UNDERSTANDING THROUGH THE ANCIENT WISDOM AND MODERN SCIENCE

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The Question

We are all aware that our planet Earth is a place of diverse qualities and happenings, where the beautiful and the ugly can be found side by side, where joy and sadness exist next door to each other. Above all, we know that pain and suffering are dominant notes in the human world. This is most evident if we look beyond the borders of our own favored land and observe the pattern of want, and all its attendant miseries, which exist in so many countries.

However, even when conditions are such that abundance of food and other necessities, and even luxuries, are the rule, still very few of us escape the grinding pressures which arise in the course of a lifetime from things concerned — particularly in this age — with body, possessions, relations and prestige. It seems to be in the nature of human earth life for the depressing, the painful days to outnumber the days of happiness and well-being. We are forced to accept these facts of our existence, but ever the question comes to us, what is the explanation for all this, and how can we attain the understanding which will bring some measure of tranquility to our lives?

The purpose of this paper is to consider this question and to suggest that the answer can be found in wisdom which has come down to us through the ages and to demonstrate that the answer we obtain from this source is validated by the data of modern science.

The Search for Truth

The search for truth, for understanding, is a necessary part of our lives. We want to live harmoniously and effectively, so we look for knowledge which will help us to avoid turbulence, to avoid pain and suffering, and to achieve health, happiness and serenity. We want to know how things really are. There are so many ideas that appeal to us, that promise wider horizons of consciousness, but which, in the course of time, lose their luster and their appeal. There is in us the instinctive feeling that knowledge really does give us the power to make more out of our lives, the power to step into new realms of living which will bring to us increased stability and integrity. Most of us take it for granted that it is possible to know the truth and that the truth will make us free. We believe that somewhere there is a key which will serve to unshackle us from the pain and trouble which, sooner or later, clouds the lives of nearly all of us.

But how are we to find the knowledge we need, what criteria are there which will

enable us to know the truth when we encounter it? All about us there are systems of teachings, religions, philosophies, and each claims to have the truth, but the difficulty, for us, is how to appraise these conflicting claims, how to know fact from fancy, the more true from the less true.

There was a time in medieval history when Western humanity tried to gain assurance and security through the church. People gave up thinking about their problems and difficulties and just simply accepted what they were told by the church leaders. It was a retreat, a surrender, an admission of helplessness before the enigmas of life. Human beings attempted to solve all their troubles by a simple appealing formula. Everything which happened was either the Will of God or the work of the Devil. The church came to occupy a place in people's mind of which it is difficult for us to conceive in our present age. The people of those centuries of the past looked to the church not only for things of the spirit but also for the health and well-being of their bodies and for their material welfare. Science and philosophy were cast in the reflection of religious dogmas. The mind of each man and woman was something to be kept in order and in conformity with prevailing ideas. Original thinking was not encouraged. The problems of the world and of human beings were neatly solved by the all-inclusive formula. They were manifestations of the Divine or Satanic Will. When the great plagues decimated human populations, there was nothing that could be done, and when innocent babies suffered and died, no questions could be raised. It was the Will of God.

For a thousand years in the Western world, there was this complete surrender to teachings fostered by individuals who assumed to know the Divine Will. Today, as we all know, most people still follow this same tradition and are obedient to that which their leaders tell them is the way and the truth. Yet always there are the few who refuse to believe blindly but insist on thinking for themselves. Some of these spoke up here and there during the Dark Ages, and not infrequently at the cost of their lives. But finally, through these independent thinkers, humanity again asserted itself and became free of church domination. There was once more the privilege to investigate, to search and to think. The modern age of science then came into being.

Now, in these days when superstition and dogma given out in the name of religion are on the wane, there is still the problem of discrimination between the true and the false. Many who, in this age of freedom, have the right to think and believe as they please, have traded the dogmas of those who claimed to speak in the name of religion for dogmas of those who are assumed to speak in the name of science. Most of the people in the Western world today are chained as securely by the concept of materialism as their ancestors were by the primitive worship of the Dark Ages. The overemphasis on the material has affected almost every one of us, whether we are conscious of it or not. This pernicious influence is evident in religion, art, and philosophy. We reveal it in the ruling motives of our daily living and even in the way we dispose of our dead.

Worship of the material side of life inevitably leads to a sense of insecurity. Physical forms and things are transitory, and as we identify ourselves with them, then simple logic indicates temporary existences for us and for those near us. We are akin to people crowded on a sinking ship far from land. There is a breathless pre-occupation with our

own situation and little heed of the trials and troubles of our fellow beings, aside from immediate family and friends. Today, the material side of life looms above everything else and in the center of it all is the physical body, with which the modern man identifies himself and his loved ones. We have swung from medieval superstitious worship of the unseen to an equally fanatical worship of the seen.

