Maharishi Vedic Science and three disciplines of modern science, of the sequential expression of natural laws from their unified basis. Section B of the table, referred to in a later section of this article, describes for each discipline how that unmanifest unified wholeness remains, unchanging, at the source of all change.

TABLE 1
THE PROCESS OF MANIFESTATION OF NATURAL LAW AS
DESCRIBED BY VEDIC PSYCHOLOGY AND MODERN SCIENCE

A. SOURCE OF SEQUENTIAL MANIFESTATION

Vedic Psychology	The dynamics of expression of natural law are contained in the sequential elaboration of the self-interacting dynamics of the field of pure consciousness; these comprise the impulses of the Veda.
Physics	The pattern and mechanics of the process of sequential spontaneous symmetry breaking, through which diverse laws of nature are expressed from the supersymmetric structure of the unified field of all the laws of nature, is contained in the Lagrangian and symmetry group of the unified field.
Mathematics	The diversity of mathematical structures, both algebraic and geometric, can be located in the set theory universe by sequentially defining all mathematical structural relationships in terms of the membership (e) relationship.
Physiology	Expression of the information contained in the DNA molecule is a sequential process whose first step, transcription of genetic information into the form of messenger RNA, involves the separation of the two strands of the DNA molecule, thus breaking the symmetrical structure of the DNA double helix.

B: NONCHANGING SOURCE OF CHANGE

Vedic Psychology	The infinitely dynamic self-referral field of pure consciousness is the source of all manifest existence, yet itself remains unchanged.
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- Physics** The complete symmetry of the unified field of all the laws of nature is found at the basis of all manifest broken symmetries, and may be located at any space-time point in creation at the Planck scale of 10^{-33} cm.
- Mathematics** The set theory universe is an eternal reality structured within the unmanifest field of intelligence. Its absolutely infinite nature transcends all conceptual boundaries of space and time. All localized values of mathematical transformation can be identified with specific sets contained within this ultimate mathematical wholeness.
- Physiology** The genome, the entirety of biological information stored within the DNA of every cell in the body, is the unchanging source of all biological structures and functions.

Consciousness and Matter

Through its sequential transformations, pure consciousness, the unified field of all the laws of nature, ultimately gives rise to manifest existence or matter. As noted previously, Maharishi points out that the transformations of pure consciousness are expressed as vibration or sound in the Vedic literature; he further notes that form is inherent in sound. That is, a concrete material form is a precipitated expression of a vibratory impulse or sound. From Maharishi's perspective, the various forms and phenomena of matter in nature thus emerge as the further elaboration of the vibratory impulses which have their source in the field of pure consciousness. The discipline of physics has also discovered that all particles of matter are modes of excitation of underlying fields.

There is another aspect of the Vedic literature termed *Upaveda* ("subordinate Veda") that, according to Maharishi, identifies dynamics of natural law responsible for transformations in the field of matter. Maharishi (1985a) describes *Upaveda*, the primary branch of which is called *Ayur-Veda* ("science of life"), in the following way:

In the sequential growth, consciousness becomes matter. Then what we find is that the field of Veda as consciousness is over and the field of Ayur-Veda has come up to deal with matter. (p. 69)

The Upaveda, or subordinate Vedas, present the knowledge of how to enliven the Veda as a living reality on the level of one's own existence. The Upavedas (Ayur-Veda, Gandharva-Veda, Dhanur-Veda, and Sthapatya-Veda) handle the most expressed value of natural law in which consciousness has assumed the quality of matter, providing the principles and techniques through which matter can be reenlivened with the full value of consciousness. (p. 118)

The description of the sequential expression of natural law found in Maharishi Vedic Science has thus led to an understanding of the relationship of consciousness and matter on the manifest level of human life—the relationship between mind and body. This understanding makes clear the need for the mind and body to be cultured so that human

consciousness can fully express the potential inherent in the field of pure consciousness, the cosmic psyche, to enrich all aspects of individual and social life. This topic will be the primary focus of subsequent articles on Maharishi Vedic Psychology in this series.

To establish a broader foundation for understanding the relationship of individual consciousness and the field of pure consciousness, the next section describes from a "psychological" perspective the process by which the field of pure consciousness, or cosmic psyche, gives rise to manifest existence. Maharishi Vedic Psychology analyzes how the unified field of all the laws of nature creates levels of subjectivity. The starting point of this analysis is again the field of pure consciousness, the essential nature of which is Samhita of Rishi, Devata, and Chhandas, or the unified state of knower, process of knowing, and known.

Part II

The Creative Process in Nature From the Perspective of Maharishi Vedic Psychology: The Sequential Manifestation of Subjective and Objective Existence

The sequential unfolding of creation from the self-referral state of the cosmic psyche has been described by Maharishi in terms of "levels" of subjectivity of the cosmic psyche. Because the unified field of all the laws of nature is a field of pure consciousness, the sequential unfolding of natural law can be understood in terms of levels of structure within the cosmic psyche that are fundamentally subjective. These levels range from the field of pure consciousness—the cosmic psyche as *Self*—to intellect, mind, and senses, and the manifest or material expressions that form the objects of the senses. The term *Self* is traditionally written with a capital letter, Maharishi explains, because the field of pure consciousness, or unified field, is universal in nature; it is the universal stature to which the self (ego) of the individual rises through the development of consciousness (see Orme-Johnson, 1988a).

The value of analyzing the process of manifestation in terms of the levels of subjectivity noted above is that these same levels can be located in the subjective life of each individual (see below). The individual whose consciousness is not fully developed expresses the levels of subjectivity—*Self*, intellect, mind, and senses—to a limited degree; the universal nature of each level is appreciated only in the fully developed state of human awareness. In the following discussion, the levels of subjectivity are meant to be understood in their most universal expression. When these levels of subjectivity are discussed, as here, in the context of the cosmic psyche (i.e., as sequentially unfolding from the field of pure consciousness), then they are analyzed not as aspects of individual experience but as broader principles of natural law. These principles may be intellectually distinguished from each other in their functioning, yet they exist together throughout nature because the totality of nature's intelligence, found in the unified field, is

present at every point of existence. In the next section of this article, the relationship of the levels of subjectivity to human life is discussed.

