



SCIENCE AND RELIGION: TWO ASPECTS OF A SINGLE REALITY

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Science and Religion : Two aspects of a single Reality

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The scientific quest and the religious quest have been the two great quests of mankind. Somehow a feeling has developed in society, also among the intellectuals, that science is antagonistic to religion. We should examine whether it is really so or it is something that arises because we give to science and religion rather narrow meanings. The purpose of the scientific quest is to discover the order that manifests itself in the external world of space, time, energy and matter—both living and non-living. The religious quest of man is a quest for discovering order in our consciousness, which is the inner world of our thoughts and emotions, our mind. Since the whole of reality is built up of both matter and consciousness why should the quest for the discovery of order in the external world be antagonistic in any sense to the quest for the discovery of order in the inner world of our consciousness ? It seems to me that they are only two aspects of a single reality, since both exist in this universe. Just as I want to find out what is true and what is factual about the external world, I also want to find out what is true and what is factual about the inner world of my consciousness. They are two complementary quests and there ought not to be any antagonism between them. Indeed, one could go a step further and say that both are part of the inquiry into truth, into reality. One divides the external world from the inner world of our consciousness only for the sake of description, for the sake of communication or analysis but they are both part of one world, one reality which is made up of both matter and consciousness.

If we look at their origins, we find that both quests have originated out of the inquisitiveness of man. The human being is the first animal who is inquisitive, who wants to inquire into his surroundings, into what is happening within and around

him, who wants to observe in order to find out, and who has this tremendous curiosity to solve any mystery that he sees. If we ask the question "Why is he inquisitive" ? there is no answer. It is not always for a purpose, he is inquisitive by nature. The purpose is a by-product, it is not the aim of the inquiry. For instance, technology has been the by-product of science, but it is not the reason for science. The scientific quest was there much before any technology developed. Man was inquiring into why the sky is blue, why the sun rises and sets, why trees grow, why there are so many species around him, why eclipses occur and all that, much before the concept of developing any technology came. The fundamental purpose of science is to discover the laws that operate in nature, the order that is there in the external world, not to develop technology.

In the same way, questions like 'Who am I?' 'What is the purpose' of life ? 'Why is there so much conflict and violence within us ?' 'Is it possible to come upon some kind of order within our consciousness ? 'What is death ? " Is there something beyond death ?' are all questions in the field of spirituality and religion. Out of this quest the different organised religions have evolved as a by-product. There were great enquirers who came upon a certain truth in their consciousness, ~~who came upon a certain truth in their consciousness~~ who came upon a certain order - we may call that order love, compassion, humility, whatever. Out of that state, they tried to communicate the truth which they had seen, and they became religious leaders, around whom the church was built up. Then the followers devised various methods for coming upon the spiritual truths which this man had spoken of. That is how institutionalised religions developed. Thus, religion is a by-product of the spiritual quest just as technology is a by-product of the scientific quest. But they in themselves are not the purpose of the spiritual and scientific quests. For a long time, the scientific quest and the religious quest were not differentiated. A learned man was involved both in the spiritual quest and the scientific quest. They got differentiated only about 300 years ago when modern science, as

87

4-11

we know it now, started developing with Galileo and Newton. Before that there were numerous great minds which were simultaneously concerned with mathematics, with the construction of new instruments, with art and literature as well as philosophy. They were inquiring into everything, the whole of life. It is only in the 17th century, with the coming in of experimentation that there came a divide, because in the spiritual quest the kind of experimentation which one does in science was not possible. The scientific quest, of course, took on a very significant turn at that point of time because thereafter it relied more and more on experiments and not merely on thinking. Since then this feeling has somehow developed, that the scientific quest is antagonistic to the religious or spiritual quest and I would like to analyse the reasons for that.