But also there are an increasing number who are dissatisfied, who refuse to be unthinking followers of authority and tradition, whatever their source, whether in the name of science or religion. These independent seekers of understanding will not be pushed aside from their objective by custom, by the sarcasms of their believing brethren, or by the labels so freely bestowed on anything which deviates from the prevailing faith. This relatively small group in our total population wants more than some person's "say so." They seek concepts, thoughts, ideals, which in some way, can be assayed for their truth.

Scientific Approach to Truth

It is a strange paradox that in this age of subservience to the principle of materialism, there is in use a method which gives us criteria for evaluating the truth of knowledge. It was the introduction of this way to truth which initiated our modern era of science. We are as yet witnessing only the bare beginning of this principle in the search for truth, yet already it has revolutionized humanity's position on this planet. It is a very simple way to find out something of the reality in us and in nature, and without it mankind flounders in uncertainty and futility.

There are various ways to valid knowledge, and each approach supplements and helps to support the others. We can receive knowledge from a great teacher, an inspired being who has developed far beyond our status but, by themselves, truths received in this way soon deteriorate and become polluted by the injection of modifications and additions from other sources. We can contact truth by way of intuition and a few have this faculty so well developed that it serves as a check on the validity of the knowledge assumed to be from an inspired source. Then we have the use of our reasoning faculties which enables us to assess the consistency, the logic of new ideas. But all of these methods have a certain limitation which, if uncorrected, leads to error and distortion. By these approaches to truth there is no way to gauge the error introduced by subjective or personal factors. In order to eliminate this defect we must have the reactions of a number of careful, critical observers. When several people of varying backgrounds, prejudices and preconceptions observe the same phenomena, the common picture of what they see tends to cancel out personal elements. That upon which they are all agreed can be accepted as relatively objective and factual. The brilliant progress of science has resulted from this depersonalized approach to knowledge. One scientist makes careful observation of some aspect of nature and reports his findings, meticulously describing the set-up of his work so that others can duplicate the conditions and so check the data. Without this control over the personal, the subjective aspect of laboratory work, progress in science would have been difficult and spasmodic, and without this depersonalized method of assessing knowledge from other sources, we cannot know the degree of its reliability.

So it is evident that in addition to revelation, intuition, and reason, there should

be the approach to knowledge through the method of repeatable procedures which enables us to strip personal biases and opinions from the knowledge which comes to us.

The scientific method serves to constantly purge data of subjective accretions. Theories come and go as the growing extent of tested data necessitates new orientations and new concepts. Further, the true knowledge accumulated in this manner does not grow old and fade with time. The verified observations of Galileo, made more than three centuries ago, are still as fresh, as vital as in the days they were first made. This accounts for the breath-taking progress of modern science. There is a carry-over of tested information from one generation of scientists to another, hence the cumulative effect of scientific research, and the ever widening circle of scientific achievement and progress.

Teachings which are untested and untestable are changed or modified as they are passed on through succeeding generations of people. It is this lack of means for verification which leads mankind from one error to another and to ages of superstition and ignorance. It is this situation which enables the fluent, the persuasive, the fanatical to fasten systems of thought and belief on the minds of the masses and which, in the past as well as in the present, has been the source of much turmoil and suffering. Teachings which carry with them initially such an imprint of truth as to be self-evident gradually succumb and become buried under the accumulations of the products of small and prejudiced minds. We see the teachings of the Master Jesus perverted, in the course of centuries, to the extent that thousands of men, women, and even children were burned at the stake in His name.

The scientific approach to truth, which has been ostensibly concerned solely with the physical aspect of the universe, has also led us to knowledge which reaches into metaphysical areas of thought. It is an old Hermetic axiom that the higher realms are mirrored in the lower, that the reality of the universe may be found in each of its parts. Science is verifying this principle, and some of the most profound philosophical concepts and principles have become logical inferences from the objective data of science.

The Need of the Integration of Science and Religion

The fact that we have a scientific method which enables us to have objective knowledge about the universe in increasing measure still leaves us with the problem of discriminating between the true and the false at the level of interpretation and meanings of scientific data. The laboratory approach only assures us tested data. We are at liberty to interpret them as we please.

During the nineteenth century scientists accepted a materialistic viewpoint of man and nature. According to this idea, the physical world, which we see, hear, smell, taste and touch, is the reality in nature. We are our physical bodies and doomed to decay and disintegration as our physical being goes the way of all flesh. This concept assumes that we are living in a universe where there is no design, no purpose, and we ourselves are the chance result of the interplay of mechanical forces continued over a vast period of time. Materialism probably arose in the past as a reaction against the religious superstition which hampered the progress of science for so many centuries, but also, interpretation of laboratory data in terms of mechanical and physical principles

simplified nature and natural phenomena. Actually, laboratory data in the life sciences has never been compatible with materialistic concepts, and the progress of science in the present century has made the materialistic thesis untenable for the physical sciences. Nevertheless, today, with a few notable exceptions, scientists, both in the physical and life sciences, continue to favor materialistic hypotheses.