According to Maharishi Vedic Psychology, all levels of subjectivity have their basis in the self-interacting dynamics of pure consciousness, where consciousness is aware of itself as knower, known, and the relationship between the two. This is the level of universal Self, the most fundamental level of subjectivity in nature. As described earlier in this article, the three-in-one nature of the field of pure consciousness is infinitely dynamic, and this dynamism is the source of all specific dynamics and all structures of natural law. Thus, the principle of relationship (*Sambandha*) inherent within the self-referral nature of pure consciousness is the basis of the creative process in nature.

Maharishi explains that the level of subjectivity that is the first expression of the unified field is "intellect," the principle of discrimination. The property of discrimination, or intellect, is inherent in the self-referral of the unified field because referring to itself alone, it discriminates knower and known within the undivided state of pure consciousness. Maharishi (1986) describes the function of the intellect in the self-referral state of Samhita:

It is the fineness of the intellect which maintains the self-referral state. In this state the intellect is completely coordinated with the Self. There the three values of Rishi, Devata, and Chhandas—or observer, observation, and observed—emerge from one state of Samhita. (pp. 112-113)

The next level of subjectivity, which integrates the multiplicity of relationships, is "mind." Mind is a more diversified level of subjectivity than the intellect and is capable of moving in all directions to encompass and elaborate all possible relationships. Maharishi (1972) describes this role of the mind in the following way:

The instrumentality through which creative intelligence expresses itself into the outer world of activity, into the gross fields of existence, is the mind. (p. 19:3)

Here, "creative intelligence" refers to the creative dynamism inherent in the field of pure consciousness.

Desire is another aspect of subjectivity described by Maharishi as associated with the dynamism of the mind. The element of desire can be located throughout the functioning of consciousness. Maharishi has commented that, at its most fundamental level, desire is inherent in Samhita, the self-referral state of pure consciousness, in the intrinsic desire of consciousness to know itself. The sequential elaboration of Samhita through all its various transformations is also an expression of this innate desire of consciousness to know itself fully. Thus, desire is also expressed in the functioning of the mind, projecting consciousness into greater diversity.

The process of diversification, governed by the intrinsic dynamism of the principle of desire, is further expressed in the emergence of the next level of subjectivity, the senses. Maharishi (1972) comments on the role

of the senses as intermediate between the mind and manifest existence:

The senses are the projection of the mind, and they are also the organs through which the mind expresses itself. Creative intelligence, expressing itself in different layers, one within the other, manifests in the entire diversity of the universe: the mind, and then the senses, and then the entire creation to serve as the objects of the senses. (p. 19:4)

In this way, manifest existence, or objective reality, is the further extension of the dynamics of transformation originating within pure consciousness. Thus, Maharishi describes in terms of levels of subjectivity the process by which the self-interacting dynamics of consciousness sequentially give rise to matter. (See Figure 2.)

Although the disciplines of modern science investigate the laws of nature objectively and use a vocabulary that makes no reference to subjectivity when describing fundamental principles or levels of natural law, these disciplines also locate within the functioning of nature the activities associated with the levels of subjectivity. That is, qualities of discrimination (intellect), integration of relationship (mind), progressive dynamism (desire), and sensitivity (senses) can be found in the functioning of all aspects of natural law. For example, the effective functioning of the immune system is based on the ability of the organism to detect invading agents, discriminate which ones are threatening on the basis of their relationship to the organism, and generate a sequence of activities to neutralize the threatening agent. On the basis of the generality of fundamental principles and qualities of the creative intelligence in nature, based in the very nature of the unified field as pure consciousness, Maharishi has formulated a discipline called the Science of Creative Intelligence. This science has provided a framework and language for integrating the discoveries of modern science and Maharishi Vedic Science; it has also provided a successful interdisciplinary framework for studying natural laws and connecting this study to the direct experience of the student (Maharishi Mahesh Yogi, 1972). (See S.L. Dillbeck & M.C. Dillbeck, 1987, for a discussion of applications in education.)

According to Maharishi Vedic Psychology, the emergence of material forms from the field of pure consciousness allows consciousness to be expressed to varying degrees through physiological structures. It is in this context that the relationship between individual consciousness and the underlying reality of pure consciousness as the unified field of all the laws of nature is now discussed.

The Relationship of Individual Consciousness and the Field of Pure Consciousness

Maharishi emphasizes that in order to understand fully the relationship of individual consciousness to the field of pure consciousness, one must take into account the role of physiological structures and processes (Maharishi Mahesh Yogi, 1969, 314-315). Twentieth-century psychology and physiology have considered consciousness to be a byproduct of the

activity of the nervous system (Wallace, Fagan, & Pasco, 1988). Maharishi Vedic Psychology affirms that the quality of the individual's experience is dependent upon the physiological functioning of the