In the last 300 years or so, the scientific quest has progressed tremendously, altered our civilization, the way we live, and released tremendous power through technology into the hands of man. The results in the form of <sup>of</sup> telecommunications, transport, medical advances, nuclear power, are all known to us. There has been a change in our lifestyle over a period of the last 100 years or so which is unparalleled in any such previous period of history. Over thousands of years our life had not altered the way it has altered in the last 100 years because of the industrial revolution which is also a by product of science. But the religious quest of man has not kept pace with it. In our understanding of ourselves, modern man seems to be almost as primitive as the primitive tribal man. So there has been a sort of lopsided development of our faculties. The intellect, the power to reason and to plan, the intelligence of thought, has developed tremendously and brought with it, a tremendous amount of ability and power. But man has not come upon the intelligence to use this power wisely. He is still primitive, still hating his neighbour. He now has the ability to go to the moon, but he has not come upon the ability to love his fellowman. The old tribal division of primitive man has taken the form of nationalism.

6-4

There is still war, there are still groups-religious groups, caste groups, language groups--and mankind is still as badly divided as it ever was. Therefore all this power and ability have become dangerous, because when there is power without wisdom the power is used unwisely. In olden days, if a man was violent, he could kill just a few people with bows and arrows. Now we can decimate whole nations with one single bomb. And that of course has increased the urgency of this problem enormously. You could say, in a sense, that we could afford to ignore the religious quest in those days when we were actually conducting it and today when we cannot afford to ignore it we are still ignoring it, at our own peril. Why is it that the scientific quest has advanced so much and man is now so intelligent, so clever at doing this kind of investigation but when it comes to self-knowledge or the understanding of ourselves, of coming upon some kind of order in our consciousness, mankind as a whole has been an utter failure? Barring perhaps a handful of people like the Christ or the Buddha or, in more recent times people like Krishnamurti, who might have come upon it for themselves, the rest of the people have not really come upon it. This has created the lopsided development in society which in turn is creating the crisis in the world today.

One of the reasons why the scientific quest has progressed so much is because there is a tremendous order out there in nature. If there was not a tremendous order in nature, if nature did not follow any laws, if things did not happen according to a plan but happened at random, science could not have developed. The reason why a stone falls to the ground is the same as the reason why the planets go around the sun and the same law of gravitation acts between galaxies and stars out there in space. So there is a tremendous order out there. Nature follows a plan, it works according to certain laws and science has been trying to discover those laws. We do not know why there are laws at all, why nature has

this order. The scientist has no idea why there should have been laws and why they should be universal, but he finds that it is so. A sodium atom when it is heated emits the same light in his laboratory as it does out there in the stars--which is why he is able to identify that atom from the light which comes to us from the stars. If you ask: "Why does it do so?", we have no answer. We can only say: "That is the law. That is what we observe." Similarly there is also tremendous order in the animate world, some of which we understand in terms of the laws of genetics but a lot of which we still do not understand. Another question, which is almost a religious question is, why does nature follow a peculiar form of logic evolved by man called mathematics? Again we don't know. It led Sir James Jeans to speculate that God must have been a mathematician because the whole universe in the outer world follows an order which we have been able to determine using some fundamental assumptions, then applying a lot of mathematics and logic to them and deriving results. We find that the results so obtained tally with what happens in nature; which means somehow this logic operates in nature. But if you ask why it operates in nature, we don't know. We can only say that such is the nature of the order which manifests itself in the universe. We are students of Nature, which has given us a consciousness which observes and thinks. Through this we can find some cause and effect relationships, but we can not answer why Nature is the way it is.

The other reason why the scientific quest has developed so much is because the observer is separate from the observed. When my consciousness or senses are viewing something and doing an experiment on an object, that object is separate from me. There is not too much interaction between the observer and the observed and therefore it is relatively easy to be objective about what one is seeing. Of course, being a human being, if the scientist has his own theory, he may be so eager that his theory should be proved true that he might end up seeing only those facts which support his theory and ignoring the others. Then he is considered