The problem for us, in the modern age, is to discover the knowledge which transcends and integrates science and religion, and which, at the same time, can be checked by the scientific approach as a measure of its validity. There are problems and questions about life and death, pain and pleasure, justice and injustice, good and evil, which demand our attention if we are to have harmony and effectiveness in our lives. All around us we note strange happenings. There is the suffering, the distress of little children. We see good people struggling with poverty or ill health, or in contrast, others low in the scale of ethical principles seem to be enjoying good circumstances. The same inequalities are evident at national levels. In some countries there is plenty of food and other resources, and the inhabitants are prosperous and well-fed, while in other areas the opposite conditions prevail. On the surface, there appears to be no plan, no order, no justice. It is as if things can happen carelessly, that by the mere whim of fate one baby suffers and dies and another lives and prospers into old age, or millions are condemned to want and suffering because of where they happened to be born. Most of us, consciously or unconsciously, assume that the circumstances, the happenings of a lifetime can often be attributed to chance or luck. Fortunately for us, there is available the knowledge we need to resolve these paradoxes, but before we turn our attention in that direction, let us consider knowledge which has been established through laboratory investigation and which is pertinent to these problems.

The Data of Science

The data of science reveal a universe of law and order where events do not occur fortuitously but where everything has its logical and consistent relationships to the larger pattern of the universe. The chemist knows he can depend upon the chemical elements always to manifest the same properties and reactive qualities under a given set of conditions; the astronomer finds the same unvarying consistency in the behavior of the heavenly bodies. From the inconceivably small to the inconceivably large, material systems bear witness to the harmony which permeates the cosmos. It is only when our knowledge is incomplete or defective that there appear to be exceptions to this rule. As the scientist penetrates ever further into phenomena, he encounters in every direction a world of precision in action and reaction.

The biological sciences have established the great unifying concept, the oneness of life, together with the uniqueness of its individual representations. Laboratory data demonstrates that life is the same manifestation in all its forms. At the cell level of living organisms, there are common characteristics in biochemistry, nutritional requirements and reactions to toxic substances. Organisms as far apart as plants and animals are nearly identical in the mechanics of cell division and in the laws governing inheritance. The underlying unity which embraces the living forms of this planet is thoroughly established.

The oneness of life is further emphasized through the concept of evolution. Scientists

agree that the great diversity of living forms is the result of a long process of evolution. From paleontology, we learn that in the earlier stages of the earth's history, living forms were simpler and less varied than they are today. Life has come up through gradations of form to the modern plant and animal kingdoms. Our present living organisms have evolved from a common source. All the vast array of plants and animals which now inhabit the earth are offspring of the same parent life.

The differences which make each type of plant or animal unique in so many respects are not incompatible with their essential oneness in life. The situation might be compared to that which exists in a series of buildings of various sizes and shapes, each of which appears to be so different from all the rest and yet they are all built of similar materials. The uniqueness of each is in the plan or design which was actualized by the builder. Likewise with living organisms, the uniqueness of each type is in the plan or design. The unity is in the life which, working through the same material and utilizing the same physical and chemical laws, brings into being specific designs.

The scientist is concerned with physical matter in its various phases and forms, but the data at his disposal have meanings which go beyond material phenomena. This is especially true with regard to living organisms. When an acorn is buried in suitable soil, it develops and grows into an oak tree. If we examine an acorn in the laboratory, using all the available techniques and knowledge of plant morphology, chemistry and physics, we can find no hint of its potential "oak-ness." We can observe what happens as the acorn develops, and books are required to contain the record of the facts accumulated through studies on the life history of this organism. But when we check our data, we note that the process by which the seed transforms into a tree is a profound mystery. A single cell of living matter initiates the sequence of development into the oak tree by dividing to become two cells. Even this first step in the process is, aside from a few superficial facts, a total unknown. We know that in some way, a particular living cell can begin that which will lead to a mighty oak tree with all its inconceivable complexity of structure, design and function, but this knowledge does not come out of the laboratory. It is common knowledge and mystery compounded, both for the scientist and the nonscientist.

Something analogous to this situation is a printed page which is a mere physical manifestation, but which may carry a message which brings to us important knowledge because an intelligent being has arranged the letters and words so that they have meaning. Likewise, the development of the tree reveals to us knowledge about life at the plant level which transcends the physical data.

The same is true of the scientific data obtained in studies on the higher forms of life, including man. A human being begins, to the unaided eye, as an invisible speck of matter, the human ovum. In the course of development, this less-than-a-pin-point of matter initiates the formation of a human body with all its intricacy of structure and energy systems, with all its transcendental organization involving trillions of parts and their operations, every split second of a lifetime, with a capacity for chemistry and physics beyond the wildest dreams of the combined talent of all chemists and physicists, with a uniqueness stamped on every cell, and even in the protein molecules contained in the cells, and finally with the consciousness and mental capacity which may enable this being to become a scientist who believes the whole sequence is the result of purposeless,

random happenings.

