About the Author

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Abstract

It is widely recognized that twentieth-century psychology has not made substantial cumulative progress. Consequently, it has not been able to solve the extensive psychological problems of our time, ranging from individual stress to international conflicts. By taking the study of the mind to its universal basis, the field of pure consciousness, Maharishi Vedic Psychology provides a powerful new theoretical understanding and applied technology capable of solving these problems. The direct experience of pure consciousness provided by Maharishi Vedic Psychology is the basis for a new set of principles, which contrast with the assumptions of the scientific culture in which twentieth-century psychology arose. These principles give a new understanding about the nature of the mind, its range of potentialities, and its relationship to natural law. Examples of these principles are: The unified field of natural law is pure consciousness, the cosmic psyche; the universe emerges through the spontaneous sequential dynamical symmetry breaking of pure consciousness; the cosmic psyche is the basis of the individual mind and is easily accessible through Maharishi Transcendental Meditation and TM-Sidhi programs as the simplest form of human awareness; nature has an ultimate purpose, which is the unfolding of higher states of consciousness, identified by Maharishi as a sequential development of seven states of consciousness; the laws of nature can be directly cognized from within the field of pure consciousness, and action from this level is spontaneously life supporting; the experience of pure consciousness deepens and enriches appreciation of all cultural traditions; every level of social organization has a corresponding level of collective consciousness; pure consciousness is the universal field underlying all levels of collective consciousness, and experience of it by even a few individuals creates coherence in collective consciousness. These new principles are verified by extensive scientific research.
Introduction

During the past 33 years of his worldwide activities, Maharishi Mahesh Yogi has made available a new knowledge of consciousness that is so fundamental and so powerful in its practical applications that it has changed the destiny of civilization from a path of seemingly inevitable self-destruction to one of creating Heaven on Earth. This bold assertion is supported by a large body of scientific research which verifies that the set of profound theoretical principles and applied programs introduced by Maharishi are capable of serving as the foundation of a new psychology of enlightenment based on a complete understanding of consciousness.

This article is the introduction to a series of 10 articles that present this knowledge as a system of psychology—Maharishi Vedic Psychology—to be published serially in this journal. These articles are being written by the faculty of the psychology department of Maharishi International University and will be compiled into a book upon completion of the series.
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The 10 articles on Maharishi Vedic Psychology proceed from its most abstract theoretical tenets in the early articles to its practical applications in individual life and different areas of society in the later articles. Experimental evidence from studies on the Transcendental Meditation (TM) and TM-Sidhi programs are cited throughout the series in support of various features of the theory. Those interested in the original research papers are referred to the five volumes of *Scientific Research on the Transcendental Meditation and TM-Sidhi Program, Collected Papers* (Vol. 1, Orme-Johnson & Farrow (Eds.), 1976; Vols. 2-4, Chalmers, Clements, Schenkluhn, & Weilless (Eds.), in press; Vol. 5, Maharishi International University, in press). Also please refer to recent reviews of the research by Wallace, 1986; Alexander, Boyer, and Alexander, 1987; and Dillbeck and Orme-Johnson, 1987.

To introduce the series, we first briefly review how the issue of consciousness has been addressed in twentieth-century psychology and how it is conceptualized in Maharishi Vedic Psychology. This section is followed by a comparison and contrast between 10 basic principles of Maharishi Vedic Psychology and corresponding principles underlying twentieth-century psychology. The 10 principles correspond to the issues addressed in each of the 10 articles. This discussion shows how Maharishi Vedic Psychology fulfills the needs of twentieth-century psychology, leading to a more logical and complete theoretical structure, predicting important new phenomena, and generating more practical results than do the common assumptions of twentieth-century psychology.

**What is Consciousness?**

**The Missing Knowledge**

In Maharishi’s analysis, there are three aspects to knowledge: the knower, the known, and the process of knowing connecting the two. Modern science has limited itself to an objective approach that studies the known only and thus has failed to provide knowledge of the knower or the process of gaining knowledge:

> Through its objective approach, modern science reveals that which is perceived, the object. The subject, the perceiver, remains separate from it. Modern science investigates into the field of the known, but it does not touch at all the field of the knower and the spontaneous process of knowing. (Maharishi Mahesh Yogi, 1986, pp. 27-28)

The knower is the perceiver and cognizer of experience, and issues of the knower and knowing are closely tied to those of mind and subjectivity and especially to issues of consciousness, the quality or state of being aware. Questions about the nature of consciousness have been addressed throughout the history of knowledge, but in the last century they have become largely the domain of a separate academic discipline that specializes in addressing them, the field of psychology (e.g., Klein, 1984). All
psychological theories have had to deal with consciousness, if only to deny its existence. Consciousness, it has been argued, is the constitutive issue for psychology in the way that energy and matter are for physics (Miller, 1981). Yet not one of the 40 divisions of the American Psychological Association is concerned with the phenomenon of consciousness per se; they are only concerned with isolated aspects of conscious experience and behavior (Knibbeler, 1985).

Without a concerted research program on consciousness, psychology has missed the basis of a unified theoretical structure. Although it has been argued that the central themes addressed by psychologists have remained the same over its history (Matarazzo, 1987), progress in providing a comprehensive theoretical understanding and integration of these themes has been lacking. Psychology, it has been said, cannot be defined because it has no central theory. Consequently, there appears to be little relationship among the different areas of psychology (Brown & Herrnstein, 1975, p. 3).

Not only are there no successful grand theories in psychology, but the field also does not appear to have made cumulative progress (Merton, 1968). Within specialty areas, ideas repeat over time. For example, a reviewer of personality theory summarizes the field this way:

The themes of personality research change not so much because issues are resolved and phenomena understood, but rather because investigators run out of steam and interest turns to "newer, more exciting phenomena"...Where optimism has appeared, it has generally been based on hope for the future rather than on demonstrated gains of the past. (Pervin, 1985, pp. 83-84)

The lack of cumulative development in sociology is similar; a recent encyclopedia of the social sciences defines sociology as "an unsystematic body of knowledge" (Kuper & Kuper, 1985). Psychology and sociology are known in the academic world as disciplines without a coherent theory, or "pre-paradigmatic" (e.g., Kuhn, 1962), and still without their "Newton." Thus, the primary need of psychology today remains to develop a single comprehensive theory of consciousness to account for the structure and full range of mental phenomena (Vroon, 1975), a theory that has not emerged historically.

The Beginning of Experimental Psychology

Experimental psychology began in the nineteenth century with attempts to use the objective methodology of science to study the mind (e.g., Boring, 1957; Fancher, 1979). Early experimental psychologists assumed that systematic control of laboratory conditions would lead to insight into the mind's basic constituents, much as chemistry had discovered the basic elements of matter. It was found, however, that subjective reports of mental activity were highly variable, even under controlled laboratory conditions. The activity of the mind, it seemed, was only partially under the
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control of environmental conditions and therefore could not be dealt with as an object of scientific investigation in the same way that physical objects could. In addition, whereas science demands that the events under study be public so that they are accessible to direct observation, the early psychologists soon realized that since mental activity was a private event that could be known only through subjective report, there was no way objectively to assess the reliability of the report.

Behaviorism

In response to the difficulty in objectively observing the mind, the school of behaviorism arose. Behaviorism was the logical outcome of the attempt to use the objective methodology of science to study psychology. Since the mind could not be objectively measured, behaviorism focused exclusively on measurable behavior in order to exclude subjectivity from its analysis. The behaviorists treated self-reports of mental events as observable behavior, which, like any other behavior, could be studied without reference to the mind or any aspect of subjectivity at all (e.g., Watson, 1919; Skinner, 1938). It came to be believed that behavior was controlled by environmental contingencies of reinforcement and could be completely understood in terms of such contingencies. The mind, if it existed at all, was considered to be a mere "epiphenomenon," neither fundamental in nature nor having a causal influence on the interaction between behavior and environment.

Many psychologists argued, however, that behaviorism had theoretical difficulties, including its explanation of language acquisition and production (Chomsky, 1959), species-specific learning (Nottebohm, 1970), and one-trial learning (Jeffress, 1951). Language, for example, appears to have a universal, innate grammatical structure that is "causal," in that it determines the form in which languages are expressed. Similarly, species-specific learning indicates that behavior often has a strong inherited component, demonstrating that behavior is not all environmentally determined. One-trial learning, "learning sets," and "insight" learning demonstrate that much of learning, especially on the human level, has important cognitive components (e.g., comprehension, understanding, and insight). Even though behaviorists have attempted to deal with these issues (e.g., Skinner, 1971), it was evident to most psychologists that the mind is relevant to what humans do and that a strictly behavioral account of psychology was very limited in its approach. Moreover, the data indicated that whereas behavioral technologies have measurable effects in a number of applied settings, they have not been as useful as originally hoped (e.g., Krasner, 1976). Indeed, the broader goals of the behaviorist movement to improve the human condition (e.g., Skinner, 1938, 1971) have not born fruit, which suggests that a solely objective approach to psychology has failed to provide profound knowledge about the knower.

Cognitive Psychology: Who Is the Knower?

Beginning in the 1950s, many psychologists turned from behaviorism to renew the study of such subjective factors as attention, thinking, and
planning. The new generation of cognitive psychologists argued that important information about conscious processes could be inferred from objectively measurable physiological and behavioral events. Cognitive psychology has been primarily concerned with selective attention—that aspect of cognitive processing that selects information for further processing—and many models of selective attention have been proposed (e.g., Broadbent, 1958; Treisman, 1960; Norman, 1969; Neisser, 1976; Marcel, 1983). However, as some theorists have noted, there remains a major problem in this enterprise, namely that it is not known who processes and interprets information (Costall & Still, 1987): Who is the knower?

For the British Empiricists, the internal representations were called ideas, sensations, impressions: more recently, psychologists have talked of hypotheses, maps, schemes, images, propositions, engrams, neural signals, even holograms and whole innate theories...[However] nothing is intrinsically a representation of anything; something is a representation only for or to someone; any representation or system of representations thus requires at least one user or interpreter of the representation who is external to it. Any such interpreter must have a variety of psychological or intentional traits; it must be capable of a variety of comprehensions and must have beliefs and goals (so it can use the representation to inform itself and thus assist itself in achieving its goals). Such an interpreter is then a sort of homunculus. Therefore, psychology without homunculi is impossible but psychology with homunculi is doomed to circularity or infinite regress, so psychology is impossible. (Dennett, 1978, p. 122)

This is to say that psychology seems to be in a position of having to posit a homunculus ("little person" within) as the knower, and then a second little person within the first little person as the knower within the first, and a third one within the second as the knower within the second, ad infinitum. Without knowledge of who the ultimate knower is, cognitive psychology will always be fundamentally incomplete. We shall return to the problem of an infinite regress of interpretive homunculi and Maharishi's solution to it after first considering the adverse practical consequences that the lack of knowledge of consciousness has had on the world.

The Adverse Consequences of Not Understanding Consciousness

In Maharishi's (1986) analysis, the limitation of modern science to only one of the three aspects of knowledge has created an imbalance of knowledge that is the source of all problems faced by modern civilization.

It is easy to see that virtually all of the outstanding problems faced by contemporary civilization are psychological in origin; i.e., they stem from a lack of understanding of the knower and the process of gaining knowledge. A survey indicates that two-thirds of Americans say their jobs are stressful (Miller et al., 1988). Stress is estimated to account for one million workers' absences per day and to cost an estimated $150 billion per year in the United States alone. Yet stress management programs have proven largely ineffective (Druckman & Swets, 1988; Smith, Brott, Cuneo, & Davies, 1988; Jones, 1985).
Psychological stress is also a risk factor for the three major fatal diseases in the United States: heart disease, cancer, and stroke. Other risk factors such as diet, lack of exercise, drugs, and cigarette and alcohol consumption are also "psychological" in that they are under voluntary control and are influenced by emotional and cognitive factors. The most recent Surgeon General's report says that two-thirds of all illnesses before the age of 65 are preventable (Castro, 1988). Yet programs to reduce risk factors have had only limited success (Matarazzo, 1985).