07

6-6

to be a bad scientist. But somebody else will repeat it and discover that he had erred. So errors are detected quickly because it is again put to test by other people. One is aware of the fact that one should not let one's desires and emotions interfere with one's observations. This is relatively easy in science because when one is looking at a fish and watching how it swims, how it lives, how it reproduces and so on, one is not awfully attached to what is happening there. One can be objective about it. When we come to the religious quest we are looking at ourselves and the observer is the observed. Therefore, the interaction between the observer and the observed is enormous and it becomes very difficult to be objective, much more difficult than in the scientific quest. Not only is it relatively easy to be objective in the scientific quest but our understanding is also additive in nature. What Newton did in a whole lifetime we can now learn in two or three years in college and build on it to discover more. Since scientific advancement is based on knowledge, it is additive. The knowledge of what people have done before helps us to learn that quickly and discover beyond that. Scientific progress has become like a continuously moving wheel which we can not stop any more even if we want ~~it~~ to. There are always scientists who have learnt everything that has been done before and are building further on it and this has become their passion. Therefore we find all the time, new toys, new computers, new modes of telecommunication, new inventions coming up. The human mind is constantly innovating in that area, and past knowledge is helpful to it in that area.

In the religious quest, knowledge is not so helpful. In fact, it can even be a hinderance if one is too attached to it. What the Buddha discovered and stated, I can read and come upon the knowledge of Buddhism, including all that has been said about the Buddha. All that knowledge would make me a professor of Buddhist philosophy, but the professor of Buddhist philosophy is not the Buddha! One cannot

87  
87

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come upon the order that was there in the consciousness of the Buddha merely through knowledge. The knowledge of what the Buddha had seen is only a description of the truth that he discovered. We get only the description by reading his books, we do not get the truth. So Buddha's student has to start all over again, he has to rediscover what the Buddha discovered in order to come upon that order in his own consciousness. He can not simply learn it like knowledge. One needs something beyond knowledge, namely an insight into the truth. Without that insight, which is a direct perception of the truth, there is no alteration of our consciousness. The intellectual can have all the questions and all the answers in his memory, but nothing transforms within his consciousness. That is why there is a great difference between the learned man and the seer. But there is not such a tremendous difference between the student of relativity who has now learned all that Einstein did and Einstein himself. There is, in the sense that his mind may not have the same insight into space, time, matter and energy which Einstein's mind had, but that insight is not so essential, If he understands the proofs and the equations, he can work with them. In the field of science and technology, it is enough to have the equations and the proof. The insight is essential only for the first person who discovered the truth. If Einstein did not have a deep insight into the questions of space, time, matter and energy, his mind could not have come upon a totally new concept which was not there in classical physics. His mind had all that knowledge of classical physics, but at the same time it must have had a certain amount of freedom from the known in order to have an insight into a truth which was totally outside the field of the known. All great scientific discoveries are results of such insights. But after the scientist has had the insight and come upon a truth, he puts it in the form of an equation, deduces it and verifies it logically. Thereafter, it is taught not through

57

K-4



insight but through logic. Science is not taught to students the way it actually happened, it is taught through rational, logical ways. Knowledge and logic have a sequence and ~~that~~ learning that sequence is enough since it works, even though one may not have the insight.

27

In the field of consciousness this is not true. One can read all the books on consciousness and on psychology but all that knowledge does not change our consciousness. It changes our ideas but it does not deeply transform our consciousness. This means knowledge can not end violence, it will not end greed, it cannot end conflict within our consciousness. To come upon a state of virtue, one has to re-discover the truth for oneself in ones own life, otherwise it only remains a description of a truth which another person, however great, saw. Unless one has seen the truth for oneself it does not act on our consciousness, it only adds to our knowledge. There is a difference between having something in our knowledge and having it as part of our being. Which is why Socrates perhaps not only prescribed "Know thyself", but went a step further to say that the only true knowledge is self-knowledge. All other knowledge he refused to accept as knowledge. In this field, what we have discovered for ourself alone is true knowledge, not what we have read from another. Of course, we must remember that in those days, there was no separate science so he was not referring to scientific knowledge, he was referring to the understanding of oneself. In this field, the knowledge gained from books, from other people's ideas, from the guru, has very little value. I say very little because it does have the value of creating the question in our mind. The question itself may not arise in our mind. So we can derive a question out of a book, but we cannot take the answer from the books. If we take the answer, it becomes only the knowledge in our head. We need to come upon the truth for ourself. And this is one of the fundamental difficulties of the religious quest.