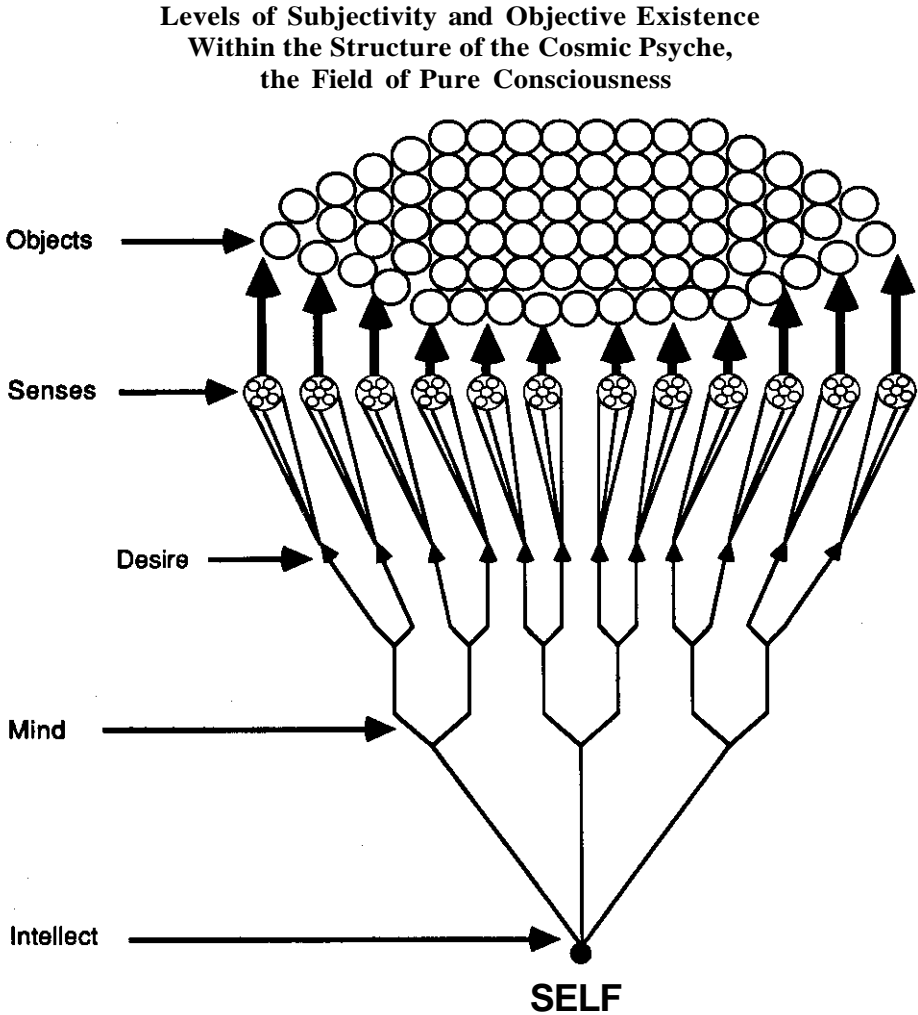


Figure 2. All levels of subjectivity are expressions of the field of pure subjectivity, the field of pure consciousness, the *Self*. The first expressed level of subjectivity is the discriminative principle of *intellect*, which discriminates three aspects—knower, process of knowing, and known—within the undivided unity of pure consciousness. Mind is the next expressed level of subjectivity, which apprehends and elaborates the multiplicity of relationships among the intellectually conceived components of consciousness. The activity of *desire*, which is already inherent in the impulse of pure consciousness to know itself, projects the mind to express and comprehend greater diversity. *Senses* are expressed as the next level of existence, mediating between mind and the most expressed level of nature, *objective existence*.

nervous system. However, more fundamentally, Maharishi Vedic Psychology identifies the nervous system and all material expressions of natural law as emerging from the field of pure consciousness, the unified field of natural law.

Maharishi points out that on the level of the unified field, pure consciousness is a self-sufficient, self-referral field of pure subjectivity and pure existence. On this universal level, he states, pure consciousness may be said to constitute "its own physiology"; that is, it requires no separate material substrate. However, to function within the boundaries of space and time, pure consciousness creates a physiological vehicle through which consciousness is expressed. That is, the unified field, the field of pure consciousness, through its self-referral interactions, creates the four fundamental forces of nature, which give rise to atomic and molecular structures, including the large biological macromolecules such as DNA. These macromolecules contain the information required to create a biological organism, through which consciousness is expressed.

Maharishi notes that the infinite variety of physiological structures, from the brain of the insect to the billions of neurons in the human brain, reflect consciousness to varying degrees. All of the various forms of life are limited manifestations of the total potential of the field of pure consciousness, expressing to a limited degree the levels of subjectivity.

The uniqueness of the human nervous system, Maharishi asserts, in contrast to that of lower organisms, is that when fully developed it can experience the innumerable possibilities inherent in the infinite dynamism of pure consciousness. The field of pure consciousness thus not only gives rise to material structures, but through the human nervous system, its expressions are also capable of experiencing the field of pure consciousness in its holistic value. Maharishi Vedic Psychology includes not only intellectual understanding of the unified field and its process of manifestation, but also procedures, including the Transcendental Meditation (TM) and TM-Sidhi programs, that develop the nervous system of the individual so that one's conscious awareness opens itself to, and comes to identify itself with, the unified field. Individual consciousness can thereby be established on the self-referral level of pure consciousness, the cosmic psyche, embracing the complete range of each of the levels of nature—Self, intellect, mind, desire, senses, and objective existence.

The Levels of Subjectivity in Individual Life

In Maharishi's analysis, prior to the full development of human consciousness through the TM and TM-Sidhi programs, the individual's experience of each of the levels of subjectivity is restricted (Maharishi Mahesh Yogi, 1969, pp. 338-341). If one does not have a systematic means for the experience of pure consciousness, the Self is not directly experienced, and the deepest level of subjectivity is the "small" self, or sense of "I" (ego). The basis of the individual ego in the field of pure consciousness is expressed by Maharishi (1972) as follows:

When we say "I," we mean the inner value of the speaker, and that is an expressed value, a wave of cosmic life. Individual life, individual ego, is a wave of cosmic life. Just as a wave on the ocean is an expression of the ocean, the individual is an expression of the infinite value of life. (p. 19:8)

Functionally, the ego is described by Maharishi Vedic Psychology as the experiencer. Maharishi (1972) comments:

The ego is that value of life which is most refined in its character. The ego experiences; it is the experiencer in the individual life. The ego feels; the ego enjoys—feeling touches the ego, understanding touches the ego. Ego understands; ego feels; ego thinks. That faculty of the ego which thinks is called the mind. That faculty of the ego which understands, discriminates, and decides is called the intellect. (pp. 19:11-12)

The function of the intellect in individual life is to discriminate or decide (Maharishi Mahesh Yogi, 1969, pp. 167, 339). Although the ego could be described as a deeper level of individual subjectivity than the intellect (Maharishi Mahesh Yogi, 1969, pp. 242-243, 422), both have their foundation in the universal field of pure consciousness: the ego in the very existence of the Self as pure consciousness, and the intellect in the intelligence of that field, which is capable of discriminating both knower and known within the self-referral structure of pure consciousness (Maharishi Mahesh Yogi, 1969, pp. 206, 423).