In the course of the embryological development which results in the formation of a human being, the embryo passes through forms which reveal past evolutionary stages. There is a period when the embryo reveals the design characteristic of fishes, followed by that of the amphibian and reptilian forms. Still later the mammalian type becomes dominant and finally the embryo assumes the structure typical of a human being. In other words, it is as if designs of past evolutionary forms were still present to some extent in the microscopic quantity of living substance, the human ovum, along with all the information needed to build the adult body.

It is also well established that in all living organisms, there is a "turn-over" of matter, so that as long as life continues, physical substance flows through the cells. All that is permanent in a living cell is the design; the physical aspect which appears to be the reality is something which is transitory and impermanent. These data complicate the embryological process, since, if we are to understand the phenomenon, we must account for, not only the formation, the development of the inconceivably complex structures, but harmonize with this the fact that the embryo is constantly in a dynamic equilibrium with the materials out of which these structures are fabricated. The facts of this embryological record have meanings which transcend the physical happenings. Here again is an example of life in action, only this time, instead of the oak tree, we are concerned with the development and growth of a human being.

The data of science bear witness to the fact that life functions in various ways and reveals new capacities and characteristics at different levels of its expression. In a human body, for example, there are living cells and tissues which differ according to their place and function in the body. Beyond the cells and tissues, there are the organs such as the lungs, stomach or heart, which manifest qualities and activities not evident in the lower levels. If we go still higher in the hierarchy of life as expressed in the body, we note organs joined together to form the circulatory, respiratory, digestive, and other systems. Finally, the complete body which is made of all these different living structures must possess still higher capacities since all the diverse elements must be harmonized in the functioning of the physical organism as a whole. However, there are still higher aspects of life associated with a human being. The behavior which orients a person with the beings, the things, the elements around him, brings into play something quite different than the life concerned with the internal bodily functions. At the level of behavior, self-consciousness, intelligence, love, will, and other qualities of life become active according to circumstance. All these are manifestations of qualities latent in life from the beginning but which do not become evident until they are awakened in the course of evolutionary development. Just as the oak tree sleeps in the acorn, so these higher attributes of life are unmanifested in its lower stages of development.

The data of both biological and physical science illuminate the wonder and mystery of nature and impress us with the limitations of our knowledge, but such understanding as we have gained through scientific research reveals, as said before, a universe of law, order and design. When a human ovum goes through the development that produces a mature man or woman, a multi-trillion series of precision coordinated events are necessary to complete the process. There is no room for chance; the unthinkably complicated design must be actualized according to an exacting pattern. Further, it is

known that each of the trillions of cells which go to make up a human or any other living body possesses, in potential, the design of the whole. From such data, it is reasonable to conclude that the universe, of which we are a part, is also the result of precision coordinated events called into action to complete an exacting pattern or design. Further, the well-established principle of the oneness of life gives us a scientific basis for the concept of brotherhood. If the same life animates us all, so that we require the same food elements, are injured by the same toxic substances, develop and grow by the same processes, etc., could it not be that active brotherhood is necessary for harmony and well-being in our lives?

The script of science is written in physical characters and, as we have seen, the meanings transcend the data. In addition to the facts of science, however, we need knowledge which includes more extensive data than scientists are yet able to contact if we are really to resolve the problems which arise in a human lifetime. To solve these problems we must turn to the wisdom that is a heritage of the ages and which includes and transcends the facts and principles of modern science.

Wisdom of the Ages

Down through the ages there has always been a tradition that within certain inner sanctuaries, concealed from the minds of those who would misuse it, there is knowledge which has accumulated through the efforts of advanced members of humanity. Those who are intuitive enough recognize reflections of this higher knowledge and wisdom in the great religions, in philosophy, and in art. Much of this Ancient Wisdom always remains secret, but throughout history, portions of it have been released for general use. Sometimes it comes to us in the form of principles or laws, or it may appear as specific knowledge about our world or the universe.

In this modern age, science has validated some of these ancient teachings, which gives us something more than intuition or their appeal to our logic for appraising their status in truth. For example, in ancient Greece, Pythagoras was a great teacher of the Ancient Wisdom. He attracted followers and formed a school which had much influence on ancient Greek thought. From this Pythagorean school came the knowledge passed down from older sources that the earth was spherical and that it, together with the other planets, revolved on its axis and around the sun. We owe a special debt to this specific teaching of the Ancient Wisdom, since it sparked the thinking in medieval times which led to the over-throw of church domination over men's minds. Copernicus, who is credited with the discovery that our planet is part of a sun-centered solar system, studied astronomy with Professor Domenico Novaro at the University of Bologna. Professor Novaro was a follower of the Pythagorean school and suggested to Copernicus that he make a study of the Pythagorean teachings on planetary movements with a view to their superiority over the church-endorsed Ptolemaic astronomy which taught that the earth was stationary and the sun, planets and stars revolved around our little earth as the center of the universe. Copernicus followed his professor's suggestion and after years of study published a report on the subject which demonstrated the inadequacy of the earth-centered system and the logic of the views set forth in the ancient teachings. Later, Galileo, Kepler, and Newton completely verified the ancient concept of planetary movements as set forth by Copernicus.

