INTRODUCTION TO VOLUME 3

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THE MAHARISHI TECHNOLOGY OF THE UNIFIED FIELD
AND THE FULFILMENT OF SCIENCE: UNFOLDING THE INFINITE
POTENTIAL OF LIFE THROUGH AN INTEGRATED APPROACH

Evolution is the hallmark of science. The discoveries of today are always the basis for the advances of tomorrow and scientific research on the Transcendental Meditation and TM-Sidhi programme proves no exception to this general pattern of scientific development. The findings reported in the first two volumes of Collected Papers represented the fruit of almost a decade of research on Transcendental Meditation, conducted between 1968 and the end of 1977. Since then a great deal of further research has been performed, confirming, amplifying, and extending the results of earlier studies. These papers are now brought together in the third volume of this series.

The studies contained in Volumes 1 and 2 brought under scrutiny a remarkable range of parameters and raised the challenging question as to how a simple, purely mental technique could produce such an array of beneficial effects. The research collected in the present volume continues this pattern and, as would be expected, also goes substantially deeper in its analysis of the effects of the Transcendental Meditation and TM-Sidhi programme, furthering our understanding of the mechanics that underlie these changes.

Observing the evolution of scientific research on the Transcendental Meditation and TM-Sidhi programme, one can discern the dynamic interplay of three major streams of development: new experimental discoveries, advances in theory, and the results of applications in different fields of human concern. This is, of course, a familiar pattern of progress in the sciences. However, in a number of respects the process of evolution is, in this case, unique.

First, experimental discoveries are being made on two levels: objective and subjective. The Transcendental Meditation and TM-Sidhi programme is in itself a highly systematic and precise experimental method, designed for the investigation of the full range of human consciousness. Without the discoveries made through this subjective path of investigation, there would have been no impetus for objective research on higher states of consciousness; indeed, the existence of these states would have remained all but unrecognized.

A second unique characteristic is the mutually enriching interaction existing between the growth of Maharishi's worldwide Transcendental Meditation movement and the development of research. Objective studies have brought to light the physiological correlates of higher states of consciousness and their benefits in practical life, leading to growing numbers of individuals practising Transcendental Meditation, and to the widespread application of this procedure in differ-
ent areas of society. In turn, the experimental researcher is provided with a subject population which is undergoing rapid development through the regular practice of the Transcendental Meditation and TM-Sidhi programme. This has resulted in the increasing availability of subjects with experiences of higher states of consciousness, allowing more precise definition of the correlates of these states. Such a trend is seen, for example, in studies on metabolic, biochemical, and electroencephalographic changes during Transcendental Meditation, and is particularly evident in the growth of research on the TM-Sidhi programme.

As with the experimental research, advances in theory have benefitted from a dual input, with complementary contributions both from ancient Vedic Science, as brought to light by Maharishi, and from the different disciplines of modern science. This integration of the subjective and objective approaches to knowledge of natural law has led to a clear understanding of the principles underlying the development of higher states of consciousness and of the significance of this development in terms of its potential applications.

New experimental discoveries in science are often the foundation for a more profound understanding of the principles governing the operation of the laws of nature. The discovery of higher states of consciousness developed through the Transcendental Meditation and TM-Sidhi programme has been especially fruitful in this respect and has acted as a catalyst for major advances in the theoretical understanding of natural law. However, as we shall discuss, the Transcendental Meditation and TM-Sidhi programme has done much more than any previous scientific discovery to promote enrichment of man’s knowledge: by virtue of its unique influence in raising the level of coherence in the collective consciousness of the world, it has rendered fertile the very atmosphere in which advances in knowledge are made. Inevitably, as Maharishi has commented, ‘all the hidden oil has begun to flow’, leading to greater breadth and depth of research and to a flowering of knowledge in this field, and indeed throughout the sciences.

The evolution of research on the Transcendental Meditation programme reflects a global transformation that is influencing every branch of science. Most notably, while the investigation of Transcendental Meditation has brought the study of higher states of consciousness to the forefront of scientific inquiry, the central importance of consciousness in the structure and functioning of nature as a whole is becoming increasingly apparent in the latest theories of the different branches of modern science. Strikingly, it is in the science of physics, the most rigorous and successful representative of the objective approach of modern science, that such a trend is most clearly evident. In order to understand this development more fully, it is instructive to consider the recent advances that have been made in physics, which have brought science to the threshold of its ultimate achievement—the description and application of the full potential of natural law.

**The Discovery of the Unified Field of All the Laws of Nature by Modern Science**

During the last 20 years, great progress has been made in high energy physics towards a unified understanding of the fundamental forces and particles of nature. From theories of four
fundamental forces—electromagnetism, the weak interaction, the strong interaction, and gravity—and their corresponding matter fields, progressive steps of unification have taken place, leading ultimately to the development of completely unified field theories. The first step in this process was the unification of the electromagnetic and weak forces (see figure 1). This unified *electro-weak theory*, developed by Glashow, Weinberg, and Salam, brought to light an important new principle—spontaneous symmetry breaking—which locates deeply hidden symmetries of nature at shorter time and distance scales and shows that broken symmetries characteristic of the ordinary low-energy world can be restored by probing such fundamental space-time scales. This principle was subsequently extended to include the strong force, leading to the development of *grand unified theories* of the weak, electromagnetic, and strong interactions (see for example Pati and Salam; and Georgi and Glashow).

The final stage of unification was made possible by the introduction of another new concept, *supersymmetry*—a profound mathematical symmetry principle capable of unifying matter fields with force fields. Through the application of supersymmetry, it was found that

gravity could be unified with other fields. Most recently, in the richest version of this theory, known as \( N=8 \) extended supergravity, it was discovered that all of the force and matter fields of grand unified field theories could be united with the force of gravity (Cremmer and Julia; and Ellis, Gaillard, and Zumino).\(^4\)

**The Properties of the Unified Field**

The fundamental properties of the unified field are the well-known properties of any non-Abelian gauge field that incorporates quantum gravity. These include the property of absolute self-referral expressed in supergravity theory by the infinite (non-perturbative) self-interaction of the unified field which is necessary for the binding of the fundamental components of the unified field, the preons, to form the force and matter fields of grand unified theories—the crucial first step in the sequential process of dynamical symmetry breaking through which the fundamental fields of nature gain their separate identities. The sequence of symmetry breaking occurring spontaneously from the unified field demonstrates the self-sufficiency of the unified field in giving rise to and supporting the infinite variety of its expressions in nature.

The unified field embodies the total potential of natural law; it is the balanced coexistence of all the fundamental quantum fields in their fully enlivened state. At relatively large time and distance scales, the fields that mediate the deeply hidden symmetries responsible for the unification of the fundamental forces and particles of nature are not operative. Diversity therefore dominates physics viewed at such space-time scales. By contrast, at the scale of superunification—the Planck scale of \( 10^{-33} \) cm (or \( 10^{-43} \) sec)—the intrinsic dynamism of natural law is so great that all the quantum fields, including gravity, are fully lively.

The unified field is the fountainhead of natural law, since all the laws of nature expressed in the effective field theories governing physics at larger distance scales are already contained in seed form in the original supersymmetric Lagrangian of the unified field.\(^5\) As such, the unified field is responsible for the ordering and evolution of the entire universe, and thus represents the most concentrated field of intelligence in nature.

**The Maharishi Technology of the Unified Field**

Knowledge has organizing power. The organizing power of every level of scientific knowledge is expressed through the technological application of that knowledge. The discovery of the unified field of all the laws of nature opens to man the possibility of developing a

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\(^6\) The Lagrangian of the unified field is the most compact mathematical expression of the complete structure of the unified field—its symmetries, components, and self-interaction. See, for example, the recently formulated Lagrangian of \( N=8 \) supergravity theory (B. de Wit and H. Nicolai, *Physics Letters* 108B (1982): 285).
technology through which he may utilize the total potential of natural law. How, then, can this level of existence be applied? As revealed by supergravity theory, the unified field is so holistic in its structure that there remains in it no possibility for the separate existence of an observer. It cannot be detected from outside itself, since there is no entity apart from it which could act as an external observer and still perceive its unified wholeness. Instead, the unified field incorporates the status of observer within its own nature in the form of its quality of self-referral; the unified field is its own sole observer. For this reason, direct investigation by standard objective methods, involving an observer-observed duality, is not possible and an entirely new methodology must be adopted to realize and apply the physics of the unified field.  

Interestingly, it is the nature of the unified field itself which provides us with the solution to this problem. From our analysis of the properties of the unified field it is evident that these are precisely the attributes of consciousness. In particular, complete self-referral is the exclusive property of consciousness, since only consciousness has the ability to know itself in a completely self-sufficient manner. Because of this, any field which displays the property of self-referral in its absolute form must, by definition, be the field of consciousness. The primary importance of self-referral in the structure of the unified field therefore identifies consciousness as the fundamental ingredient of natural law. Such an understanding is in keeping with the entire shift from classical physics to quantum mechanics, which highlights the importance of consciousness or intelligence in the wave function as a structure of knowledge.  