The level of the mind in individual life is a more active or expressed level than the intellect (Maharishi Mahesh Yogi, 1969, p. 242). The mind considers possibilities and their relationships, and also serves the functions of memory and thought. Maharishi (1972) explains the distinction between the functions of intellect and mind in the individual:

The intellect filters the information which comes to it through the mind. Useful things are accepted, useless things are rejected. The mind is like an open camera; it receives all the impulses from everywhere. The mind takes in everything that comes in through the senses. We see so many things. The vision gets drawn to one thing which seems to be more enjoyable, more useful, and then the intellect evaluates: it decides whether it is good or bad, and then accepts the good and rejects the bad. On the basis of that, we act for greater achievement and fulfillment. (p. 19:10)

Maharishi also uses the term mind in the context of individual life in a larger sense, to refer to the whole range of mental activity and structure, in contrast to pure consciousness on the one hand or the body on the other (Maharishi, 1972, p. 19:3). In this article, however, the term mind is used in the more restricted sense as the level of subjectivity responsible for considering relationships.

The element of desire can be located throughout the functioning of consciousness, having its source in the desire of consciousness to know itself. Desire may be understood as motivating the flow of attention and thus, in daily experience, connecting the mind with the environment

through the senses. Maharishi (1969) comments on the role of desire in individual life, in relation to the mind:

It is desire that establishes contact of the senses with their objects...which in turn create a spur to activity involving the self.

Self-consciousness, unmanifested pure consciousness, manifests as vibration—consciousness vibrates and becomes conscious mind, and a thought arises. The process of manifestation continues, and the thought develops into a desire. Desire is vibrating consciousness set in motion and channeled in a particular direction. It is all motion superimposed on ever-motionless pure consciousness. (p. 236)

Desire is described here as occurring at a more expressed level of mental activity than thought. Maharishi later continues, describing the relation of mind, desire, and the level of senses:

Experience results when the senses come into contact with their objects and an impression is left on the mind. The impulse of this new impression resonates with the impression of a similar past experience already present in the mind and associates itself with that impression. The coming together of the two gives rise to an impulse at the deepest level of consciousness, where the impressions of all experiences are stored. This impulse develops and, rising to the conscious level of the mind, becomes appreciated as a thought. The thought, gaining the sympathy of the senses, creates a desire and stimulates the senses to action. (p. 284)

The senses thus serve as the link between the individual mind and the environment. The levels of pure consciousness, ego, intellect, mind, and senses, and the activity of desire that also functions throughout these levels, may be taken as the fundamental structure of the personality according to Maharishi Vedic Psychology. These fundamental levels of subjectivity provide the structure through which the creative process functions in individual life. Any thought or action rises as an impulse of consciousness through these various levels.

Maharishi describes each of the more fundamental levels of subjectivity, or of "mind" in its broad sense, as organizing the activity of the more superficial levels. The ultimate expression of this principle is that by the experience of the cosmic psyche, the unified field of natural law, all the levels of subjectivity expand in their functioning to become increasingly attuned to the full range of the laws of nature. Maharishi (1972) comments:

In one word, mind, we can include the entire range of expression of creative intelligence from that universal, unbounded eternal to the individual ego, to feelings, to the thinking ability, and to the senses. The value of creative intelligence is appreciated on all these different levels. And when that universal value of life which we experience at the source of thought during meditation is appreciated on the basis of one's own personal experience, we find that the ego, the emotions, the intellect, the mind, the senses, all begin to breathe a richer life. We experience greater comprehension and richer, sharper perception. Activity is strengthened, resulting in greater achievement and a higher level of fulfillment. We think more precisely, more exactly, and more effectively. Our senses begin to perceive more fruitful values in

the environment. The eyes seem to open a little bit more, and the ears begin to hear a deeper reality; words not only fly on the surface level of sound, but something deeper is grasped. The mind begins to enjoy more and to comprehend more. This means that the mind is less restricted than before, more expanded, more open. It is capable of greater comprehension. The small lens has become a wide-angle lens.

This upsurge of life comes spontaneously through Transcendental Meditation. When the mind begins to lose its restrictions, life as a whole is improved. These experiences prove to us that the mind is an infinitely flexible organ of creative intelligence. It can confine itself within boundaries so rigid and narrow that it may be difficult for it to come out. Or it can expand to comprehend the great variety and infinite value of creation. And not only that, it can create a situation within itself that while appreciating all the boundaries and the infinite diverse phases of creation, it can maintain its unbounded status. This is the infinitely flexible character of mind. (pp. 19:4-5)

Table 2 lists a number of the research findings supporting the principle that the experience of pure, or transcendental, consciousness through the Transcendental Meditation and TM-Sidhi programs enriches the functioning of each of the levels of subjectivity. Transcendental Meditation is an effortless mental procedure for directly experiencing the field of pure consciousness, and the TM-Sidhi program trains the individual to function from the level of pure consciousness, culturing optimal mind-body coordination (Maharishi Mahesh Yogi, 1986, pp. 29-31; see also Orme-Johnson, 1988a). A future article in this series will describe how the TM-Sidhi program unfolds the latent creative potential of the mind.