Epidemiological studies indicate that a substantial proportion of the American population suffers from serious psychological problems. For example, it is estimated that approximately 20% of the population will at some time have an affective disorder (e.g., major depression). Sixteen percent have had an alcohol problem in the last three years, 1% suffer from schizophrenia, and anxiety is so common that its prevalence cannot be estimated (American Psychiatric Association, 1987). Yet the dozens of psychotherapies that have been tried generally appear to be no more effective than placebos (Eysenck, 1952, 1984; Rachman & Wilson, 1980). Moreover, trained clinicians have low diagnostic reliability and validity, faring no better and often worse than untrained laymen or actuarial statistics (e.g., Faust, 1986; Walters, White, & Green, 1988). In addition, no form of behavioral therapy or psychotherapy has been found to be effective in prison rehabilitation (Martinson, 1974). There has been some progress in managing mental health problems through drugs, but this physiological approach does not indicate any advancement in understanding consciousness itself. The very existence of so many competing approaches in clinical psychology indicates the lack of any single fundamental theory in the field. To use an analogy, if there were 30 different theories of the molecular structure of water, one would have to conclude that its structure was not understood.

The psychological nature of problems is also evident on the scale of international events. The United Nations Charter, for example, states that "Wars are born in the minds of men." The same may be said of ecological imbalances, economic crises, and most problems in education, business, industry, rehabilitation, government, and other areas. No one, however, expects solutions to these problems to be forthcoming from psychology, even though they are recognized to be problems of the mind. This fact alone illustrates the immature state of knowledge in the field.

Psychologists collectively generate over 100 research articles per day and have published about 800,000 articles since the first volume of Psychological Abstracts appeared in 1927 (Thorngate & Plouffe, 1987). Studies have shown, however, that very little practical knowledge has come from investments in psychological research (Lindblom & Cohen, 1979). Thorngate and Plouffe (1987, p. 79) comment: "The failure of the social sciences to produce many pragmatically important products would perhaps be tragic were it not for the fact that the world has survived, and will likely continue to survive, without them." It is clear that the objective as well as subjective approaches that psychology has tried thus far have had
limited success. As will be detailed below, Maharishi relates psychology's lack of practical success to the fact that it has been missing fundamental knowledge of the knower.

**Pure Consciousness, the Missing Basis of Psychology**

From the perspective of Maharishi Vedic Psychology, the principle reason that twentieth-century psychology has not made more progress is that it has studied only surface mental and behavioral events and has not fathomed the underlying reality of pure consciousness. Parallel to modern physics, in which "particles" are seen as excitations of underlying quantum fields, Maharishi describes mental and behavioral events as modes of excitation of an underlying field of consciousness. The term "pure consciousness" denotes the silent, unseen, non-changing unified field of consciousness at the basis of all of the diverse, active phases of consciousness that we ordinarily experience. For psychology to focus exclusively on the study of behavior and mental events would be analogous to physics remaining on the classical level of observables without going to the more fundamental level of quantum mechanics. Whereas all mental phenomena—such as thoughts, percepts, and feelings, as well as behavior—constitute events, pure consciousness is not itself an event. It is the basis of events. Maharishi Vedic Psychology thus categorizes all mental and behavioral events as manifest, localized, specific forms of the nonlocal, general underlying unmanifest reality of pure consciousness (e.g., Maharishi Mahesh Yogi, 1972, Lesson 7).

Maharishi has analyzed how pure consciousness is the undivided wholeness of knower, knowing, and known. In pure consciousness the three are united in one. This unity is possible because in pure consciousness the knower is aware of itself as the known, and it is also the process of knowing. Maharishi thus refers to pure consciousness as the self-referral state of consciousness because in it the knower is the sole object of its own knowing. Pure consciousness can only be known to itself by itself in its self-referral awareness because as soon as consciousness gains "other" or object awareness, it is no longer pure consciousness.

Experience and understanding of pure consciousness answer the question raised by cognitive psychologists, "Who is the knower?" Maharishi Vedic Psychology identifies the knower as pure consciousness, the silent level of consciousness at the subtest level of the mind that "witnesses" all the activity of mind and behavior. "The Self, in its real nature, is only the silent witness of everything" (Maharishi Mahesh Yogi, 1969, p. 98). The knower as the self-referral state of pure consciousness solves the problem of infinite regression of interpretive homunculi because, being self-referral, it does not have to "regress" outside of itself to know itself. It is the knower of itself as well as the knower of all events, both subjective and objective, which in ordinary waking-state consciousness are perceived as external to itself. To use one of Maharishi's analogies, when consciousness is not self-referral, the known is like the waves on an ocean and the knower is like the underlying unbounded silent bed of the ocean (1972, Lesson 7, Illustration 2).
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The self-referral state of consciousness is described by the adjective "pure" because it is the unqualified, completely general state of consciousness. Any mental event is a qualification of the generality of pure consciousness into some specific state. When we see a rose, pure consciousness as if takes on the quality of the rose and loses its unqualified status. Maharishi terms this loss of pure awareness identification with the objects of awareness (e.g., 1969, p. 151). He explains that the self-referral state of pure consciousness has no specific characteristics, but that its experience is accurately described as completely general, eternal, and infinite. The specificity of time and space emerges from within the generality of eternity and infinity. In ordinary waking-state consciousness, the reality of the unity of pure consciousness underlying the diversity of experience is lost. This loss gives rise to the experience of oneself (the knower) as moving through the creation (the known), connected to it through processes of knowing, an experience that results from not having pure consciousness lively in one's awareness.

One might argue that methods of introspection and self-report commonly employed by psychologists are types of self-referral events in that they require consciousness to observe its own processes. Attending to one's own percepts, desires, thoughts, mental images, or other forms of mental activity, however, is not the self-referral state of pure consciousness identified by Maharishi Vedic Psychology. Introspection occurs in an active state of consciousness where knower, knowing, and known are separated, rather than being united in the completely self-referral field of pure consciousness. Maharishi explains that the experience of pure consciousness is not the same thing as the thought of pure consciousness. "If one thinks about Being [pure consciousness], it is only a thought of Being and not the state of Being" (Maharishi Mahesh Yogi, 1966, p. 238). By attending to consciousness in its localized states of mental events, consciousness can never gain an appreciation of its more fundamental nature as unbounded awareness—pure consciousness.

Maharishi has emphasized that the reality of consciousness (and, as we shall see, of existence as well) is not just the three (knower, knowing, and known), nor just the one (pure consciousness). It is both together. Consciousness has a three-in-one structure (1986, p. 29). Maharishi has made the point that consciousness is both unity and multiplicity in many different ways over the years, explaining, for example, that the range of consciousness is from infinity to point (1985, pp. 65-66), from unmanifest to manifest (1972, Lesson 7), from universal Self to individualized self (e.g., 1969, pp. 395-399), from cosmic life to individual life (1966, pp. 73-77), from Absolute to relative (1966, pp. 33-34), from 100% inner to 100% outer, resulting in "200% of life" (1972, Lesson 8, p. 10).

In Maharishi Vedic Science—the source of Maharishi Vedic Psychology—(see Appendix)—the knower, knowing, and known are referred to as Rishi, Devata, and Chhandas, and pure consciousness, the collectedness of the three, is called the Samhita. Maharishi Vedic Science provides complete experience and intellectual understanding of the
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knower, the known, and the process of knowing (e.g., Maharishi Mahesh Yogi, 1985; 1986, pp. 24-49).

Lacking a means of systematically experiencing pure consciousness, psychology has been restricted to the study of events and their interactions. The non-fundamental nature of such interactions is illustrated by the fact that in psychological research, slight changes in experimental conditions result in completely different outcomes. Since the events studied are at the most complicated level of a very complex system, the laws of nature governing them are highly specific. Principles derived from the study of such complex and specific phenomena could provide neither lasting theoretical developments in psychology nor a basis for cumulative progress.

A unified theoretical understanding based on experience of the simplest state of awareness, pure consciousness, provides a new starting point for integrating psychology. Although pure consciousness, like other forms of subjectivity, cannot be directly measured, Maharishi Vedic Psychology adds an important component to the scientific knowledge of subjectivity because it provides a technology, the Transcendental Meditation (TM) and TM-Sidhi programs, by which anyone can experience pure consciousness. This technology enables the physiological correlates of pure consciousness and its effects on cognitive and behavioral processes to be studied objectively. In addition, Maharishi Vedic Psychology makes theoretical predictions about these effects that can be tested through objective measurement, including predictions about the field character of consciousness addressed in Principle 10 below.

Comparison of the Principles Underlying twentieth-century Psychology and Maharishi Vedic Psychology

Since twentieth-century psychology represents attempts to apply the objective methodology of science to study the mind and behavior, it shares the basic assumptions and world view of modern science. In this section we will compare some of the basic principles or assumptions of science that underlie psychology with those of Maharishi Vedic Psychology. The principles of Maharishi Vedic Psychology are not merely different intellectual conceptualizations but are based on the direct experience of pure consciousness made possible through the refinement of neurophysiological functioning that the TM and TM-Sidhi programs create. The relationship between states of consciousness, neurophysiological functioning, and world view will be elaborated throughout the rest of this introduction as well as in later articles in this series. The main understanding, however, that underlies the principles of Maharishi Vedic Psychology is that knowledge is structured in consciousness and that knowledge is different in different states of consciousness (e.g., Maharishi Mahesh Yogi, 1972, Lesson 9). Just as the realities of waking, dreaming, and sleeping are completely different from each other, so too are the realities of higher states of consciousness, which will
be described below (e.g., see the discussion of Principle 3). Whereas the principles of twentieth-century psychology are based on the experience of the waking state only, those of Maharishi Vedic Psychology are based on experiences of pure consciousness that arise when the neurophysiology has become sufficiently developed to sustain such experiences. Some psychologists have recognized the effects on perception and cognition of what Maharishi Vedic Psychology terms experiences pertaining to pure consciousness (e.g., Maslow’s (1962) "Being cognition"). However, there has previously been little understanding of the nature of pure consciousness or its central role in the development of higher states of consciousness. Maharishi Vedic Psychology provides this complete description.

In the text below, the principles of psychology are referred to as “old principles” because they originate from a perspective that was developed before experiences of pure consciousness became readily available through the Maharishi TM and TM-Sidhi programs. The “new principles” of Maharishi Vedic Psychology represent a world view that is being re-established now that these experiences have become available (see discussion of Principle 8, below). Its re-establishment is seen most apparently in many of the latest scientific theories—for instance, unified field theory in physics, as described in Principle 1.

The most far-reaching aspect of Maharishi’s fundamental definition of consciousness as pure consciousness is that it is not only the basis of all phases of subjectivity, but the basis of objective existence as well. This issue is addressed by the first set of principles.

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<th>OLD PRINCIPLE</th>
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<td>The most fundamental level of nature is material—comprised of matter and energy fields.</td>
<td>There is a unified field at the basis of all matter and energy fields which is the field of pure consciousness—the cosmic psyche.</td>
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A basic assumption of modern science that underlies the scientific culture within which psychology has developed is that nature is fundamentally material or physical. According to this materialist position, everything in the universe consists of inanimate physical elements operating in accord with mechanistic laws. The successes of science and its technologies might be cited as evidence that the materialist assumption is true. The successes of science do not dictate that nature is fundamentally material, however; they only indicate that the objective approach of science has been successful in dealing with objective reality on its more expressed, non-fundamental levels. As modern science comes closer to fathoming the basis of material existence in unified field theories, many scientists have noted that nature appears to take on qualities that we usually attribute to consciousness.
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For example, Hagelin (1987) and other physicists have noted that at fundamental time and distance scales, nature exhibits qualities associated with subjectivity, such as intelligence and self-referral or "self-awareness." Hagelin details many parallels between unified field theory and the Vedic account of fundamental levels of natural law, concluding that unified field theory of modern science has stepped onto the shore of the unified field of pure consciousness of Maharishi Vedic Science. Because the unified field of natural law at the basis of all creation is held in Maharishi Vedic Psychology to be a field of subjectivity, it is referred to as the cosmic psyche.