It is here that the most modern understanding of nature meets the most ancient knowledge known to man—the tradition of Vedic Science, which has been revitalized in recent years by Maharishi. In the Transcendental Meditation and TM-Sidhi programme, Vedic Science presents a profound subjective methodology which provides direct experience of the unified field by opening the awareness of the individual to pure consciousness—transcendental consciousness—in which the awareness is open to itself and to nothing else. In this state, self-referral is present to an absolute and perfect degree. Thus, through the Transcendental Meditation technique the unified field is found to be identical with human consciousness in its simplest, most expanded state—the Self. Moreover, during the TM-Sidhi programme all the subjective and objective

7. The need for a new methodology is also evident when we consider the limitations of the technology currently used for experimentation in high energy physics. It is generally recognized amongst those working in this field that we are rapidly approaching the limit of large-scale accelerator technology as a means to activate deeper levels of natural law. The current generation of particle accelerators, such as that recently employed to verify the electro-weak unification at 10^3 GeV, require a vast energy supply (a substantial fraction of that needed for a large city) and are many kilometres in diameter. Grand unification is thought to occur at an energy scale of 10^15 GeV—thirteen orders of magnitude greater than the electro-weak unification—and superunification occurs a further four orders of magnitude higher in energy at 10^19 GeV. Clearly, these levels of unification are far beyond the reach of the present experimental approach. Of course, this does not exclude the possibility of objective verification of these levels, for example through the detection of proton decay in the case of grand unified theories. However, for the reasons discussed above, such an objective approach would still be incapable of directly investigating or applying the physics of the unified field.

8. Transcendental Meditation takes the mind from the active level of thinking through more and more settled states of awareness until even the finest, most subtle level of thinking activity is transcended, leaving the individual awake in himself. Since both objects of observation and process of observation have been transcended, this state is the experience of pure subjectivity—the Self. Aspects of the mechanics of Transcendental Meditation are discussed by Domash in the introduction to Collected Papers, Volume 1.
qualities of creation are seen to emerge from the field of pure consciousness as modes of one's own self-referral intelligence.9

The theoretical understanding of the unified field provided by the objective approach of modern science, and the procedures for utilizing the unified field in practical life derived from the subjective approach of Vedic Science have led to the development of the Maharishi Technology of the Unified Field, an integrated approach to unfolding the full potential of natural law in individual and collective life. By providing the regular experience of the unified field, the Maharishi Technology of the Unified Field enlivens the total potential of natural law in the awareness of the individual, ensuring that every impulse of thought and action is upheld by the infinite organizing power of nature.

The development of the Maharishi Technology of the Unified Field is the crowning achievement of over 25 years of research in the field of consciousness conducted under the guidance of Maharishi. Indeed, the entire history of Maharishi's movement can be seen as a research endeavour of global proportions, ranging from a systematic exploration of the full potential of natural law in consciousness by millions of individuals practising the Transcendental Meditation programme to the application of the totality of natural law to bring harmony to the collective consciousness of the whole world.

Many of the important milestones in this history up until early 1978 have been reviewed in the introductions to Collected Papers, Volumes 1 and 2. In the intervening years, further steps of progress have been made which have played a central role in the development of the Maharishi Technology of the Unified Field. It is to these events and achievements, which form the historical background upon which the research contained in this volume was undertaken, that we shall now turn our attention.

Creating Coherence in Collective Consciousness

Undoubtedly the most important factor determining the direction of the developments initiated by Maharishi in recent years has been the discovery of the effects of the Transcendental Meditation and TM-Sidhi programme on society as a whole. The power of this influence was first documented in 1974 by research showing that when the level of participation in the Transcendental Meditation programme in a city reaches one percent of the total population, there is an improvement in the quality of life of the entire community, as measured by a reduction in crime rate.10 This effect has since been repeatedly confirmed in studies which have included variables other than crime, more sophisticated analyses, and more rigorous controls for possible confounding factors.11 The authors of the first research on this phenomenon named it the Maharishi Effect in honour of Maharishi who predicted it nearly 25 years ago.

9. The TM-Sidhi programme is discussed in greater detail in the introduction to the section on research into these techniques in Collected Papers, Volume 1 (page 701).
11. These studies will be published in Collected Papers, Volume 4.
INTRODUCTION TO VOLUME THREE

At the basis of this phenomenon, Maharishi locates the principle that life in any social group, from a family to the whole world, is governed by the collective consciousness of all the individuals constituting that group. Just as the thinking and behaviour of an individual is determined by his level of consciousness, so also the quality of life in society is dependent upon the degree of order and integration in collective consciousness. The discovery of the Maharishi Effect presents a formula through which coherence can be systematically generated in collective consciousness. It was this breakthrough in particular that inspired Maharishi to inaugurate the dawn of the Age of Enlightenment in 1975, in recognition of the fact that mankind was entering a new era which would be dominated by fulfilment, progress, and freedom from problems. The following year Maharishi established the World Government of the Age of Enlightenment, the global organization dedicated exclusively to raising the level of individual and collective consciousness in every part of the world, thereby laying the foundation for the success of all governments and ensuring the perpetuation of the Age of Enlightenment for all future generations.

At the end of 1977, an analysis of world events revealed a striking new development: the effect of coherence created by almost two million individuals practising the Transcendental Meditation programme was becoming apparent in the collective consciousness of the entire world. This development of world consciousness led Maharishi to conclude that it was now possible for all nations to rise to the level of invincibility by creating a fully integrated national consciousness. In the introduction to Volume 2, the nature of Maharishi's concept of invincibility and the principles underlying it have been reviewed in detail. As we shall consider later, the discovery of the unified field of natural law and the growth of research on the Maharishi Effect have now made the practicality of structuring invincibility even more readily apparent.

The Global Ideal Society Campaign

Following the declaration of 1978 as the Year of Invincibility to Every Nation, Maharishi directed his attention to the implementation of the formula that had emerged for the creation of an ideal quality of life in society and an invincible nation. In June of that year, a project was initiated by Maharishi to create models of an ideal society in 108 countries, in order to demonstrate the means of achieving this goal to all governments and international authorities. In this campaign, the World Government of the Age of Enlightenment selected one or more provinces in 20 of the world's largest nations, as well as the 88 countries with the smallest populations, to be the focus of attention for the activities of all the teachers of Transcendental Meditation.

During the project, numerous positive developments and reductions in negative events were reported from the designated provinces and nations. Perhaps the most precious fruit of this endeavour, however, was that it provided the first experimental verification of the powerful influence of the TM-Sidhi programme on collective consciousness. Research conducted in Rhode Island, U.S.A., one of the states selected as part of the Ideal Society Campaign, confirmed that the coherence generated by the TM-Sidhi programme is many times more powerful than that created by the practice of the Transcendental Meditation technique alone.
Using a version of the MERU Ideal Society Index (combining data from variables in eight categories associated with quality of life), researchers found a marked and holistic improvement in the quality of life during the experimental intervention period. During the project the number of individuals practising Transcendental Meditation in the state was, according to the 'one percent' formula, insufficient to produce a significant Maharishi Effect. It was therefore concluded that the improvement in the quality of life was due to the additional influence of a relatively smaller number of individuals practising the more powerful TM-Sidhi programme.12

It had been recognized for some time that the TM-Sidhi programme greatly accelerated the development of the individual brought about by the Transcendental Meditation technique.13 The experimental confirmation that the TM-Sidhi programme was also much more powerful in its effects on society led to an examination of theoretical models for predicting the minimum numbers required to practise these procedures in order to generate the Maharishi Effect in a given population.

As discussed in the introduction to Volume 2, the Transcendental Meditation technique may be seen as producing order and coherence through de-excitation, in a manner which is reminiscent of the behaviour of physical systems under the Third Law of Thermodynamics. In this type of model, the intrinsic properties of the field of pure consciousness are unmasked during Transcendental Meditation by reducing mental and physiological activation to a minimum level, much as reducing temperature to very low values in certain physical materials results in the production of macroscopic quantum coherent states, such as superfluidity and superconductivity. In the TM-Sidhi programme the experiential mechanisms involve not de-excitation, but rather enlivenment or activation of the field of pure consciousness through the use of specific mental procedures. The increased integration in individual and collective functioning brought about by the TM-Sidhi programme cannot therefore be explained by a Third Law-like principle. In fact, as is most graphically illustrated in EEG studies during the TM-Sidhi technique for flying, high coherence may be associated with a marked increase in physiological activation.13

In view of these considerations, it was suggested that an explanation for the coherent effects of the TM-Sidhi programme might be found in the type of non-equilibrium phase transition seen in dissipative structures. A valuable model of this kind was found in the laser, which exhibits a well-defined phase transition to a state of macroscopic quantum wave coherence at relatively high temperatures.