The validation of this teaching from the Ancient Wisdom by the methods of science demonstrated before all thinking men and women that the church was in error in its ideas on planetary astronomy. Religious leaders of those days were so sure of their position that they burned at the stake a great thinker, Giordano Bruno, for advocating the Copernican system, but the scientific approach proved them to be utterly wrong. At last, the people of those days had the measure of the church's fallibility. The Dark Ages which had lasted a thousand years came to an end. Truth, from the Ancient Wisdom, ushered in a new era of thought and the age of science.

The Modern Expression of the Ancient Wisdom

In our era a unified formulation of the Ancient Wisdom is offered to all who can receive it. Important aspects of these teachings were given out towards the end of the last century under its ancient designation, Theosophy, or *theosophia*, which means divine wisdom. Those responsible for bringing this modern expression of the Ancient Wisdom to the attention of mankind have given a special sign of its validation for the thoughtful seeker of truth by including material in the initial release of teachings that anticipated discoveries later to be made by science.

We are told that the knowledge which is basic to Theosophy, or the Ancient Wisdom, was accumulated slowly during periods of time which extend back many tens of thousands of years. Further, the procedure was comparable to that employed in modern laboratory research. Each new addition to this esoteric knowledge was carefully checked and verified by numerous workers. The standards of validation are said to have been more precise, more thorough than those which we regard as adequate in our laboratory work. It is true, of course, that we are not in a position to check, or even to understand, the faculties and powers used by these workers in physical and super physical science, but it is a fact that the whole trend of the data of science in many fields has been to give increasingly direct or indirect support for many of the concepts and specific items of information given to us in the early works of Theosophy. This is especially evident in H. P. Blavatsky's work, *The Secret Doctrine*, and in the volume entitled *The Mahatma Letters to A. P. Sinnett*. At the time these works were written, between 1880 and 1888, scientists entertained views which are in sharp contrast in many respects to those they hold at the present time. Further, the lack of data in certain areas of fundamental importance led them to restricted and erroneous ideas.

For example, in the teachings contained in the works mentioned above, it was stated that matter and energy are different phases of the same phenomenon, that matter can be converted into energy. Some of science's

> greatest misconceptions are found in her limited notions on the law of gravitation; her denial that matter may be *imponderable*; her newly invented term "force" and the . . . accepted idea that force is capable . . . of acting . . . in any other wise than *through* matter; in other *words that force is anything but matter* in one of her highest *states* . . . (*Mahatma Letters*, p. 321)[1]

[1] Page references to the *Mahatma Letters* have been revised from those of the second edition to the newer chronological edition, which was published in 1998.

> Force is . . . "matter in motion" . . . a manifestation of energy . . . matter and force are the phenomenal differentiated aspects of the one primary, undifferentiated Cosmic Substance." (*Secret Doctrine*, v.1, p. 554)[2]

And especially significant is the statement

> . . . the mineral . . . is light itself, crystallized and immetallized. (*Secret Doctrine*, v. 2, p. 169)

At the time these ideas were advanced by the adept teachers, they were considered fantastic by contemporary scientists, and yet, as we all know, in 1907, Einstein demonstrated for theoretical science that matter is convertible into energy. Further, his famous equation, E = MC, related the energy in matter to the speed of light. At the time this idea of Einstein's was advanced, there was no experimental evidence for its truth. The work leading up to and the explosion of the first atomic and the later hydrogen bombs gave us the laboratory evidence for the truth back of Einstein's theory and of the earlier statements in this regard contained in Theosophical teachings.

Many other instances could be cited of knowledge pertinent to the realm of science which was unknown to scientists at the time it was given out in theosophical writings and which are now taken for granted as a result of scientific progress. In addition to the force or energy-matter relationship, information antedating later scientific discoveries was given out about the nature of the sun's energy. Nuclear energy was unknown to the scientists of the 1880's, and it was generally considered that the sun maintained its energy level by ordinary combustive forces that were fed by meteoric matter drawn into it from surrounding space. One of the adept teachers makes this comment on the subject in 1882:

> Can one imagine the "Sun's fires fed with *purely mineral* matter" — with meteorites highly charged with hydrogen giving the "Sun a far-reaching atmosphere of ignited gas"? . . . . The Sun is neither a *solid* nor a *liquid*, nor yet a gaseous glow; but a gigantic ball of electromagnetic Forces."
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> (*Mahatma Letters*, p. 321)

This statement is in accord with data which has been accumulated by science fairly recently in connection with research on nuclear energy.