TABLE 2
Experimental Evidence Identifying Unique
Characteristics of Transcendental Consciousness
During the TM Technique

1. Decreased respiration rate and minute ventilation during Transcendental Meditation, and respiratory suspension during periods of transcendental consciousness (Badawi, Wallace, Orme-Johnson, & Rouzere, 1984; Dillbeck & Orme-Johnson, 1987; Farrow & Hebert, 1982; Wallace et al., 1971; Wolkove, Kreisman, Darragh, Cohen, & Frank, 1984)
2. Increased basal skin resistance during Transcendental Meditation and during periods of transcendental consciousness (Dillbeck & Orme-Johnson, 1987; Farrow & Hebert, 1982; Wallace et al., 1971; Wolkove et al., 1984)
3. Reduction in biochemical indices of stress during Transcendental Meditation (Dillbeck & Orme-Johnson, 1987; Jevning, Wilson, & Davidson, 1978; Jevning, Wilson, O'Halloran, & Walsh, 1983; Wallace et al., 1971)
4. Increased EEG alpha activity in frontal and central regions and increased EEG synchrony and coherence during Transcendental Meditation; increased EEG coherence during periods of transcendental consciousness (Banquet, 1973; Banquet & Sailhan, 1974; Dillbeck & Bronson, 1981; Farrow & Hebert, 1982; Orme-Johnson & Haynes, 1981; Wallace, et al., 1971)

**Experimental Evidence that the
Experience of the Transcendental Meditation
and TM-Sidhi Programs Enrich
All Levels of Subjectivity**

- Senses**
1. Improved efficiency and flexibility of visual perception (Dillbeck, 1982)
 2. Increased field independence (Dillbeck, Assimakis, Raimondi, Orme-Johnson, & Rowe, 1986; Pelletier, 1974)
 3. Shorter reaction time (Appelle & Oswald, 1974; Holt, Caruso, & Riley, 1978)
 4. Enhanced neuromuscular efficiency: Decreased reflex latency and reflex motor time, faster recovery of the paired H-reflex (Wallace, Mills, Orme-Johnson, Dillbeck, & Jacobe, 1982; Warshal, 1980)
- Desire**
1. Increased sensitivity to one's own needs and feelings and increased spontaneity; increased capacity for warm interpersonal relationships (Nidich, Seeman, & Dreskin, 1973; Seeman, Nidich, & Banta, 1972)
 2. Increased inner satisfaction, greater marital satisfaction (Aron & Aron, 1982; Berg & Mulder, 1976)
 3. Increased work satisfaction, improved relationships with co-workers and supervisors (Frew, 1974)
 4. Reduced need for external stimulation (Friend & Maliszewski, 1978)
 5. Displaying the personal values of self-actualized people (Nidich et al., 1973; Seeman et al., 1972)
 6. Orientation towards more positive values (Gelderloos, Goddard, Ahlstrom, & Jacoby, 1987)
 7. Reduced recidivism among prison inmates (Alexander, 1982; Bleick & Abrams, 1987)
- Mind**
1. Increased creativity (Shecter, 1978; Travis, 1979)
 2. Increased efficiency of concept learning (Dillbeck, Orme-Johnson, & Wallace, 1981)
 3. Improved memory, learning, and cognitive flexibility (Alexander, Langer, Newman, Chandler, & Davies, in press; Miskiman, 1976)
 4. Broader comprehension, improved ability to focus attention, and more stable internal frame of reference (Dillbeck et al., 1986; Pelletier, 1974)
 5. Greater task-specific EEG lateralization for both left and right hemispheres (Bennett & Trinder, 1977)
 6. Improved productivity and work performance (Frew, 1974)
- Intellect**
1. Increased intelligence (Aron, Orme-Johnson, & Brubaker, 1981; Cranson, 1988; Dillbeck et al., 1986; Eyerman, 1981; Shecter, 1978; Tjoa, 1975)
 2. Shorter choice reaction time, a correlate of intelligence (Cranson, in press; Holt et al., 1978)
 3. Shorter latency of cortical evoked potentials, a correlate of intelligence (Kobal, Wandhöfer, & Plattig, 1975; Wandhöfer, Kobal, & Plattig, 1976)
 4. Increased achievement on basic academic skills (Nidich, Nidich, & Rainforth, 1986)
 5. Improved academic performance among graduate students (Kember, 1985)

- Ego
1. Increased self-actualization (Ferguson & Gowan, 1976; Hjelle, 1974; Nidich et al., 1973; Seeman et al., 1972)
 2. Enhanced self-concept and self-esteem (Hanley & Spates, 1978; Nystul & Garde, 1977; Shecter, 1978; Turnbull & Norris, 1982)
 3. Enhanced self or ego development (Alexander, 1982)
 4. Decreased anxiety and negative personality traits (Abrams & Siegel, 1978, 1979; Aron & Aron, in press; Berg & Mulder, 1976; Brooks & Scarano, 1985; Dillbeck, 1977; Ljunggren, 1977; Shecter, 1978)
 5. Decreased drug and alcohol abuse (Aron & Aron, 1983; Geisler, 1978; Monahan, 1977; Shafii, Lavelly, & Jaffe, 1974, 1975)
 6. Improved general health (Cooper & Aygen, 1979; Orme-Johnson, 1987; Wallace, Silver, Mills, Dillbeck, & Wagoner, 1983)

In contrast to the theories of personality previously available in psychology, Maharishi Vedic Psychology provides a thorough understanding of the development of personality to its full integration in higher states of consciousness, as well as a practical means to achieve this goal. According to Maharishi, with the full development of human consciousness, associated with the fully refined state of functioning of the human nervous system, individual awareness comprehends the entire range of each of the levels of subjectivity inherent in the field of pure consciousness.