The production of laser light is similar in principle to the mechanics of the TM-Sidhi programme. In the latter, very powerful effects of coherence are created through the introduction

13. The more rapid development brought about by the TM-Sidhi programme was evident from the time of its introduction in terms of increasing clarity of experiences of higher states of consciousness. This influence was soon confirmed by research reported in Volume 1 (Orme-Johnson et al., paper 102; Orme-Johnson and Granieri, paper 103; and Clements and Milstein, paper 104), and is further verified by more recent studies contained in the present volume (see, for example, Werner, paper 206; Orme-Johnson et al., paper 215; Beresford and Clements, paper 224; Wallace et al., paper 229; Antes, paper 250; Rowe et al., paper 254).
of specific stimuli at the level of pure consciousness. Laser light is generated by the process of *stimulated emission*, in which a population of atoms is stimulated to emit light which is perfectly coherent, rather than randomly phase related as in the case of ordinary light. In this phenomenon, known as *superradiance*, the intensity of the beam of light is proportional not to the number of emitters (as in ordinary light) but to the square of the number, resulting in the vastly increased power and capacity to propagate characteristic of laser light.

From an examination of this and related models, it was proposed that the effect of coherence produced in collective consciousness by the TM-Sidhi programme would be proportional to the square of the number of participants. On this basis it was predicted that, at least for large populations, a group of individuals numbering only the square root of one percent of the population practising the TM-Sidhi programme together would be sufficient to create an effect of orderliness and coherence in society equivalent to that resulting from one percent of the population practising the Transcendental Meditation technique. It was considered necessary that this practice be undertaken collectively, in order to form a source of coherence of sufficient intensity to produce a 'super-radiance' phenomenon in collective consciousness. As we shall consider, subsequent experimental work has shown this prediction to be remarkably correct.

The recent discovery of the unified field of nature, and the recognition of its identity with the field of consciousness, have now provided a theoretical framework that incorporates the central principles of the stimulated emission model within a broader perspective, and is of more direct relevance to the actual mechanics of the TM-Sidhi programme. In physics, coherent collective behaviour is characteristic of one of the two fundamental classes of fields in nature—bose fields—while diversification is displayed by the other class—fermi fields. Macroscopic quantum coherent states, such as superfluidity and the laser, occur because the individual constituents of these systems exhibit bose behaviour. Since the unified field—the source of all the laws of nature—behaves as a bose field, its enlivenment in collective consciousness through the group performance of the Maharishi Technology of the Unified Field results in a powerful coherent influence, which is proportional to the square of the number of individual participants.

Maharishi explains that it is from this level that 'the enlightened individual can directly influence nature . . . . This enlivenment of the source of creation, which is a field of infinite correlation, automatically spreads throughout the environment, permeating all levels of creation with a coherent evolutionary influence'.

The World Peace Project

Responding to the findings of the Ideal Society Campaign, in October 1978, the World Government of the Age of Enlightenment undertook an historically unprecedented initiative by sending experts in the TM-Sidhi programme to calm violence and restore peace in the five most troubled areas of the world. The presence of over 1,000 such individuals in Central America, South East Asia, the Middle East, Iran, and southern Africa, was seen, during the two and a half

months of their stay to result in noticeable reductions of extreme social disorder and conflict, and in an alleviation of international tension around the world.\textsuperscript{15}

This remarkable initiative did more than produce a temporary state of peace for the world. By giving a clear indication of the power of the TM-Sidhi programme to generate coherence in collective consciousness and thereby neutralize even the most extreme forms of social disharmony, the World Peace Project revealed the means through which peace can become a permanent reality. Specifically, it emphasized that as originally predicted the intensity of coherence created in collective consciousness by the TM-Sidhi programme is greatly enhanced when the practice is undertaken in a group. In more general terms, the success of the World Peace Project demonstrated that the problems of disorder in society and conflict within and between nations, which had previously seemed such intractable and inevitable features of human life, could be effectively and immediately resolved by utilizing the most fundamental resource available to man, his own consciousness.

The collective performance of the TM-Sidhi programme subsequently became known as the \textit{group dynamics of consciousness}, while the intensified influence of coherence emanating from such a group was named the \textit{Super Radiance Effect} because of its similarity in principle to the phenomenon of superradiance in laser light.

\textbf{Measures to Intensify Coherence in World Consciousness}

The group dynamics of consciousness brought with it a new level of mastery of the field of consciousness and greatly simplified the task of bringing integration to collective consciousness and harmony to the world. Maharishi gave expression to this new development by declaring 1979 to be the \textit{Year of All Possibilities for Every Nation}.

During this year Maharishi inaugurated the Global Super Radiance Programme, in which the times of collective practice of the TM-Sidhi programme are synchronized around the world in order to greatly enhance the coherence being generated in world consciousness. Maharishi also established a tradition of regular World Peace Assemblies, during which individuals practising the TM-Sidhi programme come together in large numbers to engage in the group dynamics of consciousness. Research conducted on the sociological effects of these assemblies has confirmed the power of the group dynamics of consciousness to promote coherence in collective consciousness and thereby enrich life in society. These studies have further verified the predicted formula for the creation of the \textit{Super Radiance Effect}.\textsuperscript{16}

The success of these measures in raising collective consciousness led to the proposal that every nation equip itself, on a permanent basis, with groups of sufficient size practising the TM-Sidhi programme together, in order to ensure that the highest possible degree of coherence is always maintained in national consciousness. Greatest progress in this direction has been made in the United States, with the establishment of a national coherence-creating group at Maharishi.

International University in Fairfield, Iowa, following the highly successful World Peace Assembly held in the summer of 1979 at Amherst, Massachusetts. Research has shown that since the number of individuals participating in the group dynamics of consciousness at Maharishi International University has regularly approached or exceeded the square root of one percent of the nation’s population, there has been an unprecedented upsurge of positivity in the quality of life in the nation as a whole, as reflected by improvements in indicators of social order, justice, health, education, economic prosperity, marital stability, and safety.

Vedic Science

The growth of coherence in world consciousness in recent years has led not only to a flowering of modern scientific understanding of natural law, but also to a progressive reawakening of the most ancient tradition of knowledge. During 1980, the Year of Pure Knowledge, Maharishi began to reveal in increasing detail the treasures of wisdom from the tradition of Vedic Science, probing deeply into the understanding of consciousness as the fundamental basis of existence.

Vedic Science is the systematic investigation and unfoldment of the knowledge of Veda, the fine structure of pure consciousness. Vedic Science presents a complete picture of the entire range of natural law from its unmanifest source in the unified field of all the laws of nature through all its manifestations in the infinite diversity of subjective and objective creation. Whereas modern science has relied exclusively upon objective methodology to provide reliable knowledge, Vedic Science also incorporates a profound subjective approach which offers universally applicable procedures for the systematic investigation of the whole field of natural law on the level of direct experience. As a result of this remarkable subjective methodology, Vedic Science not only provides precise knowledge of natural law but also enables the individual to command mastery over all the laws of nature by establishing his awareness at the very source of those laws.

In the autumn and winter of 1980, Maharishi conducted an intensive course in Vedic Science in New Delhi, India, which was attended by 3,500 participants from every part of the world. In the highly coherent environment generated by such a large group practicing the group

16. The following papers report improvements in sociological parameters associated with seven large World Peace Assemblies:


17. See first paper referred to in footnote 16 above.

dynamics of consciousness, Maharishi was able to bring out many new and fundamental insights into the fine structure of the unified field of natural law—the Veda—and, aided by the scientists of MERU, to investigate more deeply the profound parallels that exist between the description of nature’s functioning available in Vedic Science and that offered by the latest theories of the different disciplines of modern science. The success of this course inspired Maharishi to name 1981 the Year of Vedic Science, thus giving expression to the rising tide of achievements in this field, and to found an institution dedicated to this precious knowledge, Maharishi Academy of Vedic Science, in Delhi, India.

**Knowledge is Structured in Consciousness**

The central theme of Vedic Science is that ‘knowledge is structured in consciousness’. Consciousness is the *sine qua non* of all knowing: it is the field upon which knowledge is gained. When consciousness is experienced in its self-referral state—pure consciousness—the subject and the object of knowledge are one and the same. It is this state, in which consciousness knows itself, that Maharishi refers to as *pure knowledge*. It is knowledge known to itself alone.

In the structure of pure knowledge Vedic Science locates the total potential of natural law. At first sight it may seem paradoxical that the undifferentiated field of pure consciousness could have any kind of ‘structure’, implying as it does the existence of boundaries. However, with the progressive development of higher states of consciousness, pure consciousness is experienced to be not only the field of absolute silence, but also to contain within itself the property of infinite dynamism in the form of a continuous effervescence of unmanifest impulses.