One of Maharishi's major concerns has been to bring scientists to the realization that recent developments of unified field theory have glimpsed the ultimate reality, the unified field of pure consciousness. In one of his first public lectures, held in 1955, Maharishi discussed the view of modern physics that all different forms of matter are ultimately nothing but abstract energy. He then showed that Vedic Science not only contains parallel descriptions of the universe but additionally recognizes even subtler levels of elementary functioning and the ultimate, transcendental reality—the cosmic psyche (Maharishi Vedic University, 1986, p. 196). In The Science of Being and Art of Living (1966), Maharishi compared the physical description of nature as structured in layers (molecular, atomic, sub-atomic) with the layers of creation described in ancient Vedic Science. He predicted that the rapid progress of theoretical physics would soon lead to the discovery of the unified field, the transcendental basis of nature (see the following article). Maharishi feels that this prediction has been substantially fulfilled in the work emerging from theoretical physics in this decade. At a conference in Washington, DC, in 1985, he explained: "The discovery of the unified field has extended the objective approach of modern science to be a fully subjective approach as well and still be modern science" (Maharishi Mahesh Yogi, 1986, p. 46). But he noted that whereas modern science has only glimpsed the unified field of natural law, ancient Vedic Science contains complete knowledge of this level of reality (Maharishi Mahesh Yogi, 1985, 1986).

The principles of the theory of consciousness that are set forth in Maharishi Vedic Science parallel the underlying principles of natural law governing all disciplines. These parallels have been demonstrated, for example, for mathematics (e.g., Weinless, 1987), physiology (Wallace, Fagan & Pasco, 1988), and computer science (Lester, 1988). We show throughout these 10 articles on psychology that the basic patterns of natural laws identified by Maharishi Vedic Science repeat themselves on the different levels of nature, and that the essence of these patterns is the fundamental dynamics of consciousness.

A discussion of the means of verifying that the unified field is the cosmic psyche is contained in the first article of the series on Maharishi Vedic Psychology (see the following article in this issue). This article first details Maharishi's description of the universal qualities of the cosmic psyche—self-referral, self-sufficiency, and infinite dynamism—and then
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demonstrates that these same qualities (a) can be shown to be fundamental to descriptions of natural law in different disciplines of modern science, including physics, physiology, mathematics, and chemistry; (b) can be directly experienced through the Transcendental Meditation program; and (c) can be shown through scientific research to grow in all areas of life—physiological, psychological, sociological, and ecological—through the practice of the TM and TM-Sidhi programs (see Principle 3, below).

In the materialistic world view, consciousness is considered to be an epiphenomenon of brain functioning, or simply to be brain functioning itself without an independent existence. In this view, starting from the beginning of the cosmos with the Big Bang, elements were formed that evolved into large biological molecules, eventually organizing themselves into human beings with nervous systems that gave rise to consciousness. Consciousness is thus seen as an emergent property of physical evolution.

In contrast, Maharishi Vedic Psychology asserts that pure consciousness is not limited to the boundary conditions of any physical system. Maharishi describes it as a state of pure intelligence and existence, prior to even the subtest stratum of physical particles and energy fields. It is unmanifest, beyond considerations of temperature, density, or any other physical properties. Being prior to space and time, it does not interact with matter or energy, but rather is a field of pure information that creates the universe through its own self-interaction or self-referral activity (Maharishi Mahesh Yogi, 1976, p. 150; see also Hagelin, 1987; Dillbeck, in press). It is the basic constituent of all matter and energy. In Maharishi's words:

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. (Maharishi Mahesh Yogi, 1986, pp. 25-26)

By "intellectually conceived" Maharishi is referring to the discriminatory property of pure consciousness by which its undifferentiated state as "one" becomes differentiated into "three." Through the principle of intellect, pure consciousness becomes aware of itself as a known, and this
If consciousness is prior to matter, what is the relationship between consciousness and the brain in Maharishi Vedic Psychology? Universal consciousness is seen as the ultimate source of the brain rather than the brain being the source of consciousness. Similar positions have been expressed by eminent scientists: "I regard consciousness as fundamental. I regard matter as derivative from consciousness"—Max Planck. "To suppose that consciousness or the mind has localization is a failure to understand neurophysiology"—Wilder Penfield (both quoted in Klein, 1984, p. 11).

In Maharishi Vedic Psychology the nervous system as a complex of biochemical and neuronal processes is the medium through which individual consciousness is experienced. In this view the activity of the brain allows the mind to experience consciousness to whatever degree it is capable. Maharishi explains that the value of consciousness experienced depends on whether the nervous system is functioning at its full potential. He has described how stress creates chemical and structural abnormalities within the nervous system which disallow the brain from functioning at full potential and which therefore disallow experience of pure consciousness. When it is functioning at its full potential, the brain allows the mind to experience pure consciousness as its basis (e.g., Wallace, 1986).

The nature of the individual experience depends on the style of neurophysiological functioning. The brain can be viewed as a kind of dynamical filter that qualifies the universality of pure consciousness into specific conscious experiences. In one style of functioning, the filter is as if opaque, and sleep consciousness arises. In another style the illusory awareness of dreaming comes through, while in yet another there is awareness of the environment and the activities of subjective life that characterize the waking state. Still another style of functioning allows the underlying wholeness of pure consciousness to be experienced by the individual.

The second article in this series (Dillbeck, in press) describes from the viewpoint of Maharishi Vedic Psychology how the cosmic psyche manifests into the diversity of the universe. It details how the self-referral activity of the cosmic psyche creates the Veda, the laws of nature or state of pure information at the basis of the universe, the unmanifest hum of creation which Maharishi calls "the sequentially available script of nature" (1985, p. 64). The article includes a discussion of the manifestation of the universe as described in Maharishi's Apaurusheya Bhashya and Veda Lila, the sequential commentary of increasing elaboration of pure consciousness on itself, which can be found documented in the Vedic literature. As Maharishi describes it, "The whole Vedic literature is beautifully organized in its sequential development to present complete knowledge of the reality at the unmanifest basis of creation and complete knowledge of all its manifest values" (1986, p. 28). Dillbeck also draws brief parallels in the second article between the Vedic description of nature's creativity and the universal self-referral activity of the cosmic psyche.
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and the mechanics of creation as seen from the perspectives of physics, mathematics, chemistry, and physiology.

Having laid the basis for the structure of the mind by locating the knower as the self-referral state of pure consciousness, the second article then goes on to describe the sequential emergence from pure consciousness of the familiar relative levels of subjective existence, which from subtle to gross are ego, intellect, mind, desire, and senses. These levels of the mind are illustrated below in Figure 1, the Psychology Unified Field Chart (see pp. 150-151).

3. OLD PRINCIPLE: There are three major states of consciousness—waking, dreaming, and sleep—each characterized by its own unique style of physiological functioning and behavior.

NEW PRINCIPLE: There are seven major states of consciousness—waking, dreaming, sleep, transcendental consciousness, cosmic consciousness, God consciousness, and unity consciousness—each characterized by its own unique style of physiological functioning and behavior.

Twentieth-century psychology is "waking-state" psychology; it provides knowledge primarily of one state of consciousness only, the waking state. Secondarily, there is also research on dreaming and sleep, along with some glimpses of higher states of consciousness. The assumption that waking, dreaming, and sleep constitute the full range of states of consciousness underlies many of the attitudes that psychologists express when they hear of higher states of consciousness. There is a strong tendency to view descriptions of higher states of consciousness as "altered states of consciousness," by which is meant some altered form of waking or perhaps dreaming or sleep. Another popular view is that "meditation" involves the "right" as opposed to the "left" hemisphere, which is to say that it merely involves one of the two major modes of waking-state functioning.

Maharishi explains that in order to experience pure consciousness, the mind must settle into a completely simple and silent state and experience its own wakefulness. In order to experience this simple self-referral state, the mind must transcend even the faintest activity of thought or feeling. For this reason, the experience is termed transcendental consciousness.

The relationship of transcendental consciousness to the waking state can be easily understood in terms of Maharishi's analogy of waves on an ocean, noted earlier (Maharishi Mahesh Yogi, 1969, p. 470). Thoughts and percepts are like the waves on the surface of the ocean. They are the localized and discrete forms of consciousness, the objects known. Pure consciousness is like the silent depth of the ocean at the basis of the waves. It is reasonable that scientists should be skeptical about the reality of states of
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consciousness that they have not experienced, but Maharishi’s introduction of the Transcendental Meditation technique has provided a simple technology that has allowed direct experience of pure consciousness for millions of people. These people experience that the TM technique allows thoughts or, returning to the analogy, the waves of the ocean to settle down. When it becomes completely quiet, experience is no longer of localized waves (thoughts) but is unbounded at the silent depth of the ocean. This silent state of unbounded awareness is transcendental consciousness.

Maharishi (1972, Lesson 22) has also explained that transcendental consciousness can be experienced at the junction point between waking, dreaming, and sleep. He points out that whereas waking, dreaming, and sleeping are completely different states, a junction point can be located at the end of one state and the beginning of the following state. These junction points constitute the beginning, or source, of a state of consciousness as well as its end.

...waking, dreaming, and sleeping states of consciousness are like curtains which hide the essential nature of that continuum of consciousness which knows no change and is always the same, constantly existing in its unmanifest value throughout time and space. It can be located, but it is not located in the character of the waking, dreaming, or sleeping states. (Maharishi Mahesh Yogi, 1972, Lesson 22, pp. 5-6)

Maharishi explains that ordinarily a person does not experience the junction point, simply because the physiology corresponding to that experience has not been cultured. For example, the junction point is not typically experienced while one falls asleep because during this process, perception becomes duller and is lost before the junction point is reached.

If one were in the waking state and could drift to the junction point with alertness becoming sharper rather than duller, then it would be possible actually to experience the junction point. Maharishi explains that the way to experience the junction point entails experiencing finer, more abstract levels of thought.

If there could be a way of perceiving the finest state of thought, this would sharpen the ability of perception in the waking state. There would come a point where the ability of perception is most refined. Awareness might transcend the finest perception. Just before transcending the finest perception, when the awareness is most alert, that most highly alert state would directly cognize the transcendent. This would be the junction point. The fourth state, then, can be experienced by gradually allowing the awareness to come out of the waking state of consciousness, without falling asleep or becoming more dull.

Waking state of consciousness is characterized by the ability of perception. If we gradually step into finer values of perception where the characteristics of the waking state of consciousness will cease to be, we will encounter the junction point. (Maharishi Mahesh Yogi, 1972, Lesson 22, p. 9)

Wallace's (1970, 1971, 1972) pioneering research has provided evidence that transcendental consciousness, experienced during the practice of
the TM technique, is not an altered state but a fourth major state of consciousness different from waking, dreaming, or sleep. Wallace's finding has been supported by extensive subsequent research (see reviews by Wallace, 1986; Alexander, Cranson, Boyer, & Orme-Johnson, 1987; Dillbeck & Orme-Johnson, 1987; and see the third article in this series, forthcoming). Wallace characterized the physiology of the fourth state of consciousness as "restful alertness." Increased rest is indicated by the pattern of changes in a number of somatic systems—decreased oxygen consumption and carbon dioxide elimination, decreased respiration rate, minute ventilation, and heart rate, and deeper relaxation, as indicated by significant increases in basal skin resistance and decreased arterial blood lactate. However, the state of rest achieved during the TM technique is not like the rest associated with drowsiness, sleep, dreaming, or merely sitting quietly with eyes closed. In TM the individual becomes much more wide awake and inwardly alert, as indicated by EEG changes showing increased and spreading alpha wave activity, particularly in the frontal brain areas (Wallace, 1986, p. 58). Significantly, these frontal areas are crucial to orchestrating the functions of the different parts of the nervous system (e.g., Pribram, 1973).