The Unbroken Wholeness of the Cosmic Psyche

Each of the various levels of subjectivity, considered universally as emerging from within the field of pure consciousness, is always connected with its underlying source. This connectedness of natural law is expressed by Maharishi (1985a) as follows:

Through sequential development consciousness unfolds itself into the value of matter; consciousness becomes matter. The Self becomes mind, and mind becomes matter. We see this in modern physiology, when the DNA and RNA give rise to all the proteins, which in turn structure the body systems. This transformation of the field of pure knowledge rising from DNA as the impulse of information in RNA, to RNA becoming protein and protein becoming the whole material system is the description of consciousness becoming matter.

This transformation is sequential but always remains self-referral. It is like the airplane flying but always remaining self-referral to the ground station through the radio. All the activities of DNA, RNA, protein, and the whole system are always self-referral.... This performance is self-referral because consciousness, intelligence, is developing itself into different expressions of its own nature and there is a continuity between matter and pure consciousness—the Self, the mind, and the body. (pp. 68-69)

Maharishi thus describes each successive stage of transformation as unified with the self-referral source of all change, the field of pure consciousness.

The wholeness of the field of pure consciousness remains always unbroken and non-changing. Maharishi (1986) describes in the following way the continuity of wholeness of the field of pure consciousness:

The self-referral intelligence at the unmanifest basis of creation remains uninvolved in the creative process, but the creative process owes its emergence and draws its vitality from the self-referral performance of pure intelligence. The

self-referral state of pure consciousness, while remaining uninvolved with the creative process in nature, is an infinitely dynamic, inexhaustible source of energy and creativity. On that basis the whole creation goes on perpetually in its infinite variety, multiplying itself all the time. Change is perpetual, and change has come on the ground of non-change because of that non-changing value of infinite dynamism at the unmanifest basis of all creation. (p. 30)

The connection of all expressions of natural law with their unmanifest, non-changing source allows change to continue constantly and with perfect orderliness; every state of change is in tune with its non-changing basis. The non-changing status of the universal potential of natural law and its availability or connection to every point of its manifestation can also be seen in the disciplines of physics, mathematics, and physiology. (See Table 1, section B.)

Except in its fully developed state, individual consciousness offers only a partial perspective on nature's functioning. Thus, Maharishi points out, the underlying unity and wholeness of nature will not be appreciated until individual awareness is fully developed. (See Alexander, Boyer, & Alexander, 1987, for a detailed description of higher states of consciousness of Maharishi Vedic Psychology.) Maharishi suggests that just as the limited perspective of the observer on the spatial relationship of earth, moon, and sun creates an apparent change in the size of the moon, so a limited perspective results in awareness of change and fragmentation rather than of the non-changing wholeness of the cosmic psyche at the basis of all manifest expressions.

When individual consciousness is restricted, one does not appreciate the non-changing wholeness of pure consciousness. In this situation, Maharishi emphasizes, the consciousness of the individual is identified with the diversity of life rather than with its underlying unity, the Samhita of Rishi, Devata, and Chhandas—unified state of knower, process of knowing, and known—within pure consciousness (Maharishi Mahesh Yogi, 1969, p. 151). In such a state, the intellect, which serves the function of discrimination, causes fragmentation in the life of the individual rather than an appreciation of unity within diversity. The state of life in which the experience of pure consciousness as the foundation of all thought and action has not yet become permanent is also traditionally called the state of "ignorance" because in this state one is ignorant of pure consciousness as the Self, as the non-changing basis of change (Maharishi Mahesh Yogi, 1969, pp. 169-170; Orme-Johnson, 1988a). As a result, life is characterized by instability and lack of complete skill in action (Maharishi Mahesh Yogi, 1969, p. 140).

When individual consciousness is not fully developed, then one has incomplete access to the self-interacting dynamics of pure consciousness responsible for all transformations in nature. As a result, the individual does not act fully in accordance with the laws of nature governing progress, development, and harmony in human life (Maharishi Mahesh Yogi, 1986, pp. 97-98). Maharishi identifies such behavior as the source of all problems of the individual and society. (See Orme-Johnson &

Dillbeck, 1987, for a more detailed discussion of these concepts in the context of social systems.)

In terms of social behavior, the state of ignorance is reflected in a limited perspective in which the relationship between one's self and others is only partially appreciated. Those who are felt to be near the self, such as mother and father, relatives, and friends, are dear. However, as long as the self is identified with changing values rather than the underlying unity of knower and known, its integrity or fulfillment may be threatened by the thoughts, speech, or action of others (Maharishi Mahesh Yogi, 1969, p. 266). One may therefore respond with fear or anger to those who are viewed as distant from the self (Maharishi Mahesh Yogi, 1969, pp. 265-266, 409-410). This perceived separateness creates problems in all areas of society. As consciousness develops to its full potential, one's self becomes more universal, and separateness ceases to dominate the awareness (Maharishi Mahesh Yogi, 1969, pp. 441-450).

In enlightenment, the state of full human development, the self is realized as the field of pure consciousness, the universal Self, the continuum of non-change underlying all change (Maharishi Mahesh Yogi, 1969, pp. 220-221). Its integrity and wholeness cannot be threatened. Therefore, as one experiences, through the growth toward enlightenment, the Self as the universal level of non-change, others are no longer perceived as threatening or as barriers to one's progress or fulfillment; they are increasingly seen as beautiful diverse expressions of one's own universality.

Maharishi has made available a holistic set of procedures for the full development of individual consciousness. In addition to the Transcendental Meditation and TM-Sidhi programs, which are subjective practices to allow the individual directly to experience the field of pure consciousness or cosmic psyche, Maharishi has also brought to light the physiological approaches of Ayur-Veda, one of the aspects of Maharishi Vedic Science that deals with prevention of disease and promotion of health and longevity. These procedures for physiological purification and balance accelerate the full development of consciousness (Maharishi Mahesh Yogi, 1986, p. 108-115). Maharishi Ayur-Veda is the name given to the revitalized system of health care based upon both approaches, consciousness and physiology.