What is the reason for this? As we have discussed, pure consciousness represents the state of absolute self-referral. This self-referral quality automatically results in the creation of three values: the observer, the process of observation, and the object of observation. Since each of these values remains nothing other than pure consciousness, the field does not lose its unified value even though unmanifest differences have been formed within it, sowing the seeds from which space-time geometry and all other manifest values of creation ultimately arise.

It is most interesting to recall that in quantum physics, supergravity theory also identifies the infinite dynamism inherent in the unified field, and finds the property of self-referral to be fundamental to the sequential process of dynamical symmetry breaking through which the unified field gives rise to the diverse fields of nature. In the Vedic literature the self-referral mechanics of creation are very precisely described from the standpoint of direct experience:

प्रकृति स्वामकष्ट्य विसृजयामि पुनः पुनः
*Prakṛtiḥ svām avāśṭabya visṛjāmi punah punah*
Curving back onto myself, I create again and again.
(Bhagavad Gita, IX, 8)

When consciousness begins to be conscious of itself and to stir within itself in this way, impulses are created within the unmanifest unified field. These impulses propagate and interact
with each other and with the undifferentiated, unbounded field in a very precise and orderly succession. It is this succession of unmanifest impulses, arising from the continuum of self-referral dynamism within the unified field, that forms the structure of pure knowledge—the Veda.

As we have seen from modern science, knowledge has organizing power, enabling the knower to predict and master events governed by the specific laws of nature which he has understood. At the level of pure knowledge, the field of pure consciousness, it is more accurate to say that knowledge is organizing power: pure knowledge contains within its unmanifest structure the totality of natural law responsible for the creation, maintenance, and evolution of the entire universe. The organizing power of pure knowledge is therefore infinite.

In the Veda itself, pure knowledge and organizing power are represented by clearly defined components. The pure knowledge aspect is expressed in the Samhitas—a complete and perfect expression of the total potential of natural law as it emerges from the self-referral performance of the Self. The organizing power aspect of each Samhita of the Veda is expressed by its corresponding Brahmana. In physics a similar pattern is apparent with the Lagrangian representing complete knowledge of the field, and the Hamiltonian the organizing power which governs the behaviour of all manifestations of the field.

Summarizing the theme of Vedic Science, Maharishi has said:

From Vedic Science we have the description of the totality of nature’s functioning in the language of nature itself—the Veda. Vedic Science describes the silent ocean of pure consciousness in the simplest form of human awareness, and explains how, in the fabric of that silence, is woven the infinite dynamism of the innumerable specific laws of nature. This is the Veda, the structure of pure knowledge along with the infinite organizing power inherent within it. This is the language of nature, the self-referral expression of the Veda. This is the total potential of natural law, the field of infinite dynamism at the unmanifest basis of creation, to which human awareness opens in its calm, quiet, collected state—transcendental consciousness.19

Higher Consciousness for Complete Knowledge

The corollary of the principle that knowledge is structured in consciousness is that by developing higher states of consciousness the individual is able to cognize directly, with complete precision, the ultimate reality of existence, the unified field, and to incorporate into his awareness all the laws of nature arising from this common source which are responsible for all structures and processes in the universe. This principle is beautifully illustrated by Maharishi’s analysis of the following verses from Rig Veda.

\[ \text{ऋषिः अवशे परसे व्योमनु} \\
\text{वरिष्णुदेवा अधि विश्वेन निषेष्टुः} \] \\
\text{यस्तः वेदः किमुचा करिष्णति} \\
\text{य इत्तद्वितस्तः हृदे समांते} \]

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

(Rig Veda, I, 164, 39)

This verse describes how the laws of nature expressed in the Veda, by virtue of their character as unchanging constancies, have their existence in the unified field of natural law, the transcendental field of pure consciousness, the Self, which alone has the property of non-change required for it to be their source.

The first part of the verse depicts the mechanics of how the unbounded, unmanifest, homogeneous unified field contains the seeds of diversity; that is, how the blueprint for the manifest universe—the laws of nature expressed in the Veda—are structured in the unified field. The 'collapse of fullness' refers to the self-referral mechanics of creation alluded to above. Maharishi has revealed how this process is described in the first expressions of the Veda: in the course of pure consciousness becoming conscious of itself, the infinite totality of natural law denoted by the very first expression of Rig Veda—অ, 'A'—collapses to a point,—ঋ, 'G'—representing the most localized value of the laws of nature.

This process describes the relationship between infinity (the unified field) and its own point value (the impulses created within the unmanifest nature of the unified field by virtue of its being conscious of itself). Between these two extremes lies the entire range of possible fluctuations of the unified field which, as the verse proceeds to state, involve all the laws of nature responsible for the entire manifest universe.

The latter part of the verse brings out the vital practical implications of the principle expressed in the first half, the essential point being that for knowledge of the laws of nature to have real practical utility and to contribute positively to life, the awareness of the knower must be established in the source of those laws, the unified field. Since it is the continuum of consciousness being conscious of itself which gives rise to the Veda, it must be clear that the Veda, the fine structure of pure consciousness, can be known to pure consciousness alone. It cannot be known in any value of the ordinary waking state of awareness, in which the awareness is localized within specific boundaries of gross perception and thinking.

Maharishi explains that failure to appreciate that the true meaning and practical value of the Veda are only accessible to higher states of consciousness has led to interpretations of the Vedic texts based merely on the meaning of the words as understood from the ordinary waking state of consciousness. The tragic consequence has been that the Veda was thought to represent only rather obscure religious poetry, rather than being recognized for its true status as the full
potential of natural law which is structured in the unified field and which governs the whole universe.

If the awareness is not established in the unified field, then the expressions of natural law—the verses of the Veda—will not be of much value to the knower. On the other hand, when the unified field is known in a self-referral manner—that is, when the knower is established in the Self—then the awareness of the individual becomes the lively home of all the laws of nature, bestowing complete mastery over natural law. Every impulse of thought, speech, and action is then in accordance with all the laws of nature, with the result that nothing is foreign and life is lived in fulfilment, in perfect harmony with the environment.

The great power and generality of the principles expressed in this verse, as well as the extraordinary compactness and precision of expression of the Veda, have been further demonstrated by the analyses conducted by the scientists of MERU, who have located in it the essence of all the most important theories of the major disciplines of modern science, together with their implications for successful application.

Gaining Mastery over Natural Law with Complete Safety

It is important to note that Vedic Science not only offers the basic prerequisite for gaining reliable and practical knowledge of the laws of nature, but also does so in a way that ensures complete safety. The knowledge of natural law gained only in an objective fashion can be used in either a positive or a negative manner—as is clearly evident in the world's ability to use the products of modern science with disastrous effects for the whole of mankind.

In contrast, the knowledge of natural law realized through Vedic Science, while providing man with a firm grip on the laws of nature from the objective viewpoint, cultures and refines the subjective aspect of life—consciousness—so that every impulse of thought and action is spontaneously and permanently in the evolutionary direction. As Maharishi has observed, such a safeguard is absolutely essential for the knowledge of the full potential of natural law, which is so immensely powerful and self-sufficient as to render the whole creative process of nature at the disposal of one single man.

Unfolding the Full Potential of Natural Law in Human Awareness

In keeping with the principles described above, the programme laid out by Vedic Science for systematically exploring the full range of natural law is founded upon the expansion of consciousness. In this process, each of the main areas of Vedic Science contributes to a sequence of steps which may be briefly summarized as follows:

1. The Upangas provide six systems for gaining theoretical understanding and practical experience of the unified field of natural law lying at the basis of creation. The Upangas prescribe the Transcendental Meditation and TM-Sidhi programme through which the individual directly experiences the unified field in the simplest form of his own awareness and gains the ability to
operate from that level of reality. The approach of the Upangas is primarily a mental one although, as is evident from the research in these volumes, the procedures they recommend have a profound influence on the physiology of the individual, eliminating stress and promoting order and coherence in the functioning of the brain. While the Upangas provide essentially all that is required to take a man to higher states of consciousness, further practices are available to ensure maximum rapidity in this process.

2. The Upavedas supplement and enhance the efficacy of the techniques prescribed by the Upangas by providing methods for purifying and restoring balance in the different fields of manifest existence—mind, body, speech, behaviour, and environment—so that they are cultured to support spontaneously the experience of higher states of consciousness.

3. The Smritis evaluate the degree to which pure consciousness has been developed through the regular practice of the Transcendental Meditation and TM-Sidhi programme and test whether balance has been fully restored by the Upavedic prescriptions. If necessary, further specific measures are recommended by the Smritis. The fulfilment of Smriti, which literally translated means memory, is cognition of the Veda, which dawns when perfect balance has been achieved and pure consciousness is fully awakened in individual awareness—when ‘memory’ is regained.