A meta-analysis of 31 physiological studies on the TM technique, conducted since Wallace's initial research, has found that the technique produces over twice the depth of relaxation (effect size) as ordinary rest on three indices: basal GSR, respiration rate, and plasma lactate. This result showed that the average state produced during the technique is twice as restful as can be achieved by ordinary waking relaxation. The EEG changes also distinguish the TM technique from waking. This distinction is particularly evident during subperiods when subjects report clear experiences of transcendental consciousness by means of a button press following the experience. During these experiences of pure consciousness, respiration may become suspended for up to approximately one minute, at which time global EEG coherence increases, indicating increased alertness (e.g., Badawi, Wallace, Orme-Johnson, & Rouzere, 1984; Farrow & Hebert, 1982). Whereas coherence decreases during sleep and dreaming relative to waking, it increases during the TM technique (e.g., Levine, 1976). The increased EEG coherence indicates that TM is a state of increased alertness in which finer values of perception open to the awareness, allowing experience of the junction point.

The understanding in Maharishi Vedic Psychology that experiences of transcendental consciousness create increased alertness is also supported by the finding that reactions are faster after meditating (e.g., Holt, Caruso, & Riley, 1978). In addition, over a period of months of practice, basic measures of perceptual and cognitive alertness and integration, which were previously believed to be unchangeable after early adulthood, also improve (e.g., Pelletier, 1974), indicating longitudinal increases in the quality of restful alertness.

Psychophysiological research has also found that the fourth state of consciousness is not merely a "right hemisphere" phenomenon. The entire
brain is involved in the experience, and both "right" and "left" hemisphere functions are enhanced as a result of the experience (see Appendix in the following article in this issue, and see the third article, forthcoming, for a presentation of the psychophysiological evidence distinguishing transcendental consciousness from waking, dreaming, and sleep).

Experiences of pure consciousness have been recorded throughout history in all cultures, indicating their naturalness and universality (Pearson, in press; Chandler, in press). However, it is only through the availability of the TM technique that these experiences can be reproduced systematically allowing them to be studied in the laboratory. It is interesting to note that the physiological characteristics of the fourth state of consciousness described by Wallace closely correspond to these historical examples. For example, Wordsworth describes an experience of transcending in terms that reflect the physiological changes similar to those seen in the laboratory research on TM practitioners:

Until, the breath of this corporeal frame
And even the motion of our human blood
Almost suspended, we are laid asleep
In body, and become a living soul;
While with an eye made quiet by the power
Of harmony, and the deep power of joy,
We see into the life of things.
("Tintern Abbey")

Here, respiratory suspension and reduced heart rate are indicated by "breath...and...blood almost suspended." Restful alertness is expressed poetically as "laid asleep in body, and become a living soul." "Harmony and the deep power of joy" allude to experiences similar to those correlated with high frontal and central EEG coherence. Wordsworth's phrase "We see into the life of things" expresses the poetic quality of transcendental consciousness, which will be discussed below (Principle 5).

The following three descriptions of experiences of pure consciousness by TM and TM-Sidhi participants, correlated with high EEG coherence, use language similar to Wordsworth's:

1. "Most of my meditations have been deep, silent wholeness, with long periods of no breath..."
2. "The experience was very blissful, super-clear—it was infinite correlation..."
3. "I feel this freshness of deep well-being in my whole body...In that state of deep freshness, in the transcendent, attention acquires a more and more important potential of wakefulness." (Orme-Johnson & Haynes, 1981, p. 213).

These descriptions are typical of experiences of TM meditators throughout the world, indicating that the TM technique has made widely available, on a systematic basis, experiences that were fleetingly available to only a few individuals previously.

Maharishi explains how the unfolding of higher states of consciousness
is based on repeated experience of transcendental consciousness (e.g., 1969, pp. 314-315; 429-441). The repeated experiences give the nervous system deep rest, which allows the internal homeostatic mechanisms of the body efficiently to repair chemical and structural abnormalities caused by stress. Eventually, when the nervous system is completely stress free, it maintains pure consciousness as a stable internal frame of reference that is not lost at any time throughout the cycle of waking, dreaming, and sleep.

This new state has a different character from the three relative states of consciousness or their basis, transcendental consciousness, because it includes both transcendental consciousness and waking together and therefore defines the fifth state of consciousness, cosmic consciousness (in Sanskrit, Turiyatita; Maharishi Mahesh Yogi, 1986, p. 115).

Maharishi describes in detail the changes that take place in the nervous system when transcendental consciousness is transformed into cosmic consciousness (1969, pp. 314-315). This description, along with the physiological research on rising cosmic consciousness, is elucidated in the third article in this series, which discusses how cosmic consciousness is the first stabilized state of enlightenment (e.g., Maharishi Mahesh Yogi, 1969, pp. 144-145; 1972, Lesson 23). It is referred to as enlightenment because in it the individual becomes enlightened about his essential identity as pure consciousness. Enlightenment is vastly different from the waking state, which is referred to as the state of ignorance because in it the mind remains ignorant of its essential nature. Not knowing his universal, unbounded nature as pure consciousness, the individual identifies with the experience of his relative attributes, giving rise to a sense of "my" and "mine" and fear of losing what is "mine." Ignorance of one's universality is ultimately the source of narrow-mindedness and suffering (e.g., Maharishi Mahesh Yogi, 1969, p. 318; Dillbeck, 1983).

The article continues by explaining how, in cosmic consciousness, the physiological mechanisms that give rise to waking and transcendental consciousness co-exist yet function independently. Maharishi (1969, p. 315) explains that in order to develop the sixth state of consciousness, the nervous system needs to be cultured further so that these two levels come to function in an integrated manner. This integration is accomplished by the individual in cosmic consciousness performing activities that engage the most refined feelings of service, reverence, and love. Perception becomes so refined as to appreciate the finest relative values of every object of perception along with unbounded awareness, which was established in cosmic consciousness (Maharishi Mahesh Yogi, 1972, Lesson 23, pp. 7-8). As a result, the separation between the Self and objective existence is all but dissolved. Maharishi has explained that the changes in perception that occur in the sixth state of consciousness are due to new products being produced by the digestive system once a stress-free nervous system has been achieved in cosmic consciousness (see Wallace, 1986 for a review of biochemical research on the TM and TM-Sidhi programs). The sixth state of consciousness is called God consciousness (Bhagavat Chetna—Maharishi Mahesh Yogi, 1986, p. 115)
because when one's perception of creation becomes highly refined, one's appreciation of the creator becomes based on direct perception.

With time, the physiological functioning becomes so refined that the finest relative value of perception rises to the level of the infinite value of perception (Maharishi Mahesh Yogi, 1972, Lesson 23), which is the level of the seventh state of consciousness, unity consciousness (Brahmi Chetna—Maharishi Mahesh Yogi, 1986, p. 115). In unity consciousness there is no separation between the Self and outer reality. This state of consciousness is described by a famous verse from the Upanishads: "I am That, Thou art That, all this is That." Maharishi explains that in unity consciousness, both inner and outer realities are seen in terms of the universal Self—the cosmic psyche. Table 1 summarizes the characteristics of the seven states of consciousness.

### Table 1: Seven States of Consciousness

<table>
<thead>
<tr>
<th>States of Consciousness</th>
<th>Ordinary Perception</th>
<th>Pure Consciousness</th>
<th>Refined Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sleeping</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2. Dreaming</td>
<td>Unreliable</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>3. Waking</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4. Samadhi or Transcendental Consciousness</td>
<td>Yes</td>
<td>Always</td>
<td>None</td>
</tr>
<tr>
<td>5. Turiyatita or Cosmic Consciousness</td>
<td>Yes</td>
<td>Always</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Bhagavad or God Consciousness</td>
<td>Yes</td>
<td>Always</td>
<td>Perception of reality as the Self—unbound pure consciousness</td>
</tr>
<tr>
<td>7. Brahmi Chetna or Unity Consciousness</td>
<td>Yes</td>
<td>Always</td>
<td></td>
</tr>
</tbody>
</table>

Scientific research indicates that the growth of higher states of consciousness through the TM and TM-Sidhi programs is "higher" in every sense of biological adaptability (see Appendix in the following article in this issue). Alexander et al. (in press) have argued that the higher states of consciousness described by Maharishi meet criteria (e.g., Flavell, 1985) for developmental stages beyond the highest level of waking-state development. For example, they involve fundamental transformations in
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experience of self, other, time, space, and causality. They are "directional" in that they emerge as an invariant sequence that reflects increasing unification of self and world. They are "uniform" in that related descriptions of higher states of consciousness have been reported throughout human history and across Eastern and Western cultures (e.g. Pearson, in press; Chandler, in press). They are "irreversible" because they are based on corresponding major changes in brain functioning (see the following article—Appendix, the third article in this series, forthcoming, and Wallace, 1986). In addition to describing the seven states of consciousness and the mechanics of their evolution in detail, the third article summarizes 18 years of research on higher states of consciousness since Wallace's breakthrough study in 1970.

In the materialist world view, nature is value-neutral and indifferent to the human condition; nature obeys laws but has no purpose. Human values are considered to be relative to the adaptive pressures of biological and cultural evolution, life evolves through the dynamics of natural selection in response to selective environmental pressures, and biological evolution is viewed as the evolution of matter once it becomes organized highly enough to acquire attributes called life. Like consciousness, life is seen as an emergent quality of matter.

In contrast to biology, where evolution refers to physical changes of species through natural selection, in Maharishi Vedic Psychology, the word "evolution" denotes the process of the development of higher states of consciousness as described above. Maharishi Vedic Psychology understands biological evolution as part of this larger purpose, the progression of species to express increasingly the totality of the cosmic psyche. A more highly complex neurophysiology is capable of expressing the cosmic psyche—the total potential of natural law—more fully. The goal and endpoint of physical evolution is the human nervous system, which is capable of sustaining unity consciousness, in which the cosmic psyche is fully expressed in individual life. Once having produced a human nervous system, evolution continues through refinement of the functioning of the nervous system, which supports the sequence of higher states of consciousness. In this perspective, human ontogeny continues the thrust of philogeny. They are both part of the same intrinsic purpose of the cosmic psyche to express the totality of its nature, its three-in-one structure, both point and infinity, manifest and unmanifest, relative and Absolute.

Biologists often speculate on what the human race will be like in the next step of physical evolution. In Maharishi Vedic Psychology, the human species does not need to change structurally in order to progress along the

4. OLD PRINCIPLE: Nature has no purpose and is value-neutral.

NEW PRINCIPLE: Nature has a purpose, which is the evolution of life to higher states of consciousness.
continuum of increasing adaptive flexibility. The human nervous system possesses the capacity for perfect adaptation; only this capacity needs to be developed. Maharishi (1986) describes the person in unity consciousness as spontaneously exhibiting the unlimited organizing power of the unified field of natural law, capable of mastering any conditions whatsoever, and always having a purely life-supporting influence on the environment.

Some psychologists and ethologists have argued that the problems of civilization are the inevitable by-products of aggressive tendencies that our species has inherited from its ancestors (e.g., Lorenz, 1966; Wilson, 1978). Maharishi Vedic Psychology understands human problems as arising not because of residual tendencies towards aggression, nor because we have inherited a fight-or-flight system that is obsolete in modern life (e.g., Toffler, 1970), but because we have not used the full potential inherent in the nervous system due to lack of an effective developmental technology.

The TM-Sidhi program is one of the key technologies that Maharishi has made available for developing unity consciousness. The fourth article in this series describes the mechanics of how the Maharishi TM-Sidhi program produces perfect adaptive freedom in life by developing different areas of mind-body coordination. That article describes how all possibilities in human life are realized when the mind projects thought and action from the level of the unified field. The ultimate expression of all possibilities in mind-body coordination occurs when the body can do anything that the mind desires—for example, Yogic Flying, whose fully developed state is the ability to fly. This level of mind-body coordination is cultured through the Maharishi TM-Sidhi program.