Scientists back in the latter years of the nineteenth century, with but few exceptions, accepted the idea that the chemical atom was the ultimate subdivision of matter and were scornful of the statement in *The Secret Doctrine* that

> It is on the doctrine of the illusive nature of matter, and the infinite divisibility of the atom, that the whole science of Occultism is built. It opens limitless horizons to *substance*, informed by the divine breath of its soul in every possible state of tenuity, states still undreamt of by the most spiritually disposed chemists and physicists." (v. 1, p. 520)

It is also stated in this work that chemical elements are the result of evolutionary processes, that underlying physical matter there is a basic material in constant motion from which the matter we sense arises as a secondary development. At present, physicists consider hydrogen to be the primal element from which the rest of the chem-

[2] Page references to *The Secret Doctrine* have been revised from those of the Adyar edition (1938) to reflect the pagination of 1979 edition, which is the same as the original 1888 edition.

ical elements have developed during the course of the evolvement of the universe. Further, it is now known that in vacuum space there are the so-called virtual particles, the photons, which appear to be continually created and destroyed. It has been suggested that these invisible, rapidly moving particles are, among other things, the precursors of the matter which forms the elements.

In *The Secret Doctrine*, there is considerable space given to a discussion of the limitations of the ideas on gravity which were dominant in science at that time. Since then, Einstein's theory of relativity has changed the physicists' viewpoint in this respect, though current gravitational theories are still unsatisfactory to many scientists.

To assume that such knowledge could be present in the Ancient Wisdom by chance, by guesswork, is to turn our backs on rationality. We must conclude that the adept teachers who were responsible for the principles and concepts advanced in *The Secret Doctrine* and the *Mahatma Letters* had accurate and advanced sources of knowledge, and this gives us a basis for seriously considering the other aspects of these teachings which are not yet open to verification by orthodox science. If a system of knowledge can be checked at many points where it impinges on the aspect of the world open to scientific investigation and if such knowledge is logical, coherent and consistent throughout, then we are forced to give it serious attention if we are really in search of the truth.

Some Key Concepts of Theosophy

Let us turn our attention to some of the key concepts of Theosophy and note how they harmonize with information which has come out of the laboratories of science. In order to do this we need not penetrate very deeply into the Ancient Wisdom, but rather consider a few of the basic principles which have such far-reaching implications for ourselves and the world we live in. According to these teachings, there is throughout the entire universe, in everything everywhere, an animating principle which we can think of as life or spirit. This life principle by its very nature is ever active, ever multiplying, and ever unfolding new capacities and powers as it works through matter to complete the divine plan for the universe. At the lower level of development, life, or spirit, is equivalent to what the physicist calls energy or force, and at the higher levels it expresses what we think of as spiritual qualities. This life — this one animating principle — works continuously with matter in order to express progressively its innate capacities, for only as suitable material forms are available can life begin to reveal its real nature. From this teaching, it follows that all living forms, including human beings, are reflections of the one life. Brotherhood is a fact of nature.

The activities of life are governed by the master law of the universe, the Law of Equilibrium, or cause and effect. Without this law, the restless energy of life would be spent in futile efforts. The universe would dissolve in chaos. It is the Law of Equilibrium which keeps the planets moving in their orbits and which governs the vibrant harmony of a living organism.

The combination of the perpetual activity of life as it works through matter in accordance with the Law of Equilibrium leads to the unveiling of life's properties in an ascending spiral of development or evolution. It begins on this planet Earth in the mineral kingdom and slowly evolves up through plant, animal, man and beyond. There is a parallel evolution of the form side and the invisible side of nature. As life moves

upward through matter, it awakens into consciousness and at the human stage acquires self-consciousness.

Each unit of life, as it attains to the stage of a human being, begins to know right from wrong. Hence, it assumes a higher degree of responsibility to the universal law for its actions. This results in increasing pressure in the lives of men as compared with the action of the law on the lives of animals. There is suffering and distress through wrong actions, and joy and pleasure when behavior is in harmony with nature. According to these teachings, man's primary task is to realize his kinship with his fellow beings, which is another way of saying he must know his real Self. Until this knowledge fills his heart and mind, there will be lives of much turbulence.

Life, or spirit, begins its great pilgrimage through matter as a pure, divine, unthinking, undivided principle. The purpose of its long journey is to ray out its innumerable qualities through individual designs and to coordinate all this in the formation of a universe. As this proceeds, living organisms arise in a bewildering display of varied designs each of which, viewed from the form side, appears to be separate and independent of the rest As the qualities of mind and emotion come into play, this sense of separateness increases until finally in the undeveloped human stage, the individual fails to recognize any unity with others beyond his family and friends. But the unfolding spirit in man finally brings with it the knowledge that he is spiritually one with all his fellow beings.

The life which came forward from the source in oneness, but with all its qualities unawakened, after an unthinkable period of time in matter of various levels, again attains to oneness. But this oneness is now expressed through countless numbers of individually unique, thinking, self-conscious forms. As man comes into spiritual maturity he knows that life is one, that all beings are his kin and that there is a special bond between himself and every human being. An abiding sense of brotherhood epitomizes the awakening of the spirit.