यो जागार तमृचः कामयाने
Yo jāgāra tamrīchāḥ kāmayante

When the total potential of consciousness is fully awake within human awareness, the specific expressions of natural law, the riches of the Veda, spontaneously unfold themselves in the awareness as the internal structures of the field of pure knowledge, the fabric of consciousness.

(Rig Veda, V, 44, 14)

4. Cognition of the Veda: direct experience of the structure of pure knowledge, the expressions of the language of nature, eternally existing in the self-referral value of the unified field. With this experience, the infinite dynamism of the total potential of natural law is enlivened in the simplest form of awareness so that the infinite organizing power of nature is lived in every phase of practical life.

5. The Vedangas provide the means to verify the experience of Vedic cognition and to validate the ability to utilize the total potential of natural law contained in the unified field for the fulfilment of any desire.

6. The Itihasa displays the supreme value of the structure of pure knowledge, the Veda, personified on the practical level of human life.

7. The Puranas present the full range of all possibilities available through the infinite organizing power of nature inherent in the Veda, the structure of pure knowledge. They provide the final strokes of enlivenment and stabilization of all the fundamental impulses of creative intelligence in human awareness for full enlightenment.

Through this sequence of steps, Vedic Science establishes the awareness of the individual in the ultimate reality of life, in which the entire cosmic activity of all the laws of nature is experienced as modes of fluctuation of pure consciousness, the Self.
The Apaurusheya Bhashya

Maharishi’s own cognition of the internal structure of Veda—the *Apaurusheya Bhashya*—represents a unique and brilliant achievement. In the Apaurusheya Bhashya, Maharishi has revealed that the Veda is a progressively elaborated commentary upon itself—each expression of the Veda is a commentary on, and elaboration of, all that has come before. Thus, the first expression ‘A’ and its progression to ‘G’ are expanded upon by the first word—अग्रिम्य ‘AGNIM’; in turn, ‘AGNIM’ is elaborated to form the first verse, which is followed successively by greater and greater elaborations until all four Samhitas—Rig Veda, Sama Veda, Yajur Veda, and Atharva Veda—are fully unfolded.

Based on this cognition, Maharishi’s structural analysis of Rig Veda has been extraordinarily detailed, extending to a complete and integrated picture of the significance not only of the syllables of the verse, but also of the gaps between them and the unmanifest mechanics of natural law that operate within these gaps to transform one expression into the next. The self-unfolding commentary of the *Apaurusheya* or ‘uncreated’ aspect of the Vedic literature (the four Samhitas of the Veda), and the intellectually derived *Paurusheya* or ‘created’ aspect of the Vedic literature are devoted to the elaboration of different aspects of the structure of pure knowledge and its organizing power.

Ayurveda—the Science of Life

In his elucidation of the whole range of Vedic Science, an area to which Maharishi has devoted special attention is Ayurveda—the science of life. Ayurveda is the Upaveda which deals with health, and represents a complete system of medicine whose aim is to create and maintain perfect health for both the individual and society. Working in close collaboration with Maharishi since 1979 has been Dr. V. M. Dwivedi, the greatest living exponent of Ayurveda. As a result of Dr. Dwivedi’s exposition of the principles and practice of Ayurveda, illuminated by Maharishi’s insights into the important role of Ayurveda in the development of higher states of consciousness, interest in this ancient science of perfect health is blossoming throughout the world. Medical practitioners and other health professionals from many parts of Europe, North America, and Asia are now establishing associations dedicated to investigating and applying the science of Ayurveda.

It is, of course, no coincidence that the state of enlightenment should be intimately connected with perfect health. Every step in the development of higher states of consciousness laid out by Vedic Science requires the development of new and higher levels of orderliness and integration in the functioning of the brain, and in the entire physiological system. In turn, perfect health depends upon the ability to live in complete accordance with natural law, which is the hallmark of enlightenment.

Perfect health cannot be achieved by manipulation of isolated aspects of biochemistry, physiology, psychology, or behaviour. It requires instead a completely holistic approach which restores balance in all aspects of life simultaneously by acting from the fundamental source of
life—the unified field. Ayurveda provides this holistic approach by virtue of the fact that every concept, every recommendation, and every treatment in Ayurveda is addressed to the restoration of balance in the operation of the laws of nature from their ultimate basis in the unified field. In Ayurveda, all aspects of physiology, medicine, and health are directly linked to the unified field of all the laws of nature; the principles and practice of Ayurveda are derived from the language of nature itself, the Veda, the structure of pure knowledge inherent in the unified field. As a result, Ayurveda is both the most profound and the most natural system of medicine.

The essence of the Ayurvedic approach to health is to establish perfect balance on all levels of individual and collective life, thereby preventing the occurrence of any weakness which could result in disease. Ayurveda advocates two complementary approaches in order to achieve this goal. First, it is recommended that the awareness of the individual is established in the unified field. Ayurveda therefore lays absolute emphasis on the regular practice of the Transcendental Meditation and TM-Sidhi programme as the essential element in the maintenance of perfect health.

Secondly, Ayurveda provides means for directly adjusting the physiology at the physical level by a variety of measures, including recommendations for daily routine and activities appropriate for different climatic and seasonal conditions, dietary regimens, and the use of medicines based on the vast pharmacopoeia and highly developed pharmaceutical methods laid out in Ayurveda. Through these measures, perfect balance is promoted in physiological functioning, which in turn supports the experience of the unified field in the awareness of the individual.

Through this dual approach from both subjective and objective angles, life is brought into complete accordance with natural law. Since no law of nature is violated, no ground is created for sickness or suffering. In this way, Ayurveda fulfills the ideal of preventive medicine, and also includes within its scope the cure of disease and the promotion of perfect health and longevity.

**Achievements in the Direction of Immortality**

The promotion of longevity is, in fact, the concern of an entire branch of Ayurveda known as Rasayana, or rejuvenation and restoration therapy. Rasayana plays a central role in the achievement of the ultimate goal of Ayurveda which is captured in the aphorism:

अयुर्वेदोद्धर्मानां

*Āyurveda amrītaṇāṁ*

Ayurveda is for Immortality.

(Charaka Sūtras, 25, 40)

Maharishi explains that immortality is the character of the source of all existence—the unified field—and that because Vedic Science as a whole, including Ayurveda, acts to establish life on this firm basis, immortality can become a reality in human life.
Ageing comes about when the individual does not know how to breathe life in the totality of natural law. The complete study of ageing requires the study of not only physical values but also the source of life, the field of pure consciousness, which is pure life itself, the home of all the laws of nature.

The evolutionary trend of life should not include the element of ageing, but ageing enters into it unlawfully, illegally. Evolution is certainly a system of change, but change does not have to impede life; it does not have to involve decay, because change is structured in non-change. It is non-change that appears as change, and non-change is just immortal. Therefore the son of immortality does not have to be mortal.

The cause of the immortal becoming mortal is simply loss of memory—loss of the memory of pure consciousness. This loss is not natural; it is an abnormality which is restored by the strokes of pure knowledge. In the ultimate analysis this restoration is purely on the level of awareness, since in the ultimate analysis ignorance is purely a matter of awareness. That is why enlightenment is just a matter of consciousness awakening.

Nothing happens in the state of enlightenment other than the awareness of unboundedness, the awareness of immortality. Ageing at its basis is rooted in ignorance, and the final strokes of neutralizing ageing are accomplished by an awakening of the full potential of consciousness, which takes life to immortality.

Vedic Science demands that we open our awareness to its full potential. The formula is: Transcend—open your awareness to the home of all the laws of nature, and then stabilize the home of all the laws of nature in your awareness. In this way you will spontaneously behave in accordance with all the laws of nature.

Spontaneity of action in accordance with all the laws of nature is the only way to eliminate the process of ageing. The total value of natural law has to become a living reality; no aspect of natural law must be violated—then immortality will be a continuum. This is the gift of Vedic Science.20

In view of the emphasis placed by Ayurveda on regular practice of the Transcendental Meditation and TM-Sidhi programme, it is interesting to note that research reported in this volume has focused on the effects of these techniques on the ageing process. Studies employing standardized indices of physiological age have revealed that these techniques act to retard and even reverse the deleterious changes that occur with biological ageing.21 In the light of these remarkable findings it is of great interest to observe that many of the physiological and psychological effects of the Transcendental Meditation and TM-Sidhi programme documented by research are directly opposite to the deteriorations that are associated with advancing age, or are such as to beneficially influence the factors that are most closely associated with longevity and the maintenance of good health in later life.22

From the perspective of modern physiology, various factors are likely to be important in the mechanism of the effects of the Transcendental Meditation and TM-Sidhi programme on the ageing process. These include stress reduction, more efficient homeostasis, and increased integration in the functioning of the central nervous system. Most fundamentally, however, the Transcendental Meditation and TM-Sidhi programme can be seen to enliven in physiological functioning the quality of self-referral which is inherent in the unified field. Self-referral is the essence of the homeostatic feedback mechanisms which maintain stability in the internal physiological milieu and enable the body to adapt to a great range of different circumstances. With the enlivenment of this property, every aspect of the physiology remains in tune with its unified source in the self-referral functioning of DNA, the most basic material expression of the unified field in the physiology and the source and governor of all structures and functions in the body. This results in improved balance in physiological processes and perfect integration of mind, body, behaviour, and environment.