We experience in the TM-Sidhi program that our self-referral awareness immediately becomes awake in the different characteristics of the unified field. We see that the unified field is capable of spontaneously producing through its self-referral activity different characteristics or different shades in its own nature, like pure, crystal water becoming pink and then yellow and then green. These different qualities of the self-referral state of consciousness can be produced at will. Through this practice, a very clear habit develops of producing the quality we want in our awareness. This habit gives us greater and greater alliance with the total potential of natural law, which is the unified field. (Maharishi Mahesh Yogi, 1986, p. 96)

Maharishi explains that the Sanskrit word *sidhi* means perfection. The TM-Sidhi program comes from the ancient *Yoga Sutras* of Maharishi Patanjali (see Prasada, 1982/1912). The *Yoga Sutras* are an aspect of Vedic literature that expresses rules of transformation of the fundamental laws of nature, which spontaneously emerge from the self-interacting dynamics of consciousness. Maharishi explains that *yoga* means unity and *sutra* means "stitch." Hence the *Yoga Sutras* are the stitches that weave unity consciousness. Maharishi TM-Sidhi techniques, which utilize the *Yoga Sutras*, are the means of stitching together wholeness of consciousness by integrating different aspects of sensory, motor, cognitive, and affective functions with the underlying field of pure consciousness.
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The Maharishi TM-Sidhi program thus provides a means for unfolding all possible human potentials to their highest degree of perfection. The final goal of the sidhis, however, is not the specific sidhi performances themselves, but total integration of life in unity consciousness.

Maharishi explains that the TM-Sidhi program is not only a powerful means of development; it also tests the degree of integration of specific psychophysiological functions with the cosmic psyche. Successful performance of the predicted result proves that the nervous system is functioning normally enough to maintain the experience of pure consciousness while engaged in activity. The fourth article in this series discusses each of these views on the TM-Sidhi program.

Modern science developed historically as a means to overcome the limitations of subjectivity. Experimental conditions are controlled and systematically varied in order to discover orderly relationships among variables. The conditions of observation are carefully noted and reported so that anyone can replicate the phenomenon and observe the same results. The evolution of scientific theory is a cultural process of gaining increasingly closer correspondence between hypotheses about nature’s functioning and publicly observable data.

The objective methodology of science can thus be viewed primarily as a means of checking the validity of theories that are subjective in the sense that they are constructions of the human mind. A theory is successful if the representation of nature conceived in the mind of the scientist corresponds to objectively observed laws of nature. Observation occurs either through direct sensory experience of nature or through reading instruments that measure the occurrence of phenomena beyond the range of the senses. Of course, observation, being a sensory experience, is itself subjective, and in the final analysis, science is a process of verifying one level of subjectivity—intellectual conception—by virtue of another level—perception.

Ultimately, the success of the objective methodology of science depends upon the quality of consciousness of the scientist, particularly the deeper cognitive functions. Only a highly intelligent mind can discover patterns of order in objective data that become deep principles and lasting theories. The role of intelligence in the success of science suggests that there must be some fundamental correspondence between the nature of human intelligence and the order perceived in nature. There are, for example, instances in which abstract mathematical theories, derived through

5. OLD PRINCIPLE: The dynamics of natural law and the dynamics of consciousness are different. Subjective knowledge is unreliable; objective knowledge alone is valid and reliable.

NEW PRINCIPLE: The dynamics of natural law and the dynamics of pure consciousness are identical. It is possible to know all laws of nature by knowing the dynamics of consciousness.
logical processes completely without reference to external reality, later were found to describe precisely the laws of nature in some area of physics (see Weinless, 1987). It has been argued in various ways throughout history that knowledge of the universe is a mere reflection of universal Forms (Hamilton & Cairns, 1961) or archetypes (Jung, 1959) that are hidden deep within consciousness. Yet, twentieth-century psychology does not have any clear conception of what these archetypal laws of nature might be or an empirical technology for accessing them.

According to Maharishi Vedic Psychology, as the human psyche expands to experience pure consciousness, the unified source of both subjective and objective existence, the more clearly it becomes able to cognize directly the laws of nature as its own self-referral dynamics. This ability is true of the arts as well as the sciences. Ralph Waldo Emerson, the father of American Transcendentalism (who had read widely in the Vedic tradition), expressed this point of view when he wrote that if the student studies nature, he will find:

Emerson saw that in order to know nature more fully, one had to become "so finely organized" as to attain that holistic level of consciousness in which the dynamics of nature could be directly cognized.

Maharishi Vedic Psychology is the fulfillment of American Transcendentalism because it provides a systematic technology, the TM and TM-Sidhi programs, for refining the nervous system to a level that enables the individual to cognize directly the laws of nature as the self-referral state of pure consciousness, Samhita. Laws of nature on the level of Samhita are the unmanifest "hum" of creation, the Veda ("Veda" is the Sanskrit word for knowledge). Direct cognition of the laws of nature in the self-referral state of consciousness is called Vedic cognition, which is the topic of the fifth article in this series. Maharishi describes how research in consciousness through the TM and TM-Sidhi programs is on the forefront of modern science:

Today, those who exclude consciousness are not with the times, they are far behind. Every generation has a few scientists who are really dedicated to
research, and the fruit of their research is enjoyed by all. It is very fortunate
for the world of knowledge today that much has been uncovered about the
reality of that self-referral state of intelligence at the basis of all designs of
life in creation. All who are practicing the Transcendental Meditation and
TM-Sidhi programs are the real scientists of this generation, on the forefront
of scientific investigation. (1986, p. 28)

....the reality of the unified field, the Veda, 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 awareness, and to bring it to our awareness is the purpose of
study. (1985, p. 63)

The experimental method of waking-state science has resulted in an
information explosion in which it is difficult to keep up with one's field.
Computerized information storage and retrieval systems have developed
to make any factual knowledge easily accessible. Yet the totality of
scientific knowledge, even in its current incomplete and fragmented
state, cannot be known by one mind because there is so much of it.

In discussing this issue, Maharishi (1985) points out that every youth
desires to know everything, do everything, accomplish everything. Yet with
modern science-based education, every year as students learn some laws
of nature they become aware of greater fields of knowledge lying beyond
what was learned. In this sense, ignorance of knowledge increases at a
faster rate than the amount of knowledge gained. The best that education
can hope for is "all knowledge in one campus," and great libraries and
communities of scholars have been assembled to meet this aspiration.

Maharishi provides a radical alternative to this frustrating situation in the
concept of "all knowledge in one brain" (e.g., S. Dillbeck & M. Dillbeck,
1987). By all knowledge, Maharishi means the fruit of all knowledge. He
notes that the practical application of any knowledge is in fulfilling de­sires. Thus the fruit of all knowledge is ultimately fulfillment. By having
pure consciousness established in one's awareness, one can know any­thing and do anything. Just as a seed contains all the laws of nature that
structure the growth of a tree, the field of pure information, inherent in
the self-interacting dynamics of consciousness, contains the total poten­
tial of natural law which structures the universe. Maharishi explains that
it is possible to be the total potential of natural law in the state of full en­
lightenment, fully matured unity consciousness, which he describes as Brahman consciousness.

It is only through Vedic Science that one individual person can become a
lively embodiment of natural law. That is what is known as the totality,
Brahman. Unity consciousness in the midst of all the diversified structures
of knowledge and all activities, performances, behavior, interchanges, and

6. OLD PRINCIPLE: It is not pos­
sible to know all the laws of
nature.

NEW PRINCIPLE: It is possible to be all the laws of nature.
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exchanges—all lively in one unity consciousness and unity consciousness lively in one human personality—that is the representative of natural law, Brahman consciousness, the totality. The Veda declares, “Aham Brahman.” “I am That.” (Maharishi Mahesh Yogi, 1986, p. 34)

The sixth article in the series describes how unity consciousness fully unfolds into the peak of human evolution—Brahman consciousness.

7. OLD PRINCIPLE: Utilize the objective approach to solve human problems. NEW PRINCIPLE: Utilize objective and subjective approaches to solve human problems.

Scientists typically believe that the scientific method is the best hope for solving human problems, including behavioral ones. Yet scientific method and knowledge do not cause one to become more moral or create right action. Maharishi comments:

Being objective in its approach, modern science brings only intellectual understanding about the functioning of the laws of nature. It does not penetrate into the life of the scientist. It does not integrate his personality. He can do some little jugglery here and there in the field of creation, converting this into that and that into this, but he himself is open to all kinds of destructive values because the modern approach to the investigation of natural law does not and cannot enable the scientist to imbibe knowledge and live it in daily life. (Maharishi Mahesh Yogi, 1986, p. 34)

The reason that scientific knowledge does not integrate the personality is that it does not function from the level of pure consciousness, the holistic level of natural law at the basis of the personality (see Figure 1 below, pp. 150–151). As discussed earlier, science has been partial in its approach because it has been limited to investigation of the known and has not illuminated knowledge of either the knower or the process of knowing. Furthermore, the approach of science has been partial and fragmented because it investigates isolated laws of nature out of context of their holistic basis in the unified field of pure consciousness. Consequently, no one ever gains total knowledge of natural law through the experimental approach of modern science. As a result, all the effects of the applications of scientific discoveries cannot be known until side-effects appear. The harmful side-effects of modern medicine and pollution of air, water, and food produced by industrial and chemical technology, as well as the destructive power of electronic and nuclear technology, have affirmed the proverb that “A little knowledge is a dangerous thing.” The partial laws of nature discovered by science not only do not integrate the personality, but often create imbalances, resulting in a society characterized by problems, stress, sickness, unhappiness, and disharmony.

Maharishi explains that the way to create right action and holistic knowledge that does not lead to imbalances is expressed in the Bhagavad-Gita as Yogastah kuru karman.
"Established in Being [pure consciousness], perform action." This means, establish consciousness in its unified, self-referral state, the total potential of natural law, and perform spontaneous right action that is purely evolutionary.

The Transcendental Meditation and TM-Sidhi programs train human brain physiology and human awareness to function in accord with the total potential of natural law and spontaneously exhibit natural law in daily life. Thereby all aspects of life come to be always in the direction of evolution. (Maharishi Mahesh Yogi, 1986, p. 32)

8. OLD PRINCIPLE: Pre-scientific knowledge is primitive, unreliable, and not useful. NEW PRINCIPLE: Knowledge and experience of higher states of consciousness provide a new perspective for re-evaluating our cultural heritages.

This principle of creating right action is elaborated in the seventh article in this series. As a corollary to the principle that subjective knowledge is unreliable (Principle 5), the scientific community also tends to view knowledge from pre-scientific cultures as primitive—unverified or unverifiable knowledge that generally is not useful. Knowledge of the seven states of consciousness available in Maharishi Vedic Psychology provides a new perspective for evaluating cultural traditions. It may be that some of what the waking-state perspective views as "mystical experiences" and "myth" may actually be descriptions of experiences of higher states of consciousness (Chandler, in press; Pearson, in press; R. Orme-Johnson, 1987). Intellectual understanding and direct experience of higher states of consciousness, for example, greatly enrich appreciation of one's religious tradition (Smith, 1983).

As discussed previously, in Maharishi's analysis, for knowledge of life to be complete, it must provide a comprehensive understanding of all three of its aspects—knower, known, and process of gaining knowledge. Scientific knowledge, which is knowledge of the known only, is at best only one-third of complete knowledge. Maharishi explains that complete knowledge of the three-in-one structure of life was once available in the ancient Vedic civilization, and that this tradition, which was all but extinct, is now being revived in its purity in this generation (e.g., Maharishi, 1969, pp. 9-21). The remarkable parallel of Vedic knowledge to the most advanced scientific understanding (e.g., Hagelin, 1987; Weinless, 1987), together with the effectiveness of its techniques, which have been empirically verified through modern scientific research (e.g., Dillbeck, 1983), provides evidence for the veracity of the Vedic understanding of fundamental reality.