With these principles, we can account for the progressive stages of development from the mineral kingdom up through the plant, animal, human and beyond, not only from the physical or form side, but also from the life and spiritual side of evolution. This knowledge enables us to understand that, while there is one life pervading the universe, it manifests itself in an immense variety of forms. For in life and matter, there is almost infinite capacity for the creation of new designs so that each leaf, of the countless leaves on the trees, is distinctive and unmatched in some particular. Also, with these principles we can understand that, in spite of appearances which seem to indicate otherwise, perfect justice is assured to each of us as we evolve in accordance with the one law through many lives here and elsewhere.

As we have seen, the data gained through laboratory investigation as far as they go confirm these teachings. The scientist's attention is confined to the physical side of life, and so his views and his facts are more restricted as compared with those of investigators who have access to data concerned not only with physical but also with superphysical states of matter. Nevertheless, these Theosophical principles are in harmony with the views of the scientist in so far as they apply to the world open to his type of investigation. The unity of life, its evolvement through an ascending spiral of diverse forms in accordance with the Law of Equilibrium, or cause and effect, are truths which

are held in common by both science and Theosophy.

The Law of Equilibrium

The Law of Equilibrium, designated in the East as the Law of Karma, was expressed in part by Sir Isaac Newton when he stated his Third Law of Thermodynamics: "To every action there is always opposed an equal reaction." Emerson summarized it when he said, "Every secret is told, every crime is punished, every virtue rewarded, every wrong redressed, in silence and certainty. What we call retribution is the universal necessity by which the whole appears wherever a part appears" (*Compensation*). This law insures the development of the qualities and the capacities latent in life. Life by its nature is ever active, and the Law of Equilibrium serves to guide the life energy into channels which will insure the unfoldment of its innate powers. When living organisms develop too far in a particular direction, forces come into play which cause them to change their course until the particular qualities involved have been vivified in harmony with their place in nature. This necessitates stress and pressure while a new capacity or power is in the process of being developed. In the instance of the acorn-oak tree sequence, we are, of course, concerned with a performance which life manages readily and with few errors. Vast periods of time have been devoted to unfolding the capacity for shaping matter and adding all the other qualities which go into tree forms, including specific application to the oak tree type. Who knows what this life, which has mastered today's oak tree design, will accomplish in the future?

The process by which life evolves new capacities, in accordance with the Law of Equilibrium, is exemplified in an elementary way by what happens as we learn to ride a bicycle. At first, the performance may be rather rough and uncertain, possibly with a few falls due to our ignorance and lack of training; but as we persist in our practice, our capacity for bicycle riding becomes actualized and we ride forth smoothly and with minimum effort. The same principle is in operation throughout nature and it accounts both for the joy and the sadness in our lives and in the lives of our fellow beings.

The Master Design

As we consider the idea of life working through matter to evolve its latent capacities, it becomes evident that there must be a master design towards which life is moving. We know (to go back again to the acorn) that in some form or quality, the plan of the tree is in this seed. A complicated organism such as a tree can only arise from precision organization of structures and activities. We know that even such a comparatively elementary machine as an automobile cannot be produced by the builders without blueprints, which enable them to fabricate and coordinate the various parts together in accordance with the design of the car. An oak tree or any living organism is incomparably more complicated than an automobile, including categories undreamed of in man-made machines. To assume, as the materialists do, that matter without purpose or plan can, through a process of randomization, build a tree or a man if given sufficient time is not only in opposition to all our experience but has no justification from the data and principles of science itself.

If a man-made machine necessitates carefully drawn plans in order to insure the proper assemblage of materials, it becomes obvious that the incalculably greater intricacy

of a universe would require a super design for its evolvement. According to the Ancient Wisdom, there is such a plan, and comparable to the manner in which the design of the oak tree is in the acorn, so the plan of the universe is in life and matter. Every grain of sand, every living cell, every atom mirrors this divine plan; or as Emerson puts it, "The universe is represented in every one of its particles. Everything in nature contains all the powers of nature. God reappears with all his parts in every moss and cobweb." The process of evolution represents the progressive approach to a perfected cosmos.

The Oneness of Life — Brotherhood

We have been concerned mainly with demonstrating that through the Ancient Wisdom, or Theosophy, we are provided with knowledge that in its particular and universal applications gives us a picture of the universe which appeals to our reason and to our experience and which is supported by the data of science. Not much has been said about the place of these teachings in our individual lives, since the developing of our thesis required that we consider mainly general laws and principles. What has been given reveals to us a world of orderly evolvement and perfect justice as the lot of everyone. Further, we realize from these teachings that each human being, through many lives working in accordance with the great Law of Equilibrium, or compensation, develops the divinity within and so finally attains to his true status.