The Transcendental Meditation and TM-Sidhi programme is now being increasingly recognized as a breakthrough of unparallelled importance in the field of health. Beginning in 1978, thousands of physicians from nations around the world have joined and contributed to Associations for Perfect Health through the Transcendental Meditation and TM-Sidhi programme in order to promote the use of this technology for the attainment of the highest standards of health in their countries.

Perfect Health for Society

Physicians everywhere are now recognizing that their responsibilities extend to the health of society as a whole. All problems in society may be seen as problems of health, and like individual illnesses, may be traced in their aetiology to violation of the laws of nature. Ayurveda teaches that when an individual violates the laws of nature, he not only creates disturbances in his own health but also produces stress in the collective consciousness of society. If allowed to accumulate this results in disorders of collective health, manifesting as economic, political, and social problems. History shows us that, like individuals, civilizations which do not continuously evolve and maintain their integrity become subject to the ravages of ageing and decay, eventually disappearing altogether.

Due to the lack of effective technology, the medical profession has in the past been unable to meet its responsibilities for the health of society. The discovery of the Maharishi Effect and the introduction of the group dynamics of consciousness have now provided the key to the maintenance of collective health and the formula to prevent and reverse the ageing process of society.

The final verses of Rig Veda describe how the collective functioning of a group of individuals from the unified field of natural law—the field of 'wholeness' or perfect health—is the foundation for greater and greater values of wholeness in the creation of an enlightened society.

23. Deoxyribonucleic acid, which constitutes the genetic material.
Go together, speak together, know your minds to be functioning together from a common source, in the same manner as the impulses of creative intelligence, in the beginning, remain together united near the source.

Integrated is the expression of knowledge, an assembly is significant in unity, united are their minds while full of desires. For you I make use of the integrated expression of knowledge. By virtue of unitedness and by means of that which remains to be united, I perform action to generate wholeness of life.

United be your purpose, harmonious be your feelings, collected be your mind, in the same way as all the various aspects of the universe exist in togetherness, wholeness.

(Rig Veda, X, 191, 2–4)

**An Integrated System of Education**

The unique synthesis of the intellectual understanding of the unified field developed by modern science and the direct experience of the unified field provided by Vedic Science forms the basis for an integrated system of education through which every individual can gain the benefit of holistic knowledge of natural law, enabling him to think and act spontaneously in accordance with all the laws of nature.

Education, lacking such an integrated approach, faces a crisis. As knowledge is gathered concerning an ever-increasing array of phenomena, education is confronted with the need for growing specialization in every field of learning. The horizon of scientific knowledge has, by now, become so vast that it can take a man a lifetime to study even one highly specialized field. Moreover, despite the enormous amount of information provided, education has failed to develop the individual's inner resources of creativity and intelligence. Even while becoming familiar with the knowledge of natural law contained in the various fields of scientific study, a man gains no education in how to live life in accordance with all the laws of nature, free from mistakes, sickness, and suffering.
Maharishi University of Natural Law

It was in order to remedy this deficiency in education that Maharishi founded a worldwide educational institution—Maharishi University of Natural Law—dedicated to bringing the integrated system of education to people from all walks of life in every country. The inauguration of this new university took place in April 1982, the Year of Natural Law, at the historic setting of Mentmore, Buckinghamshire, England, the British seat of the World Government of the Age of Enlightenment. Later in the same month, 1008 Maharishi Colleges of Natural Law were established in 108 countries around the world, making Maharishi University of Natural Law a truly global university.

Speaking at the inauguration, Maharishi commented:

Maharishi University of Natural Law is unique in every way; it is unique in its structure of knowledge, unique in its system of imparting knowledge, and unique in the result of gaining knowledge, all of which are holistic in their value.

While the usual concept of a university has been to make all knowledge available in one campus, Maharishi University of Natural Law makes available all branches of knowledge in one package of knowledge, and structures the totality of knowledge in one single awareness. The system of imparting knowledge at this university follows the system of expression of natural law itself, in which the totality of natural law is always lively and is always supportive of its own expressions, which uphold the specific channels of organizing power of nature. The emphasis in the courses of Maharishi University of Natural Law will be on the holistic knowledge and experience of natural law in order that the totality of the organizing power of nature dawns in human awareness.

Maharishi University of Natural Law offers the fruit of all knowledge to everyone; it enlivens the infinite creative power of natural law in human awareness and bestows complete mastery over natural law. The development of this complete and integrated approach to education is the direct means to bring individual and collective consciousness everywhere in alliance with natural law and raise every nation to enjoy cultural integrity, self-sufficiency, and invincibility.

The integrated system of education offered by Maharishi University of Natural Law is very firmly grounded not only in principle but also on the practical level of verification of its efficacy. The principles underlying this integrated system have been validated through personal experience of the benefits of Transcendental Meditation by millions of individuals around the globe. Furthermore, research on both the individual and society has confirmed that the development of higher states of consciousness enriches every aspect of life.

A close appraisal of the scientific literature on the Transcendental Meditation and TM-Sidhi programme reveals two principal and complementary features. The first is the extraordinary range and depth of the effects of these techniques extending from changes in cellular biochemistry to a holistic development of personality, and from increased orderliness and coherence in brain functioning to increased coherence in the behaviour of society as a whole. Secondly, these findings taken together present a thorough experimental documentation of Maharishi’s description of the growth of life in accordance with natural law, as reflected in increased integration, stability, and efficiency at all levels of physiological, psychological, and behavioural functioning, together
with a simultaneous enrichment of the environment. The overall pattern of findings builds up a picture which portrays a fundamental and unique process of human growth, a balanced and integrated evolution of mind, body, and behaviour towards the state of perfect functioning known traditionally as enlightenment.  

24. Research contained in each of the volumes of Collected Papers includes findings of particular relevance to academic life, such as increases in intelligence, creativity, memory, learning ability, and speed in solving problems, improved academic performance, broader comprehension with improved ability to focus attention, and enhancement of perceptual acuity and mind-body co-ordination.  

25. Studies demonstrating increased integration of brain functioning and other improvements in physiological parameters bring out a very important difference between previous approaches to education and the integrated system offered by Maharishi University of Natural Law: instead of being merely on the level of information, the knowledge gained at this university is grounded in the physiology of the individual. As a result, Maharishi University of Natural Law not only fosters intellectual skills and understanding but also promotes the growth of integration in personality, perfect health, and the development of life-supporting behaviour.

26. Maharishi University of Natural Law draws upon more than a decade of experience of education based on the development of higher states of consciousness at Maharishi International University, which was founded by Maharishi in 1971 in the United States. Maharishi International University (MIU) has pioneered education according to the basic formula of the integrated system now being offered by Maharishi University of Natural Law. Through this approach to education the students of MIU have achieved not only outstanding academic and professional success but have also grown in the qualities of enlightenment.

27. A further vital feature of the integrated system of education that can be seen emerging from the results of research on Transcendental Meditation, and from the achievements of MIU, is

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24. For a concise summary of the findings of specific studies on Transcendental Meditation and their relevance to other research in this field, the reader is invited to consult the introductions to the different sections contained in these volumes.

25. These studies can be found in the sections on Intelligence, Learning, and Academic Performance, and Motor and Perceptual Abilities in the three volumes of this series. The reader is also invited to consult the review papers contained in Volume 2 which discuss the importance of the Transcendental Meditation and TM-Sidhi programme in education.

26. As discussed in the introduction to Volume 1, in 1971 Maharishi had already formulated a comprehensive theoretical framework—the Science of Creative Intelligence—in order to describe in a systematic manner the universal principles guiding the nature and unfoldment of creative intelligence both in human life and at every level of creation. This science, of which the Transcendental Meditation and TM-Sidhi programme is the practical aspect, has formed the foundation of education at MIU. The Science of Creative Intelligence contributes to, and finds its fulfillment in, the synthesis of objective and subjective approaches to knowledge embodied in the Maharishi Technology of the Unified Field.

27. At its central campus in Fairfield, Iowa, MIU offers the integrated system of education from primary school to post-doctoral level, including academic programmes leading to the degrees of: Ph.D. in the Neuroscience of Human Consciousness; Master of Business Administration; Master of Arts in Education and Higher Education Administration; Bachelor of Arts and Bachelor of Science (in thirteen undergraduate majors). In addition, MIU College of Natural Law in Washington, D.C., offers MIU's first year curriculum and special programmes in the field of Natural Law and Invincibility. Doctoral and Master's programmes in a number of other disciplines are to be added in the near future.
the role of educational institutions as 'power houses' for the maintenance of a high level of coherence in collective consciousness. As Maharishi has observed, through their participation in the group dynamics of consciousness even children can become the guardians of national well-being. 'While learning to read, to write, and to play, they will also be contributing to the coherence of national consciousness, thereby blessing the nation with security, harmony, and prosperity'.