Maharishi explains that although Vedic knowledge has been continuously maintained by the tradition of Vedic masters to this day, the full value
of this knowledge became virtually lost in society in recent history as a result of errors that crept in over the generations. In the process of disseminating this knowledge throughout society, knowledge became lost whenever intellectual understanding was not verified by experience of pure consciousness and ultimately of unity consciousness (Maharishi Mahesh Yogi, 1969, pp. 9-17). In this view, the historical rise of the scientific method in recent centuries can be seen as a response to the need for a reliable means of gaining knowledge once effective subjective technologies for experiencing pure consciousness were not widely available.

From the perspective of Maharishi Vedic Psychology, all philosophies—all perspectives on knowledge—have some truth to them because they are all aspects of the cosmic psyche. Different perspectives, however, will differ in how completely they portray the totality of knowledge. If one perspective presents a 100% vision of the totality, then any mixing with another point of view, even if it represents 99% of the total, will create a loss of knowledge that will be a loss to humanity for a very long time. For this reason, those who believe that Maharishi’s knowledge represents a revival of pure knowledge are concerned to preserve that purity. This undertaking does not mean giving up one’s critical faculties to blind faith. On the contrary, repeated inquiry through every conceivable avenue—e.g., direct perception, intellectual analysis, comparison, or verbal testimony from an authentic source—is considered a vital aspect of Maharishi Vedic Psychology (Maharishi Mahesh Yogi, 1969, pp. 303, 473-474).

Maharishi has explained that the knowledge that needs to be most carefully guarded from transmission errors is the technology of consciousness, the delicate knowledge of how to culture the nervous system to experience higher states of consciousness directly. If the direct experience is lost, then the entire edifice of knowledge collapses into useless philosophical speculation. Without stabilization of higher states of consciousness, different interpretations of the knowledge about them arise, corresponding to the level of consciousness of the interpreter. Expressions that were designed to provide intellectual understanding of direct experiences become taken as points of speculative philosophy. Without direct experience, debate over the meaning of expressions of the enlightened becomes unresolvable. The knowledge of integration of life is then taken as a matter of faith rather than as an empirically verifiable fact. Enlightened sages are viewed as living in the faraway past rather than as individuals in this generation living a normal state of human life.

Maharishi Vedic Psychology is an experiential psychology whose experiences can be empirically verified through both direct experience and scientific research. The knowledge for gaining direct experience of pure consciousness is closely protected because experience is crucial to this understanding of life. The tradition has always been to protect the purity of these practices and not to experiment with them. Some modern scientists
who are sympathetic to the idea that Vedic and other ancient traditions do have important subjective technologies to offer may nevertheless feel that science itself could improve upon this knowledge. However, Maharishi notes that from the partial fragmented approach of modern science the wholeness of knowledge can never be constructed or even appreciated. To use an analogy, fifth-grade math students could not design a math curriculum to advance themselves to the level of calculus.

Modern science is a waking-state approach to knowledge, and thus is based on a style of neurophysiological functioning that can neither provide nor sustain the experience of the knower as pure consciousness. Maharishi explains that it is only from the total perspective of enlightenment that knowledge of the means to develop consciousness to enlightenment could come. Experimentation with the technology of consciousness by the unenlightened could thus only be a source of errors and lead to loss of knowledge. On the other hand, use of the scientific method to verify the effectiveness of technologies for developing consciousness is a legitimate and necessary pursuit that enables individuals who have experienced neither pure consciousness nor Maharishi’s techniques for developing consciousness to appreciate the effectiveness of Maharishi Vedic Science and Technology.

The eighth article in the series presents—as an example from the ancient Vedic literature on enlightenment—an analysis of the Bhagavad-Gita as a case history in Maharishi Vedic Psychology. Maharishi refers to the Gita as "the essence of the Veda" and as "the textbook of psychology" (personal communication, January 12, 1983), and he has provided a detailed analysis and commentary (1969) on how it portrays the transition of an individual's consciousness from a state of suffering and ignorance to enlightenment. The story of the Bhagavad-Gita is an example of the large Self, one's higher Self—portrayed as Lord Krishna—having a dialogue with the lower self—represented by Arjuna, a king and the mightiest archer of his time. And what does the higher Self say to the lower self?

Let a man raise his self by his Self, let him not debase his Self; he alone, indeed, is his own friend, he alone his own enemy. (VI.5)

Maharishi (1969) comments:

No help from the outside is required. A man has in himself everything he needs to rise to any height of perfection. Nothing of the world is needed to elevate the self; no method is to be adopted, no means to be sought. The self is elevated by the Self alone....(p. 395)

Through meditation a situation is created where the Self is found uncovered, unfolded in Its pure and essential nature with no shadow cast upon It by anything....

Meditation does not unfold the Self—the Self, it must be repeated, unfolds itself by itself to itself. The wind does nothing to the sun it only clears away
the clouds and the sun is found shining by its own light. The sun of the Self is self-effulgent. Meditation only takes the mind out of the clouds of relativity.
The absolute state of the Self ever shines in its own glory. (p. 396)

Thus, the eighth article illustrates how knowledge of the ancient Vedic tradition is highly relevant to modern life, a point that is further verified by the scientific research discussed in the next two sections.

An underlying assumption of science that arises from its fragmented experimental approach is that each problem has its own solution. This assumption arises because science addresses natural law on the level of objectivity, which is the field of multiplicity. So deeply ingrained is this point of view that the suggestion of a single solution to all problems is often met with frank disbelief, and "panacea" thus has a negative connotation. Yet, if pure consciousness is the total potential of natural law in nature, then enlivening pure consciousness through the TM and TM-Sidhi programs would promote life in accord with the evolutionary purpose of natural law in every aspect of life and would indeed be a panacea.

Earlier in this introduction we noted that many of the outstanding problems faced by contemporary civilization are psychological in origin. Here we will briefly discuss some of the research on the TM and TM-Sidhi programs indicating that this program offers a solution to each of these problems. The first major problem we noted was the ubiquitous presence of stress in modern life. Research shows that through the regular practice of the TM technique, every aspect of the physiology functions with increased order and in harmony with every other aspect of the physiology, thus decreasing stress, which is disorder (e.g., see the Appendix in the following article; and see Wallace, 1986). Hans Selye, an internationally known medical authority on stress, has written:

Research already conducted shows that the physiological effects of Transcendental Meditation are exactly the opposite to those identified by medicine as being characteristic of the body's effort to meet the demands of stress....

I would refer to it [the TM technique] as a method which so relaxes the human central nervous system that...it doesn't suffer from stress....And I think if you can influence the nervous system through Transcendental Meditation so that it can really relax, really be at its best in responding non-specifically to any demand, that is an ideal solution (quoted in Oates, 1976, pp. 214, 217).

A wide range of research supports Selye's statement. A comprehensive meta-analysis of 31 physiological studies showed that the TM technique is over twice as effective as ordinary rest at producing physiological relaxation (decreased respiration rate and plasma lactate, and increased basal skin resistance; Dillbeck & Orme-Johnson, 1987). The same study also
INTRODUCTION TO MAHARISHI VEDIC PSYCHOLOGY

showed that meditators have lower baseline levels on stress indices (respiration rate, heart rate, spontaneous skin resistance responses, and plasma lactate) than do controls. In addition, the TM technique reduces plasma Cortisol, a major stress hormone (Jevning, Wilson, & Davidson, 1978), as well as serum cholesterol levels in normal and hypercholesterolaemic patients (Cooper & Aygen, 1978, 1979). The psychological component of stress is also reduced as indicated by a meta-analysis of over 100 studies on anxiety. These studies show that the TM technique is over twice as effective in reducing chronic (trait) anxiety as any other meditation or relaxation techniques. The other techniques were found to be no different from each other or from placebo controls (Eppley, Abrams, & Shear, 1984).

It was also noted earlier in this introduction that many medical risk factors are psychological. The TM program not only impacts stress (one of the major risk factors), but also reduces other risk factors, including cholesterol levels, as mentioned, and drug, cigarette, and alcohol consumption (see review by Siegel & Abrams, 1981). It would be expected that a technique that reduced so many risk factors would be beneficial to health in general. This result has been found in a study of health insurance statistics on 2000 TM practitioners over a five-year period. Both hospitalization and doctor visits were reduced by more than 50% in TM practitioners compared to controls of similar age and occupation. In addition, the TM group showed decreases in all categories of disease, including marked reduction in the three major causes of death in the U.S.—heart disease (-83%), cancer (-30% in benign and malignant tumors), and stroke (-50% in diseases of the blood and blood vessels) (Orme-Johnson, 1987). Furthermore, the TM technique has been shown literally to extend human life in the advanced elderly (Alexander, Langer, Davies, Chandler, & Newman, 1986).

In the area of mental health, the TM technique has been shown to be more effective than a variety of psychotherapies for treating post-traumatic stress syndrome in Vietnam veterans (Brooks & Scarano, 1984). In addition, a meta-analysis (Ferguson, 1980) found that the TM technique is more beneficial than other meditation and relaxation techniques for producing overall psychological improvements. In the field of prison rehabilitation, where nothing else has been found to be effective (Martinson, 1974), the TM technique has been shown to increase autonomic stability, improve sleep patterns, enhance development and psychological health, improve behavior, and most important, to reduce recidivism (Alexander, 1982; Bleick & Abrams, 1987; see Dillbeck, 1987, and Orme-Johnson, 1981, for reviews).

The ninth article in this series summarizes the applied principles of Maharishi Vedic Psychology to guide life in all fields, including education, health, business and industry, rehabilitation and crime prevention, defense, and government (also see the following article—Appendix). That article also provides an overview of the more than 420 scientific studies demonstrating the effectiveness of the TM and TM-Sidhi programs in each of these areas.
MODERN SCIENCE AND VEDIC SCIENCE

10. **OLD PRINCIPLE**: Society is organized by cognitive and behavioral interactions.

**NEW PRINCIPLE**: Society is organized by its collective consciousness; the most fundamental level of collective consciousness is pure consciousness, the field of infinite correlation.

For the twentieth-century sociologist and social psychologist, society is understood in terms of social interactions on the behavioral and cognitive levels. A common theme throughout the social sciences is that the interests of the individual and society are inevitably in conflict. For instance, Freud's (1930/1961) theory that individual desires run counter to the rules of society necessary to maintain its structure has widely influenced Western intellectual thought.

One of the most far-reaching aspects of Maharishi Vedic Psychology is its theory of collective consciousness, which describes how pure consciousness is the field of infinite correlation that interconnects all members of society. From this perspective, conflict is not fundamental; it is only an artifact of thought and behavior of the members of society that arises when they are not integrated at their source—pure consciousness. Although the concept of a pervasive field of consciousness underlying both the individual and society can be found in twentieth-century psychology (e.g., Fechner, cited in James, 1898/1977; Jung, 1959; Durkheim, 1951), until now neither psychology nor sociology has had any concept of how to increase harmony in society from the level of its collective consciousness. In addition, as McDougal (1920/1973) has concluded, theories of collective consciousness will not have a major influence on mainstream social sciences until such theories are empirically testable.