The oneness of life and its evolvement through an ascending order of material forms has been given special emphasis since this concept is so fundamental in Theosophical teaching and, in a more restricted sense, in biological science. It is stated in *The Secret Doctrine* that

> The radical unity of the ultimate essence of each constituent part of compounds in Nature — from Star to mineral Atom, from the highest Dhyāni-Chohan to the smallest infusoria, in the fullest acceptation of the term, and whether applied to the spiritual, intellectual, or physical worlds — this unity is the one fundamental law in Occult Science. (v. 1, p. 120)
>
> The whole order of Nature evinces a progressive march towards *a higher life*. (v. 1, p. 277)

We have a kinship with all nature but this kinship becomes more intimate as we move upward through kingdoms of nature. As mentioned before, at the human stage, life manifests new properties not active in the lower stages. There is more than a quantitative development of powers and capacities as life moves through the kingdoms of nature. At each higher level new characteristics are revealed. This is most evident as we observe the contrast between a mineral and a plant, but it is also quite obvious as we go from the plant to the animal form, as well as in the transition from the animal to the human stage of life.

When life attains to the level of the human being, new powers unfold which are not active in subhuman forms. Even the most primitive representations of mankind reveal, in some degree, spiritual qualities. It is, as we all know, this awakening of the spiritual aspect of our nature which differentiates us from the highest types of the animal world. So it follows that we are united with our fellow human beings through all the degrees of life which we share with the animal world plus a special link through the spiritual side of our natures. The bond between living beings grows as they evolve to higher levels of

life's expressions.

Brotherhood, for a human being, must be centered in the spiritual aspect of human nature. Hence, it follows that there can be no brotherhood in action or in spirit which excludes any of our fellow human beings. On the other hand, if brotherhood exists between ourselves and the rest of humanity, it will automatically include all other forms of life.

As we consider the various levels or phases of life's expressions, it is difficult to keep in mind that back of these varied manifestations, life is one. Something analogous to this is observed in a number of lamps of different sizes, colors and shapes, and yet the illuminating agent, electricity, is the same for all of them. Life appears in differing expressions in accordance with the qualities of the matter it ensouls, but always it remains the one life, indivisible and immutable, in time and space.

One of the obstacles to a recognition of brotherhood between human beings lies in the tremendous range of differences in body, emotions, and minds which exist from one person to another. We are often repelled by characteristics which are unfamiliar or which seem strange to us. Frequently there are antagonisms towards whole races because of their customs, the color of their skin, or the way they talk. Yet a moment's reflection on the matter should be enough to convince us that a world where all human beings looked, thought and behaved alike would not be a pleasant place in which to live. It is the nature of the universe to develop different expressions of the one life, and the uniqueness of the individual becomes accentuated with progress in evolution. Data from biology bear witness to this tendency. The manner in which the germ cells are produced insures that there will be no duplication in nature. A real brotherhood of man must be made up of distinctive individuals and races, together with all the resulting differences in physiques, customs, ideas and religions. Understanding this principle, we not only gain tolerance, but we welcome and enjoy differences and contrasts between ourselves and others.

There are immense practical considerations for us in the knowledge that we are all animated by a common universal principle which works in harmony with the great Law of Equilibrium. For example, the vitality of our physical bodies is a quality of life which we share with all other bodies. If we become antagonistic to our fellow beings, we tend to constrict, among other things, this source of our own physical well-being. We limit the supply of that which is essential to our bodily health. This will continue until, through the associated stress and suffering, we learn the truth and place ourselves once more in harmony with nature's laws. The same is true, of course, for other aspects of this life within us, such as the health and well-being of the emotions and the mind.

It is noteworthy in this connection that all the great teachers of humanity have stressed the critical importance of the habit of love and compassion towards all beings. If we can awaken a genuine sense of goodwill, of friendliness towards the world, then the requisite for brotherhood is satisfied, and we can begin to live peacefully and effectively at all levels of our lives, but more than that, we will become one with the forces which slowly but surely are developing a sense of brotherhood among human beings everywhere.

CONCLUSION

The knowledge needed to attain to peaceful and effective living is available when we are ready to receive it, but it does not come to us without effort. It is easy to accept what are claimed to be ready-made solutions for all our problems, if we are content to take that which assumes to be from an unquestionable authority. Human beings have been doing that for millennia and it has led into superstition and delusion. We all know that it is our nature to avoid responsibility and effort whenever possible, and this trait is especially marked where the attainment of knowledge is concerned. It is much more convenient to have someone else provide the answers to life's questions, and yet it is common experience that we never receive something for nothing, that we must always earn our way. All around us are the products of other people's minds. We are beset by the pressure to take this teaching or that teaching and the rewards they promise for our adherence. Certainly we should not close our minds to such offerings, but until we undertake the work necessary to make them our own, they can be of little value to us. All that anyone can do for us, whether a god or a man, is to give us the seeds of wisdom. It is our job to cultivate these seeds until they grow and develop into our particular and unique understanding.

In this paper I have attempted to bring to your attention a glimpse of a wisdom tradition, Theosophy, which has matured through the ages and which has been validated in its basic principles by the data of modern science. These teachings are not offered to us dogmatically or on the basis of authority, but rather serve as guideposts to a path which will lead us to more fruitful and harmonious lives. But we must travel the road ourselves, and as we do so — each in his own way, and at his own pace — these truths which are above time and place will begin to blossom in our hearts and minds and in each day's living.

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