The ability of this system of education to realize the highest ideals of mankind in every sphere of life has been further illustrated by work at MERU showing that all the beautiful tenets and goals expressed in the constitutions of the nations of the world, and in the scriptures of the great religions, are fulfilled by the scientifically documented effects of the Transcendental Meditation and TM-Sidhi programme. The historic development of modern science coming in attunement with Vedic Science has thus given birth to an educational system worthy of the Age of Enlightenment, a system which fulfils the ultimate goal of education in the creation of an enlightened individual and an ideal nation.

The Year of the Unified Field

Every age bears the stamp of its technology. Throughout history technological innovations harnessing new aspects of the organizing power of natural law have repeatedly transformed the nature of civilization. Such innovations can often be seen to reflect a guiding theme which has permeated the thought, the administration, the culture, and the military science of the age.

In the modern era, the rapid pace of scientific progress has led to an unprecedented flow of technological advances. As knowledge has deepened, technology has become progressively more powerful and far-reaching in its effects. While many comforts and conveniences have been added to life as a result, these have been accompanied by a corresponding growth in destructive potentialities. This is most clearly evident in the case of chemical, electronic, and, particularly, nuclear technologies which have even reached the point of threatening man's existence on earth. Such technologies, based as they are on the diversified levels of natural law, have inevitably produced both positive and negative effects. Only a technology founded on the total potential of natural law located in the unified field can be completely balanced and holistic, and only such a technology can harness the infinite organizing power of nature to enrich all areas of life and neutralize the destructive capabilities of technologies based on partial values of natural law.

At the inauguration of the dawn of the Age of Enlightenment, Maharishi observed that we are witnessing a global transformation which is influencing every area of human society, taking life from the inevitability of problems and suffering to fulfilment and unlimited progress. With this transition, entirely new principles are rising to guide life in the Age of Enlightenment, which are completely opposite to those which prevailed in the age of ignorance. The discovery of


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the unified field of natural law by modern science has provided the crucial insight into the knowledge which will provide the guiding theme of life in the Age of Enlightenment. In recognition of this fact, Maharishi inaugurated 1983, the ninth year of the Age of Enlightenment, as the Year of the Unified Field.

The discovery of the unified field has now found its application in the Maharishi Technology of the Unified Field, the technology to utilize the total potential of natural law. Appropriately, this pinnacle of achievement comes at the time of global celebrations of the Silver Jubilee of Maharishi's worldwide Transcendental Meditation movement. Maharishi chose to inaugurate the Silver Jubilee Celebrations by presenting to the world the invincible defence strategy based upon the Maharishi Technology of the Unified Field.

**The Invincible Defence Strategy**

In no area of human concern is it more urgent that mankind harness the full potential of natural law than in the field of defence. Nuclear weapons have in fact made defence non-existent in the world today. The resolution of this state of affairs demands the application of a technology based upon a more fundamental and hence more powerful level of natural law than is available at the nuclear level. With the discovery of the unified field of all the laws of nature, modern science has located the most basic field of existence in nature, the power of which far exceeds the power of the nuclear level of matter and energy. The Maharishi Technology of the Unified Field offers a strategy of defence which utilizes the infinite power and intelligence present in the unified field. This formula for invincible defence was presented to the governments of all nations through the major daily, weekly, and monthly newspapers and news magazines of the world. The text of this offer appears on the following page.

Research on the Transcendental Meditation and TM-Sidhi programme has shown that this technology increases order and coherence at all levels of life, from coherence in the functioning of the brain to coherence in society as a whole. A universal principle in nature is that coherent systems display the property of invincibility. This is seen, for example, in the Meissner Effect in physics, whereby a superconductor is able to divert the disordering influence of an external magnetic field by virtue of the coherent behaviour of the electrons within it. The Maharishi Technology of the Unified Field brings this principle into operation in society. Through the group dynamics of consciousness coherence is generated in collective consciousness, bringing national consciousness in alliance with the total potential of natural law. The nation then enjoys the protection of the invincible power of natural law against disruption from within or without.

Destructive means of defence can, at best, serve only to postpone confrontation by leaving the enemy in a perpetual state of fear. Moreover, history records that ultimately, destructive means of defence have always proven suicidal for any nation. The only effective means of defence that can truly be established in this nuclear age is the ability to prevent the birth of an

29. The Meissner Effect and other physical models illustrating the principles underlying invincibility are discussed in more detail in the introduction to Volume 2.
ALLIANCE WITH NATURAL LAW

INVINCIBLE DEFENCE STRATEGY

THE WORLD GOVERNMENT OF THE AGE OF ENLIGHTENMENT OFFERS to every government the invincible strategy of defence, which uses the infinite power and intelligence concentrated in the unified field of all the forces of nature. This will neutralize the destructive capabilities of all those who possess the power of destruction found at the electronic and nuclear levels.

Today, when the fear of annihilation has enveloped the family of nations, and the inevitable dependence on other nations has robbed each country of its natural freedom, Maharishi has made available the integrated science of natural law composed of the objective approach of modern science and the subjective approach of ancient Vedic Science which provides a technology to raise any nation to command the infinite power of natural law.

Here is the opportunity for every nation to restore its dignity and freedom and perpetually maintain its sovereign status.

Any government can utilize this strategy of invincible defence. The technology has been developed, tested, and proved; now it is just a matter of applying it and gaining the invincible authority of the total potential of natural law.

This will reinforce any existing strategy of national defence in any country and will bring national self-reliance, self-sufficiency, and the dawn of real freedom in invincibility, even to the smallest nation.

In this nuclear age, when every nation is incapable of defending itself, when the United Nations has declared its failure to serve as a unifying platform, when the Security Council survives only in name, when the superpowers themselves are most afraid of each other, and when every nation is at its wit's end to find a real friend when in need, the World Government of the Age of Enlightenment offers indomitable strength to every nation through Maharishi's invincible technology of defence which uses the infinite potential of the unified field, the source of all intelligence and power in nature.

Alliance with natural law is the only way now for any nation to survive with the dignity and freedom that should belong to any sovereign state.

Alliance with natural law is the clarion call of our scientific age. Strategies of defence using the electronic and nuclear levels of nature threaten total annihilation. Alliance with the unified field of natural law offers invulnerable security—invincible defence. Each nation is invited to make its choice.

Ministry of Natural Law and Order, World Government of the Age of Enlightenment, International Capital of the Age of Enlightenment, Seelisberg, Switzerland

Telex 72800 MERU CH

This gift of Invincibility to Every Nation inaugurates the Silver Jubilee Celebrations of Maharishi's worldwide movement, 1957 - 1983.
enemy. Any country which does not possess the knowledge and skill to prevent the birth of any enemy, or transform enmity into friendliness, cannot guarantee the security of the nation, whatever may be the extent of its nuclear armoury.

Maharishi locates the root of enmity as stress in national consciousness which, in turn, is the result of violation of natural law. By coming into alliance with natural law through the Maharishi Technology of the Unified Field, a nation can eliminate the weakness in its own structure caused by violation of the laws of nature and, at the same time, neutralize negative tendencies arising beyond its borders. The Maharishi Technology of the Unified Field thus offers the means through which any nation can rise above fear by disallowing enmity to grow within or around it.

Explaining the need for the invincible defence strategy, Maharishi has said:

It is beneath the dignity of any sovereign state to depend on other nations for its security. Moreover, it is clear that military alliances have failed to ensure the safety of nations. The only desirable alliance for any nation seeking self-sufficiency and invincibility is alliance with the total potential of natural law inherent in the unified field. There is no power greater than natural law; there is no friend greater than natural law. Nature is the perfect organizer. The invincible evolutionary power of natural law alone can bind together the innumerable divergent tendencies in the family of nations and simultaneously lead them all to fulfilment.

Here is the perfect strategy of defence for any country, large or small: looking within ourselves we become strong through alliance with natural law. Through this strategy every nation can now rise to invincibility, enjoying internal harmony and stability, and friendly relations with all nations. Invincibility for every nation is the only sure foundation for permanent world peace.

Wisdom demands that the government and the people of every country take recourse to this timely formula for alliance with natural law and utilize the skill of nature to ‘avert the danger that has not yet come’. Victory before war is the clarion call of unified field based defence.30

A Purusha for A Government

So essential for every government is the maintenance of an integrated national consciousness that Maharishi has introduced the concept of a new profession in society, dedicated to enlivening the unified field of natural law in collective consciousness. From the findings of sociological research mentioned above, it can be seen that a single group of individuals numbering the square root of one percent of the nation’s population, engaged in the group dynamics of consciousness, is sufficient to maintain national consciousness in an integrated state, bringing the nation in alliance with natural law.