Maharishi (1986) comments on the role of Maharishi Ayur-Veda in terms of the theme of this article and in relation to the development of individual consciousness to realize the underlying unity and wholeness of the field of pure consciousness:

... The purpose of Ayur-Veda is to maintain balance. Balance is the natural state of life. Life is always balanced because the basic characteristic of its fundamental element, the unified field of all the laws of nature, is complete balance. In the process of expression of the unified field of all the laws of nature, consciousness becomes matter and matter assumes different characteristics. If in this process imbalances come along, then the coordination between mind and some aspect of the body breaks.

This breaking of coordination is also a natural process. We have seen how

the threefold structure of the Veda—Rishi, Devata, and Chhandas—breaks from their unity. This is the fundamental feat of spontaneous dynamical symmetry breaking, as it is called in quantum field theory. Because this breaking of symmetry is a natural phenomenon, imbalance is also a natural phenomenon. Balance is a natural phenomenon, imbalance is also a natural phenomenon. Balance is a state of satisfaction. Deviation from balance is dissatisfaction. Anywhere in the process of manifestation of intelligence into matter or in the reaction of matter with matter, anywhere in those space-time boundaries that the self-referral condition is unavailable, there is pain and suffering.

The knowledge of Ayur-Veda is first for prevention and second for cure. The primary aim of Ayur-Veda is to maintain the whole brain physiology so that the mutually functioning brain elements generate a very coherent state of consciousness. Consciousness should be so coherent that...it comprehends the underlying unity when it is comprehending the surface value of variety. (pp. 110-112)

As Maharishi notes here, when human consciousness is fully developed, it realizes all innumerable relationships as expressions of the self-interacting dynamics of pure consciousness; all diversity is found as emerging from within the Self (Maharishi Mahesh Yogi, 1986, p. 97). This is the development of "unity consciousness," in which all changing expressions of nature are realized in terms of their non-changing basis, the unified field of natural law. At this level of awareness, the perception of unity not only underlies but "overlays" all diversity in life. On this unified basis, differences are fully enjoyed and appreciated, and one is able to make full use of every situation for the benefit of all (Maharishi Mahesh Yogi, 1969, pp. 305-308).

According to Maharishi, the realization of the underlying unity of nature in the individual's awareness is the fulfillment of the theme of this article—the expression of natural law from its unified basis. The following statement summarizes this theme of the sequential manifestation of natural law, leading to the full development of consciousness:

The differentiated values of Rishi, Devata, and Chhandas display the discriminative value of intelligence, while the Samhita upholds the undifferentiated, holistic value of the Self.... It is this intelligence aspect that creates the three values of Rishi, Devata, and Chhandas within the structure of the Samhita.

In this perspective, we find a sharp distinction between the two constituents of the Self: the silent, witnessing Being and the active, discriminative intelligence. The whole display of the structure of pure knowledge [Veda] in the Samhita has its basis in the intelligence aspect, which, eternally remaining inspired by the witnessing value of the Self, and being lively under that inspiration, continues to discriminate, starting with the distinction between Rishi, Devata, and Chhandas, and then creating innumerable combinations and permutations of the three, thereby giving structure to the sequential flow of the Samhita, until all possible transformations of its own nature are exhausted and the infinite diversity of the universe emerges from all the fundamental values contained in the Samhita and its exponent, the whole Vedic literature....

It is on the ground of the intellect that the infinitely vast and varied expanded state of natural law is structured. The whole purpose of Vedic study

is to see that the intellect is fully awake to connect every aspect of the study with its source, the Samhita. This results in the flowering of the total structure of pure knowledge in the Self along with the full awakening of the discriminative quality of intelligence, which in its self-referral state finds itself completely one with the Self. (Maharishi Vedic University, 1985b, pp. 5-6)

The passage continues, summarizing the theme of this chapter, emphasizing the importance of the refinement of physiological functioning for the full development of human consciousness, and the nature of that development as the realization of the complete unity of existence:

As the intellect experiences greater richness at every step of probing deeper into the mechanics of transformation sequentially unfolding more and more expressed levels of the self-referral dynamism, the individual intellect expands and ultimately finds itself expanded into the unbounded ocean of pure intelligence. With this phenomenon of the expansion of consciousness, at every stage of increased appreciation, the richness grows in the corresponding levels of the physiology, enlivening the Chhandas—predominant physical structure in the values of Devata, Rishi, and ultimately the Samhita itself. This awakening of Samhita in human awareness is the restoration of the unified source of all the innumerable values of transformation in the infinite diversity of the universe....

It is the completeness of Vedic Science that opens to human awareness the full range of knowledge, from the state of unity to infinite diversity and back to unity again. Vedic Science reveals how the intellect transforms the state of unity into the distinction between intelligence and Being and then into infinite diversity, and having fathomed the farthest extent of diversity, turns back in the direction of the original unity.

As the intellect proceeds in the direction of infinite diversity, it finds itself in a deadlock of sameness—the sameness of infinite diversity; and this monotonous sameness of infinite diversity ceases to satisfy the intellect's basic tendency to evolve. Having fathomed the full range of infinite diversity, the progressive nature of the intellect can be satisfied only by reversing the direction and synthesizing all diversity into the original state of unity. This takes the awareness in a natural way to increasing levels of synthesis, until there is nothing further to synthesize and nothing further remains to be known. In this state of unity, the enigma of the duality between intelligence and Being is resolved, and the whole field of diversity is found to be nothing other than the expression of one's own Self. (Maharishi Vedic University, 1985b, pp. 6-7)

As many individuals begin to rise towards this state of complete enlightenment, the society as a whole begins to grow in coherence and harmony (Orme-Johnson & Dillbeck, 1987). On this basis, the development of enlightenment provides the practical solution to all problems in society, bringing fulfillment to education, health, business and industry, criminal justice, government, culture, and international relations (Dillbeck & Abrams, 1987; Dillbeck, S.L., & Dillbeck, M.C., 1987; Maharishi Mahesh Yogi, 1978; Nidich & Nidich, 1987; Orme-Johnson & Dillbeck, 1987).