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The other difficulty is that the interaction between the observer and the observed is so great that it is terribly, terribly difficult to be objective about it. It is a very personal investigation. One can illustrate this by an example. If we try to examine how we go to sleep, our awareness decreases because in sleep we are not aware. So the mind cannot watch itself going to sleep. In observing oneself there is a tremendous interaction between the observer and what is being observed. Indeed there is no separation between the two. We create a separation by saying "I am angry", as if the "I" is separate from the anger. It appears to us that the "I" is something separate and the anger is like a disease which can be got rid of. But one must question whether it is really so, whether the person that is saying "I am angry" is separate from the anger. Or is the "I" the same consciousness in which there is anger? When we get a disease, we have a germ or a virus that gets into us. Then of course, there is our body and this external thing that got into it. One can take antibiotics and so on which go and kill that germ and get rid of it. Is anger like that? Is violence like that? Is hatred like that? Is it a disease which catches us and we can do something to get rid of it? Or is that 'me' itself? Which means it will end only when the "me" ends, and one has to die for it to end. Which raises the next question whether the psychological 'me' can die before the death of the body?

So there are several intrinsic difficulties with the religious quest. Knowledge does not help us here as it does in the scientific quest. Moreover, it seems to me, that we have really not been intelligent about the spiritual quest. Look at what mankind has done. Just as there have been great scientists like Einstein, Newton, Galileo, Darwin and so on, whom the scientists respect, in the same way there have been great spiritual teachers. People respect those great spiritual teachers because they came upon a certain state of consciousness which was one of love and compassion, a universal

8-2

consciousness which was not divided from the rest of the world. But what did their followers do ? The followers said "This man is our guru, our teacher, our saviour, our leader so let us worship him. They took his words and propagated them. In order to propagate the words, they built an organization which became the church. They got busy in spreading his message, which as we saw earlier, is only the word, not the truth. The followers did not come upon the truth, they were satisfied with propagating the word. It is more or less the same story with every religion but let us look at the example of Christianity. Christ came upon a certain truth and to describe that truth he gave the Sermon on the Mount. The followers received the words of the Sermon on the Mount and they spread the words. They did not try to find out what their teacher had found out. Instead, they started propagating the words and developing rules about following them; so they got busy forming organizations. Then there was difference of opinion and the Protestants separated from the Catholics. Now for the last 50 years in Northern Ireland, the Catholics and the Protestants have been fighting and killing each other, all of which has nothing to do with what Christ had said. That man said "Love your fellow man". But we are fighting and killing each other in his name! Obviously all this has nothing to do with the religious quest.

The religious quest is concerned with the discovery of order in our consciousness. We must go on with the religious quest, not try to organize it, turn it into a belief, make rules about it and propagate those rules. All that is not religion, just as technology is not science. Suppose the scientists had done the same, if they had built a temple to Newton and said "We are Newtonians, Newton is our leader, whatever Newton said alone is true and we are going to propagate it" and another group of scientists did that for Einstein and said "We are Einsteinians", would we have called them scientists ?

Certainly not. We would have said : "You have to learn science, study and discover the order in nature, come upon the understanding and knowledge, of science only then you are a scientist". But in the field of religion, we have been very gullible. If a man wears a certain type of dress, goes and does certain rituals, lights the lamp in a certain way and so on, we accept him as a holy man. We have lost sight of the fact that this is also a quest, an inquiry. Unless a human being comes upon order in his consciousness, he is not a religious man. It has nothing to do with rituals, with the dress we wear, with the words we utter or the books we read. It has nothing to do with some ability or knowledge we have in our head either. You can have a man who can explain what the Buddha said better than the Buddha himself but the fact is that he is not the Buddha. If he has not ended violence in his consciousness, he is an ordinary man. He may have tremendous ability to explain what the Buddha said and the Buddha may not have had that ability. That ability is not important, it is the change in the consciousness that is important. We have turned the religious quest into the practice of individual religions, and that is not the same as the religious quest. There is nothing wrong with what the Christ or Buddha said, but the way we approach it is mistaken, because it is illusory. We think by reading their books we are going to get the truth. As we pointed out earlier, we can get a question out of them but we have to find the answer (or the truth) for ourselves. Examining those questions, discovering what is true and what is false for ourselves, in our own consciousness, through our own observation, through our own meditation, through our own inquiry, is the true religious quest. Only that can bring order into the consciousness, because it can bring understanding and clarity to our consciousness.