Such a group has been called by Maharishi a Purusha, denoting in the terms of Vedic Science the holistic value of consciousness which is embodied in the unified field, and which is

enlivened in collective consciousness through the group performance of the Maharishi Technology of the Unified Field. Through the establishment of a Purusha, every government can guarantee that the collective consciousness of the nation, the true governor of government, becomes integrated. By maintaining integration in national consciousness the government lays the only firm foundation for its own strength and success and for the fulfilment of every aspect of national life.\textsuperscript{31}

National Law and Natural Law

When considering the importance of the Maharishi Technology of the Unified Field for government, it is interesting to note Maharishi’s analysis of the connection between natural law and national law. Natural law, which has its source in the unified field, governs the functioning of nature at every level of existence. The enormous variety found in the expressions of natural law is reflected in the diverse trends and tendencies displayed by the individual citizens of a nation. It is this diversified structure of natural law which gives rise to the necessity for national law: man-made laws to regulate and administer the trends and needs of the various segments of society. National law therefore has its ultimate basis in natural law.

In order to fulfil its purpose, national law must satisfy the diverse needs of every individual and organize for the mutual fulfilment of all citizens of the nation. Until now, it has not been possible for governments to meet the needs of every citizen; the individual’s needs and freedom have inevitably been compromised in the interest of the majority. As a result growing frustration has developed in the lives of many citizens, leading to the emergence of problems of all kinds including social unrest, crime, and other forms of disorderly behaviour throughout society.

In the unified field of natural law we find a perfectly balanced coexistence of all the innumerable diverse aspects of nature’s functioning.\textsuperscript{32} From this unified basis, natural law administers the entire universe with supreme precision and efficiency. Alliance with the full potential of natural law contained in the unified field not only ensures the success of the individual’s endeavours by making available the support of all the laws of nature, but also guarantees that the interests of society are simultaneously promoted. When life is lived in accordance with natural law, violation of the laws of nature ceases, eliminating the root of problems in society. National law will no longer require the element of fear which has previously been found necessary to maintain law and order, and will become as effective and enriching as natural law, bringing fulfilment

\textsuperscript{31} In the Absolute Theory of Government, Maharishi explains that government is not an independent organization, but rather is an innocent mirror of the collective consciousness of the nation, faithfully reflecting whatever is presented to it. This principle has been considered in the introduction to Volume 2 in connection with the establishment of the World Government of the Age of Enlightenment in 1976. For a full discussion, the reader is referred to: Maharishi Mahesh Yogi, \textit{Creating an Ideal Society} (Rheinweler, West Germany: MERU Press, 1977).

\textsuperscript{32} This is clearly evident in supergravity theory, which reveals that the unified field possesses the property of complete balance between the opposite qualities of natural law, for example between the fermi fields that create difference and structure and the bose fields that create effects of coherence, and also between the internal quantum symmetries and the external large-scale symmetries of space-time.
to the needs of every citizen. The enormous resources of the government, which are currently diverted into the management of problems, can then be freed to promote progress and prosperity.

**Continental Capitals of the Age of Enlightenment**

In order to bring the Maharishi Technology of the Unified Field into operation in every nation as rapidly as possible, and to perpetuate the application of this knowledge for generations to come, the World Government has now established Continental Capitals of the Age of Enlightenment on each of the six continents of the world. The Continental Capital will provide the resource of knowledge and expertise through which any government can bring its country into alliance with natural law and will at the same time take the necessary steps to ensure that the collective consciousness of the entire continent will always be maintained in a state of integration. Each Continental Capital will sponsor programmes to provide the knowledge that will enrich every aspect of community life and enliven the full organizing power of nature for unrestricted progress and achievement, providing a better quality of life in every part of the world.

An important aspect of the work of the Continental Capital will be to equip governments with reliable means of monitoring the rise of coherence in collective consciousness resulting from the implementation of the Maharishi Technology of the Unified Field. To this end, scientists at MERU have developed the MERU Ideal Society Index, which provides measures compiled from objectively verifiable criteria in eight areas of society: education, health, law and order, business and industry, government, agriculture, environment, and social welfare. The numerical values derived using the MERU Ideal Society Index may be displayed as a ‘barometer’ to record the progress being made in the different areas of society and in the nation as a whole. As a visible indicator of the rising quality of life, such a barometer will serve as an inspiration to all members of the community and will also enable the leaders of society to ensure that all areas of national life are growing as rapidly as possible towards fulfilment.

**Governments Invited to Solve Their Problems**

The World Government of the Age of Enlightenment, acting on Maharishi’s inspiration, has recently extended an invitation to all governments announcing its readiness to solve their problems, regardless of the magnitude and nature of the difficulties and irrespective of the system of administration in operation in the nation. The text of this announcement is reprinted on the following page.33

Astounding though this offer appears, it is, we suggest, the only logical conclusion to be drawn from the principles, the experimental findings, and the practical experience which lie at the foundation of the Maharishi Technology of the Unified Field. Throughout its history, the achievement of science has been to bring the impossible into the realm of the possible. Now, the discovery of the unified field of all the laws of nature and the availability of the means to unfold

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33. This offer was again made through the major national and international press of the world.
GOVERNMENTS INVITED TO SOLVE THEIR PROBLEMS

THE WORLD GOVERNMENT OF THE AGE OF ENLIGHTENMENT ANNOUNCES its readiness to solve the problems of any government regardless of the magnitude and nature of the problem—political, economic, social, or religious; and irrespective of its system—capitalism, communism, socialism, democracy, or dictatorship.

Governments are invited to contract with the World Government of the Age of Enlightenment to solve their problems on the basis of cost reimbursement after the target is reached.

1983 can be the year of fulfilment for every government.

- Complete confidentiality is assured.
- Consultations, discussions, deputations, and feasibility studies may not be necessary because every government already knows what must be achieved, and the World Government has already developed techniques to fulfill any requirement.
- The government will set the target, specify the stages, and determine the criteria of success at each stage.
- The World Government of the Age of Enlightenment will design the project accordingly and implement it.
- The first step will be a letter of intention from the government to the Minister of Education, World Government of the Age of Enlightenment, Seelisberg, Switzerland.
- The contract will be drawn up by a mutually acceptable international law firm in conjunction with an international bank.

It is hoped that every government takes this announcement in the same spirit of absolute sincerity, simplicity, and confidence with which it is being proclaimed in favour of life, happiness, and harmony in the family of nations.

"With the blessings of Guru Dev, life on earth now is on the doorstep of the perpetual sunshine of the Age of Enlightenment."

—Maharishi

This invitation to all governments to solve their problems is a wave of fulfilment of the Silver Jubilee Celebrations of Maharishi’s worldwide Transcendental Meditation movement (1957-1983).
the full potential of natural law in individual and collective life have opened to science a domain of previously unimaginable richness—indeed a field of all possibilities.

For the first time it is open to every member of society to participate in the vanguard of scientific advancement and, moreover, to have the privilege of applying the very latest scientific knowledge for the betterment of themselves and society. This has become possible because science has found that the full potential of natural law and its infinite organizing power are available in the awareness of every individual. No longer is the growth of science and technology the exclusive province of specialists, or dependent upon complicated and expensive machinery. Anyone who knows how to properly utilize the necessary 'hardware'—the human brain—through the Maharishi Technology of the Unified Field, can gain mastery over all the laws of nature. As Maharishi has commented, 'Human brain physiology is that hardware of the cosmic computer which, through proper programming, can draw upon the cosmic software of nature to accomplish anything'.

While the Maharishi Technology of the Unified Field represents in a very real sense the achievement of the ultimate goal of science, it is also just the beginning. For in the application of this technology, the potential for enrichment of all areas of life is endless—the unified field of all the laws of nature is a resource which can never be exhausted, and there can be no end to the play and display of its infinite creative intelligence. Thus, while the long and sometimes arduous search for an understanding of the unity of nature has reached its destination, the path of real fulfilment for science stretches out endlessly ahead, for it is in the application of scientific discoveries that their real fruit is enjoyed.

At this time in the evolution of mankind, it is the unique privilege of the leaders of government, members of the scientific community, and the custodians of every area of society to be in a position to implement the Maharishi Technology of the Unified Field and thereby realize in their nation Maharishi's gift of the full sunshine of the Age of Enlightenment. In Maharishi's own words: 'With the mastery over natural law that is now in our hands, we are standing at the doorstep of utopia'.

Maharishi European Research University
Seelisberg, Switzerland
October 1983, the Year of the Unified Field
Ninth Year of the Age of Enlightenment

34. Maharishi Mahesh Yogi, Lecture delivered at the International Capital of the Age of Enlightenment, Seelisberg, Switzerland, August 1983.