Summary and Conclusion

Maharishi Vedic Psychology identifies the source of the creative process in nature as the self-interacting dynamics of consciousness, in

which the field of pure consciousness is open to itself as the unified state of knower, process of knowing, and known. The infinite dynamism of the three-in-one structure of pure consciousness is identified by Maharishi as the fountainhead of all transformations by which the field of pure consciousness sequentially gives rise to manifest existence. The dynamics of transformation within pure consciousness are expressed in the form of unmanifest vibration or sound, known as Veda.

The sequential process of transformation of self-referral pure consciousness into its various expressions is described in the sequence of sounds in the *Veda*. One of Maharishi's unique contributions to Vedic knowledge is the understanding that the sequence of sounds of the Veda form a self-expressed commentary (*Apaurasheya Bhashya*) on the self-interacting dynamics of the field of pure consciousness.

Maharishi also identifies the whole Vedic literature as a sequential elaboration of the self-interacting dynamics of consciousness. This is another of Maharishi's great contributions to Vedic knowledge, in which the entirety of the Vedic literature can be understood as expressing the precise sequence of transformations of natural law through which the field of pure consciousness gives rise to all the diversity of nature. These transformations constitute all possible interactions of the elements of Samhita, the three-in-one structure of the field of pure consciousness.

From a psychological perspective, the process of manifestation from within the universal field of pure consciousness is described by Maharishi as taking place through a sequence of levels or functions of subjectivity, from pure consciousness, the cosmic psyche or universal Self, to intellect, mind, desire, and senses. These form fundamental principles of natural law which function throughout nature as well as in human experience.

Among the material expressions of the unified field of all the laws of nature are physiological structures, which reflect the totality of the field of pure consciousness to varying degrees. The human nervous system has the unique ability to reflect the totality of the self-interacting dynamics of the field of pure consciousness in one holistic structure of consciousness achieved in the state of full enlightenment. Thus, the human nervous system can be considered to be nature's means through which the totality of natural law available in the unified field can be lived and enjoyed. Through the full development of human consciousness, one can fully participate in the creative process of nature, bringing immense fulfillment to every aspect of life.

The essence of this article is expressed by Maharishi (1986) in this way:

The self-referral state of consciousness is that one element in nature on the ground of which the infinite variety of creation is continuously emerging, growing, and dissolving. The whole field of change emerges from this field of non-change, from this self-referral, immortal state of consciousness. The interaction of the different intellectually conceived components of this unified, self-referral state of consciousness is that all-powerful activity at the most elementary level of nature. That activity is responsible for the innumerable varieties of life in the world, the innumerable streams of intelligence

in creation. If this state of consciousness, or this state of nature's activity, could be brought on the level of daily life, then life would naturally be as orderly and as full of all possibilities as is the nature of this self-referral state of consciousness. (pp. 25-26)

In order to use the infinite organizing power of the unified field of all the laws of nature in daily life, one must develop one's consciousness to the state of full enlightenment, in which the individual psyche is realized as the cosmic psyche, the unified field of nature's functioning. This is the opportunity available to human life through the Transcendental Meditation and TM-Sidhi programs. Maharishi's immense contribution to applied psychology and practical life is that action from this level is fully in accordance with all the laws of nature that support progress in human life, and as a result, action is free from mistakes and most enriching to the whole environment. Thus, the development of human consciousness to higher states is the solution offered by Maharishi Vedic Psychology to all problems in society.

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present at every point of existence. In the next section of this article, the relationship of the levels of subjectivity to human life is discussed.

According to Maharishi's Vedic Psychology, all levels of subjectivity have their basis in the self-interacting dynamics of pure consciousness, where consciousness is aware of itself as knower, known, and the relationship between the two. This is the level of universal Self, the most fundamental level of subjectivity in nature. As described earlier in this article, the three-in-one nature of the field of pure consciousness is infinitely dynamic, and this dynamism is the source of all specific dynamics and all structures of natural law. Thus, the principle of relationship {*Sambandha*) inherent within the self-referral nature of pure consciousness is the basis of the creative process in nature.

Maharishi explains that the level of subjectivity that is the first expression of the unified field is "intellect," the principle of discrimination. The property of discrimination, or intellect, is inherent in the self-referral of the unified field because referring to itself alone, it discriminates knower and known within the undivided state of pure consciousness. Maharishi (1986) describes the function of the intellect in the self-referral state of Samhita:

It is the fineness of the intellect which maintains the self-referral state. In this state the intellect is completely coordinated with the Self. There the three values of Rishi, Devata, and Chhandas—or observer, observation, and observed—emerge from one state of Samhita. (pp. 112-113)

The next level of subjectivity, which integrates the multiplicity of relationships, is "mind." Mind is a more diversified level of subjectivity than the intellect and is capable of moving in all directions to encompass and elaborate all possible relationships. Maharishi (1972) describes this role of the mind in the following way:

The instrumentality through which creative intelligence expresses itself into the outer world of activity, into the gross fields of existence, is the mind. (p. 19:3)

Here, "creative intelligence" refers to the creative dynamism inherent in the field of pure consciousness.

Desire is another aspect of subjectivity described by Maharishi as associated with the dynamism of the mind. The element of desire can be located throughout the functioning of consciousness. Maharishi has commented that, at its most fundamental level, desire is inherent in Samhita, the self-referral state of pure consciousness, in the intrinsic desire of consciousness to know itself. The sequential elaboration of Samhita through all its various transformations is also an expression of this innate desire of consciousness to know itself fully. Thus, desire is also expressed in the functioning of the mind, projecting consciousness into greater diversity.

The process of diversification, governed by the intrinsic dynamism of the principle of desire, is further expressed in the emergence of the next level of subjectivity, the senses. Maharishi (1972) comments on the role