One empirically testable consequence of Maharishi's theory of collective consciousness is that when individuals and groups practice the Transcendental Meditation and TM-Sidhi programs, the benefits are not confined to that individual or group, but spread to the larger society. Maharishi explains:

*This transcendental level of nature's functioning is the level of infinite correlation. When the group awareness is brought in attunement with that level, then a very intensified influence of coherence radiates and a great richness is created. Infinite correlation is a quality of the transcendental level of nature's functioning from where orderliness governs the universe.* (Maharishi Mahesh Yogi, 1986, p. 75)

The influence of TM and TM-Sidhi participants on the larger society is called coherence in collective consciousness, which has been operationalized as improved quality of life on standard social indicators (see Orme-Johnson & Dillbeck, 1987, for a review of over 30 studies). Maharishi's
theory of collective consciousness and the empirical research thereon is discussed in the 10th article in this series. It presents Maharishi’s perspective that the individual is the unit of collective consciousness and that every level of social organization—family, community, city, state, nation, and world—has a corresponding level of collective consciousness, with pure consciousness as the common basis of each (e.g., Maharishi Mahesh Yogi, 1976, p. 123). As individual members of society increase the coherence of their own consciousness, the collective consciousness of their family, community, city, state, nation, and world also increases in coherence. Thought and behavior in the larger society function from a less limited, more expanded frame that automatically takes into account the best interests of the individual and society. Applied to education, increasing coherence in collective consciousness increases the general level of creative intelligence throughout society (e.g., S. Dillbeck & M. Dillbeck, 1987). Applied to business, it increases morale, harmony, and productivity. Applied to city and national life, it decreases crime rate and increases positive trends in society (Dillbeck, Banus, Polanzi, & Landrith, in press; Dillbeck, Landrith, & Orme-Johnson, 1981; Dillbeck, Cavanaugh, Glenn, Orme-Johnson, & Mittlefeldt, 1987; Orme-Johnson, Gelderloos, & Dillbeck, in press). Applied to national defense, it increases the internal cohesion of the nation and increases friendliness between nations, making the nation invincible (Maharishi Mahesh Yogi, 1978, 1986; Orme-Johnson, Alexander, Davies, Chandler, & Larimore, in press; Davies, 1988).

This phenomenon of increased coherence in all levels of collective consciousness has been named the Maharishi Effect (e.g., Borland & Landrith, 1976). Empirical and theoretical work has indicated that the square root of 1% of a population is the critical minimum size of a group practicing the TM and TM-Sidhi programs needed to produce the Maharishi Effect (e.g., Dillbeck et al., 1981; Dillbeck et al., 1987; Orme-Johnson, Gelderloos, & Dillbeck, in press; Orme-Johnson, Alexander, Davies, Chandler, & Larimore, in press; and see Orme-Johnson & Dillbeck, 1987, for a review). All of these studies have used public data sources collected independently of the experimental hypotheses, and the hypotheses and measures have been lodged in advance of the experiment with outside review boards of impartial scientists. The studies have employed the most advanced causal analysis methodologies available to the social sciences and have been conducted on every level of society, ranging from the interaction of the brain physiologies of two separated individuals (e.g., Travis, 1988) to the effects of groups of 7000 (the square root of 1% of the world’s population) on reducing armed conflicts on the other side of the world (e.g., Davies, 1988).

Davies, for example, used an 821-day data base recording levels of cooperation and conflict in Lebanon, coded blind of the experimental hypothesis by a non-meditating professional. Davies studied the Maharishi Effect in Lebanon during seven experimental periods in which groups practicing the TM and TM-Sidhi programs were large enough to be predicted to reduce the conflict (including a small assembly of approximately 100
people within the conflict area and, on three occasions, assemblies of approximately 7000 in the United States or Europe). The effects of temperature, holidays, and seasonality, as well as other forms of nonstationarity in the data were taken into account using Box-Jenkins impact assessment analysis. During the 93 days of the assemblies, there was a mean 65% increase in level of cooperation, 48% reduction in level of conflict, 71% reduction in war fatalities, and a 68% reduction in war injuries (p < .0001 for all variables). On a composite war/peace index, the probability of the effect occurring by chance was $10^{-19}$. This study corroborated earlier research demonstrating the calming influence of the Maharishi Effect on armed conflict (e.g., Alexander, Abou Nader, et al., 1987; Dillbeck, 1987; Orme-Johnson, Alexander, Davies, Chandler, & Larimore, in press).

Theoretical prediction that the Maharishi Effect operates on the unified field of natural law is supported by the findings of several studies on the state and national levels that have demonstrated global changes in the quality of life (e.g., Dillbeck et al., 1987; Orme-Johnson, Gelderloos, & Dillbeck, in press; Orme-Johnson, Cavanaugh, et al., in press). These changes include balancing of the national economy, as indicated by reduced inflation and unemployment (e.g., Cavanaugh, 1987).

One of the most striking features of Maharishi's theory of collective consciousness, discussed in the 10th article, is that the government is the "innocent mirror" of the collective consciousness of the nation (Maharishi Mahesh Yogi, 1977, p. 122). Research has demonstrated, for example, that President Reagan's statements with regard to the Soviet Union were much more positive during those periods when the numbers of TM and TM-Sidhi participants at Maharishi International University in Iowa were sufficiently large to have the predicted influence of increased coherence in U.S. national consciousness (Gelderloos, Frid, Goddard, Xue, & Löliger, in press).

Maharishi has now established coherence-creating groups on every continent, and these groups, together with the influence of the three million meditators and the other 73,000 TM-Sidhi participants worldwide, are purifying world consciousness through the Maharishi Effect. The substantial body of theory and research, reviewed in the 10th article in this series, demonstrates that Maharishi's programs are responsible for the wave of peace that the world is now experiencing.

**Maharishi and the Fulfillment of Psychology**

At the beginning of twentieth-century psychology, William James (1890/1972) concluded his landmark book *Psychology (Briefer Course)* by noting that psychology was yet to have its Galileo or Lavoisier. He stated that they "will be famous men indeed when they come, as come they some day surely will..." (p. 464). He noted that the range of their thought will necessarily extend beyond physics and that "the best way in which we can facilitate their advent is to understand how great is the darkness in which we grope, and never to forget that the natural-science assumptions with which
we started are provisional and revisable things” (p. 464).

Maharishi is not only the Lavoisier and Galileo, but he is also the Newton, Einstein, and beyond of psychology. Maharishi Vedic Psychology provides the most logical and complete theoretical structure for psychology by identifying the profound link between objective and subjective existence. As long as science only investigated non-fundamental levels of natural law, and as long as the mind only experienced its non-fundamental active levels of consciousness, the connection between objective and subjective domains was not seen. At this time in history, experience and intellectual understanding of pure consciousness has created a new awareness of the unified basis of nature. The increased coherence in world consciousness produced by the TM and TM-Sidhi participants has created a level of coherence in collective consciousness that has facilitated the rapid progress of unified field theory in physics. The result is the emergence of a new era of a completely integrated science, Maharishi Vedic Science.

Maharishi Vedic Psychology unfolds the full range of human development—seven states of consciousness—as well as providing an understanding of collective consciousness and the technology to create an ideal society from that level—the Maharishi Effect. Moreover, Maharishi Vedic Psychology generates practical results, solving the recalcitrant psychological problems of our time. It reduces stress and health-risk factors, improves mental health, provides effective rehabilitation, reduces crime rate, and creates world peace. All problems are disorders of some kind. Enlightenment is the state of perfect order. Therefore, the path to enlightenment solves all problems as a ”side effect,” not through focusing on the nature of problems per se, but through focusing on perfecting human life.

We have chosen to associate Maharishi’s name with this new psychology by calling it Maharishi Vedic Psychology rather than merely Vedic Psychology in order to maintain the link with its source for future generations. Maharishi had a modern university education at the University of Allahabad, and he was fortunate to receive a rare and precious Vedic education from one who is widely recognized as the greatest master of enlightenment of modern India, His Divinity Swami Brahmananda Saraswati, Jagadguru, the Shankaracharya of Jyotir Math in northern India.

When Maharishi came out of the Himalayas after 13 years with his teacher, he was immediately recognized by those who heard him speak and who learned his system of meditation, to be the realization of the enlightenment of which he spoke. As one person described it in 1958, it was as if a great, ancient Maharishi of Upanishadic fame had suddenly descended into the twentieth-century (Maharishi Vedic University, 1986, p. 228).

Ever functioning from the level of cosmic intelligence, Maharishi displays the infallible precision of the ”cosmic computer,” the field of pure intelligence, the unified field, which governs the infinite diversity of the universe without a problem. Maharishi states that the human brain has the potential to be the ”cosmic computer,” which through proper programming can accomplish anything, and he himself is the supreme example of this spontaneous
perfection. Those around him have witnessed time and time again that everything he does is perfect for the moment and perfect for all time, perfect for the immediate environment and perfect for the entire world. (Maharishi Vedic University, 1986, p. 2)

Maharishi’s supreme genius is expressed in his ability to teach and to bring others of all ages and in all walks of life toward enlightenment. Maharishi has commented that he has no followers but that people follow their own evolution, and that if they find that what he says is useful, then they listen to what he says and use his techniques for developing consciousness in their daily lives. Maharishi’s message is simple, and it has always been the same: Life at its basis is bliss, and the nature of life is to evolve toward greater happiness to reach the highest bliss in enlightenment. The development of higher states of consciousness is not an esoteric pursuit for those who withdraw from life, but is the most effective means infinitely to enrich practical life. What Maharishi is offering to the world is the psychology of enlightenment, a completely universal knowledge capable of bringing fulfillment to all areas of theoretical and applied psychology.

As discussed earlier, inasmuch as most problems in the world have psychological origins, the elimination of psychological problems through Maharishi Vedic Psychology will completely transform the world, creating Heaven on Earth. Maharishi (1988) explains that "Heaven on Earth" means that the inner glory of pure consciousness is lived in daily outer life. Heaven on Earth is thus life in the wholeness of the three-in-one structure of consciousness, unmanifest and manifest, Absolute and relative, life in enlightenment which "bridges the gap between point and infinity, bringing together all the extremities of infinity, opening boundaries to unboundedness...Life in Heaven and life on Earth, together present the wholeness of life which in its reality is waves of bliss eternal" (pp. 1-2).

Psychology Unified Field Chart

Maharishi Vedic Psychology is summarized in chart form in Figure 1, the Psychology Unified Field Chart (see pp. 150-151). This chart displays the various levels of psychology from the perspective of Maharishi Vedic Psychology. The center of the chart indicates the seven states of consciousness that lie at the core of Maharishi Vedic Psychology. The chart is organized both vertically and horizontally in terms of the threefold structure of knowledge, representing the different contributions made by the knower, the process of knowing, and the known (the object of knowledge). As indicated in Level 1 of the chart, these three elements have their common source in the field of pure consciousness, the self-referral state of consciousness (termed Samhita in the Vedic expression), in which the knower (Rishi), process of knowing (Devata),

1Maharishi has recently brought out 20 approaches of Ayur-Veda for gaining perfect health, which is a physiological way of defining enlightenment.
INTRODUCTION TO MAHARISHI VEDIC PSYCHOLOGY

and known (Chhandas) are the same pure consciousness. This unified state of experience is identified by Maharishi Vedic Psychology as the experience of the unified field of natural law, the cosmic psyche.

In the vertical dimension (see left side), the chart represents six basic levels of psychology: Level 1, the Self (capitalized to represent the deepest level of the knower, pure consciousness); Level 2, the mind (the processes of knowing, which include ego, intellect, mind, desire, and senses); Level 3, the body and behavior (the level of objective phenomena, the known); Level 4, seven states of consciousness; Level 5, collective consciousness; and Level 6, applied psychology.

Horizontally, each of the levels of psychology is also divided into three aspects, corresponding to knower, process of knowing, and known. That is, the left column refers to the fundamental structure of subjectivity at a given level of psychological functioning; the corresponding process of knowing represents the dynamical process through which that structure functions; and the known refers to the product that results from the given process.

The different specialty areas of psychology correspond to levels of the chart, as indicated on the left side. The fundamental nature of the sequence of levels of the mind and objective existence as described in Maharishi Vedic Psychology is illustrated by the fact that the chapter headings of the major textbooks spanning the 100 years of psychology’s existence (compiled by Matarazzo, 1987) correspond to these levels (see Table 2, pp. 152-153). That is, even though the content has changed over the years, psychology texts have always had chapters on behavior, physiological substrates, senses and perception, motivation, thought processes, discrimination, feeling, and the self or whole person. The reason for this stability, according to Maharishi Vedic Psychology, is that these levels are universal levels of individual subjectivity that are sequentially unfolded from the cosmic psyche. It should be noted that there have been no textbook chapters on the most fundamental level of the mind, pure consciousness, the basis of all the other levels. Maharishi Vedic Psychology provides the missing foundational knowledge for psychology, the chapter on the cosmic psyche.

Each of the levels of the chart is elaborated below.

Level 1: The Self

Maharishi Vedic Psychology offers both a theoretical description of the fundamental level of consciousness, the field of pure consciousness—the Self—and technologies for its direct experience. The experience of pure consciousness is the "self-referral state" of human awareness, termed Sanhita in ancient Vedic Science, which Maharishi has revived; in this state, consciousness is directly open to its own nature, and the knower, process of knowing, and known—or Rishi, Devata, and Chhandas—are unified. This experience of a unified state of awareness is identified by Maharishi Vedic Psychology as the experience of the unified level of the functioning of nature itself, the unified field of natural law.
This chart illustrates how the Maharishi Technology of the Unified Field contributes to twentieth-century psychology by providing a new integrated approach in which the whole range of psychology can be appreciated from its source in the self-interaction of the self-referral unified field of all the laws of nature—the cosmic psyche. Practice of the Maharishi Technology of the Unified Field ensures that the functioning at every level of psychology fully reflects the self-referral value of the unified field, establishing all aspects of life in accordance with the total potential of natural law—perfect mental health for the individual and society.
<table>
<thead>
<tr>
<th>LEVEL</th>
<th>TEXTBOOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Processes</td>
<td>James, <em>The Principles of Psychology</em> (1890)</td>
</tr>
<tr>
<td></td>
<td>Angell, <em>Psychology</em> (1906)</td>
</tr>
</tbody>
</table>

| Behavior            | Attitudes and Opinions (24), Social Relations of the Individual (25) |
|                     | Social and Development (12), Social Cognition and Social Behavior (18), Social Influence and Group Processes (19) |
|                     | The Social Bases of Behavior (16), Exploring Social Issues (17) |

| Physiology          | The Functions of the Brain (2), On Some General Conditions of Brain Activity (3) |
|                     | The Psychophysical Organisation and the Nervous System (2), A Sketch of the General Relations of Consciousness to Neuronal Action (3) |
|                     | Growth and Development (4), Heredity and Environment (19) |
|                     | Evolution Genetic Bases of Behavior (2), Nervous and Endocrine Systems (3), Stress... (10), Cognitive Development (11) |
|                     | Life-Span Psychological Development (2), The Biology of Behavior (3), Understanding & Managing Stress (13) |

| Senses              | Sensation (17), The Perception of Things (19), The Perception of Space (20) |
|                     | Sensation (5), Perception (6), The Perception of Spatial and Temporal Relation (7) |
|                     | Perception (10), Sensation and Psychological Measurement (11), Color (12), Visual Space Perception (13), Hearing (14), Taste and Smell (15), Somesthesia (16), Topographical Orientation (17) |
|                     | Sensory Processes (4), Perception (5) |
|                     | Sensation (4), Perception (5) |
## TABLE 2 (CONTINUED)
**PSYCHOLOGY TEXTBOOK CHAPTER HEADINGS ARRANGED ACCORDING TO THE LEVELS OF THE UNIFIED FIELD CHART FOR MAHARISHI VEDIC PSYCHOLOGY**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>TEXTBOOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mind</td>
<td>The Automation Theory (5), The Mind-Stuff Theory (6), The Relations of Minds to Other Things (8), The Stream of Thought (9), Conception (12), Association (14), The Perception of Time (15), Memory (16), Imagination (18), The Perception of Reality (21), Hypnosis (27)</td>
</tr>
<tr>
<td>Ego</td>
<td>The Consciousness of Self (10), Will (26)</td>
</tr>
<tr>
<td>Cosmic</td>
<td></td>
</tr>
<tr>
<td>Psyche</td>
<td></td>
</tr>
</tbody>
</table>
According to Maharishi Vedic Psychology, the fundamental mental structures—the levels of the knower—are the ego, the intellect, the mind, and the senses. In addition, feeling and desire are also included in the chart because of their importance in governing affective processes and the direction of thought and behavior. Note that the term "mind" is used to refer both to a specific mental structure and to all levels of subjectivity other than pure consciousness; the usage of the term will always be clear from its context.

The functions of the various levels of mental structure are as follows: The ego is the deepest level of individuality, the experiencer, responsible for integration and synthesis. Although affective processes extend throughout all levels of the mind, feeling is illustrated between the ego and intellect to denote the subtle and refined affective processes involved in intuition, creativity, and basic values of the individual. The intellect is responsible for the functions of discrimination, decision making, and controlling the allocation of attention. The mind, considered in its more specific sense as a level of mental structure, is concerned with association, memory, and apprehending relationships. Desire is the dynamic process by which the individual seeks increasing fulfillment. Desire may be understood as originating deep within subjectivity; ultimately, according to Maharishi Vedic Psychology, it has its source in the desire of pure consciousness to know itself (Samhita), an experience of immense fulfillment. Desire is represented on the chart between mind and senses because, in the process of fulfilling specific desires, the individual's attention is drawn out through the senses to behavior in the environment. The function of the five senses is to process environmental information appropriate to each sense. The product ("known") of each of these levels of mental structure, indicated on the chart, is self-explanatory.

Level 3: The Body
At the third level of the chart, the "knower" is represented by the physiology and behavior of the individual. Behavior and the state of the nervous system are closely connected to the individual's state of consciousness. The "process of knowing" is comprised of conditioning, learning, and adaptive and homeostatic processes. Through these processes, physiological and behavioral functions of the individual adjust to the conditions of the internal and external environment to produce physiological balance, skills, and behavioral adaptation—the "known."

Level 4: Seven States of Consciousness
One of the central contributions of Maharishi Vedic Psychology to understanding and unfolding the full potential of human life is that of the seven states of consciousness. The three major states of consciousness commonly experienced are waking, dreaming, and sleep states. Through the
Transcendental Meditation and TM-Sidhi programs, the applied technologies of Maharishi Vedic Psychology, the individual gains and stabilizes the experience of a fourth major state of consciousness, transcendental consciousness (see center of chart). Transcendental consciousness is the experience of the self-referral state of consciousness, the experience of the unified field or cosmic psyche. As indicated by scientific research, this state of restful alertness is characterized by reduced respiration, plasma lactate, and Cortisol, and increased EEG coherence and skin resistance.

Cosmic consciousness, in contrast to the first four states of consciousness, is a stable state of consciousness, characterized by the permanent experience of transcendental or pure consciousness along with the changing states of waking, dreaming, and sleep. This state and the two later states are also known as stages of enlightenment. God consciousness, the sixth state of consciousness, is a further stage of development in which the most refined level of each object is perceived. In unity consciousness, the seventh state of consciousness, the gap between subject and object is fully bridged, and every object is perceived in terms of pure consciousness, the Self, the unified field of natural law.

As the individual rises to higher states of consciousness, each of the levels of the mind functions in a more effective, powerful, and integrated way. On the basis of the experience of the unified field, the field of pure consciousness, every thought and action is fully attuned to the full range of natural laws that promote the positive development of oneself and others; action is spontaneously right for the needs of the time. The development of full enlightenment, unity consciousness, should be considered normal adult life, the birthright of each individual.

Level 5: Collective Consciousness

Maharishi Vedic Psychology identifies consciousness as governing not only the individual but also society. At each level of society—family, community, city, nation, or the world as a whole—the subjective element ("knower," in the left column) is the collective consciousness of that level, governing the collective functioning of its social life. The center and right columns, respectively, present the most important collective process ("process of knowing") and quality and structure of life ("known") at each level.

The quality of consciousness of each individual in a social group contributes directly to the quality of collective consciousness of that group. Therefore, the development of enlightenment in individual life is accompanied by the growth of coherence and harmony in collective consciousness, so that throughout the entire society there is greater integration between the individuals’ desires and the needs of society. Research has found that the regular experience of the field of pure consciousness by only 1% of a population practicing the Transcendental Meditation program in their homes, or only the square root of 1% participating in the group practice of the TM-Sidhi program, generates measurable improvements in the quality of life in society and a reduction of violence in conflict areas.
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This phenomenon, known as the Maharishi Effect, is the practical means offered by Maharishi Vedic Psychology for creating an ideal society and a peaceful world.

Level 6: Areas of Applied Psychology

The top of the chart displays the culmination of all fields of psychology in the areas of applied psychology. The chart illustrates how the application of psychology to these areas further contributes to the betterment of society. The well-being and mental health of society influence the ministries of government and the head of state, who are governed by collective consciousness.

Appendix

Academic Sources of Maharishi Vedic Psychology

This knowledge of consciousness is being presented as a system of psychology for the first time in this series of articles. Previously it has been formulated as the Science of Creative Intelligence (Maharishi Mahesh Yogi, 1972) and as Vedic Science (Maharishi Mahesh Yogi, 1986; see Chandler, 1987). The Science of Creative Intelligence (SCI) is an experience-based set of general principles of consciousness common to every discipline, integrating all disciplines with each other and with the consciousness of the knower. Central to SCI are experiential techniques for developing creative intelligence, the most important of which are the TM and TM-Sidhi techniques. Vedic Science encompasses the same principles, but emphasizes a scholarly examination of their roots in the ancient Vedic tradition of India and expands the study into more detailed analyses of the relationship between consciousness and natural law.

The Science of Creative Intelligence and Maharishi Vedic Science have served as an inspiration to found universities that have generated rapidly growing programs of undergraduate, graduate, and post-graduate academic and applied research. These include Maharishi International University in the United States (1971); Maharishi European Research University in Switzerland (1975) and Germany (1982); Maharishi University of Natural Law, England (1982); Maharishi Veda Vidyapeeth, India (Vedic University for Asia, 1983); and Maharishi Vedic University, Europe and the United States (1985). These programs of research are an invaluable resource for the field of psychology because essentially they are research programs on consciousness. Maharishi’s knowledge of consciousness has provided a basis for profound new interpretations of the latest advances in quantum field theory (Hagelin, 1987), physiology (Wallace, Fagan, & Pasco, 1988), mathematics (Weinless, 1987), computer science (Lester, 1987), and medicine (Chopra, 1988; Rigby, 1988; Gasser, 1988). In addition, this knowledge has provided a broad interdisciplinary basis for interpreting all academic fields in terms of fundamental knowledge of the knower, including the fields of literature (R. Orme-Johnson, 1987), education (S. Dillbeck & M. Dillbeck, 1987; Nidich &
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Nidich, 1987; Gelderloos, 1987), and philosophy (Chandler, in press). Maharishi Vedic Psychology draws upon all of these important sources of research on consciousness, and the presentation of Maharishi's knowledge as a system of psychology is one of the many programs of scholarship occurring within the broader context of the Science of Creative Intelligence and Maharishi Vedic Science.

Additional key sources of Maharishi Vedic Psychology are Maharishi's books on consciousness, the Science of Being and Art of Living (1966), and Maharishi Mahesh Yogi on the Bhagavad Gita, A New Translation and Commentary, Chapters 1-6 (1969).

Other important sources of Maharishi Vedic Psychology are books containing transcripts of some of Maharishi's most important lectures; e.g., Creating an Ideal Society (1976), Enlightenment and Invincibility (1978), Life Supported By Natural LAW (1986), and Thirty Years Around the World—Dawn of the Age of Enlightenment: Volume One, 1957-1964 (1986). The latter book documents Maharishi's early lectures given in India in 1955 and describes how an invitation he received to give a lecture series turned into the beginning of the Transcendental Meditation movement and a series of world tours. The transcripts of the lectures given on those tours can be found in Thirty Years Around the World, and the forthcoming sequels will include his principal lectures and activities in the second and third decades of his worldwide movement.

Acknowledgement

Regarding the section on cognitive psychology, I would like to acknowledge the contribution of Dr. Dodds Charleston. Additionally, I wish to acknowledge the valuable suggestions and editorial comments of Drs. Robert Boyer, Samuel Boothby, Charles Alexander, and Michael Dillbeck. Deep appreciation also goes to Bonnie Mendocha, Lindy Atzenweiler, and Nancy Watkins for their assistance in preparing and editing the manuscript.

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