The other factor that has very seriously bogged down the religious quest is belief. What does belief mean to a person who is in quest of truth ? We have to regard it the

same way as a scientist regards a theory. The theory is not the truth, the model is not reality. We have to do experiments to find out what is true. But when we have belief, we are merely accepting something without evidence, which has little value. Totally rejecting something also has no value. When we listen to something and examine it, try to find out whether it is true, then the work which our consciousness does in trying to find out whether it is true, has value. The acceptance is as false as the rejection. It is only when we listen and consider, neither quickly accept nor reject but live with the question and learn from it, through our own experimentation, through our own observations, that we may get some truth out of it. The religious quest has not gone far because we have interpreted it to mean belief and practice of certain rituals and so on. We think that it is going to get us peace of mind, that it is going to bring us to something divine. That is an illusion. It is like the mistake of thinking that aspirin is going to cure the disease. It only provides temporary relief. Worship may give us a certain peace of mind temporarily, but for the same reason for which the mind was disturbed yesterday, it will be disturbed tomorrow because the same causes are still operative. If the problems do not dissolve at the source, the cause is still there and the effect is bound to be there.

The third thing that institutionalized religions gave was a moral code— ~~What~~ what is right, ~~What~~ what is wrong; what is good, what is evil; what to do and what not to do. Every religion has done that. We must examine whether one can come upon virtue through the practice of virtuous actions. Whether one can come upon kindness in one's consciousness by performing certain kind acts. Suppose <sup>I</sup>~~I~~ become a vegetarian, I do not kill animals, I give alms to the beggar, I help old people across the road and go on doing these kind acts, will

that bring kindness into my consciousness ? Or is kindness a state of mind, an outlook, which, if we come upon it, all these actions would follow as a natural consequence ? If we watch, we see that there are vegetarians who are extremely cruel in other aspects of their life. They have not come upon kindness, that is why there is such contradiction. In one area they appear to be very kind because in that area they have decided to be that way, but they have not come upon kindness, therefore they are very unkind in another area. A particular action becomes a habit and one can feel virtuous without having come upon virtue. That is a serious difficulty of the religious quest. It is the same with violence. If I am aggressive, I am violent, I hate people, can I practice non-violence ? I project an idea that non-violence means not hitting another person, so I hold myself back. I get angry, I feel like hitting the other person, but I do not hit saying I am non-violent. But in my consciousness there is still hatred, there is still aggression. I have merely prevented my hand from hitting. Is that non-violence, or is the ending of hatred in my consciousness non-violence ? Surely there is non-violence only when there is the ending of violence. As long as I am violent and I think I am practicing non-violence, it is only control. And self-control is something totally different from the ending of violence. All those religious commandments have only led to self-control. One does not object to self-control, it may be necessary, but it does not alter the consciousness within us. We cannot come upon virtue by practicing what we think is non-violence. Self control will never bring the understanding and the ending of violence within our consciousness. Virtue is a state of mind. There is virtue only when disorder ends. Violence, fear, jealousy, possessiveness are all a part of the disorder in our consciousness. One cannot impose order on disorder through discipline. If we do that, it is still part of disorder; it is only control and that control is still part of the disorder. The need to impose order on oneself, arises only

when there is disorder in the consciousness. Therefore imposed order is really disorder. The controller is the controlled and is violent. Suppression is violence with oneself; so the violence is still there and nothing changes inwardly. Of course the external action also matters and to that extent self-control may be necessary but it changes nothing inwardly. We are still in conflict when we are only controlling. If we are suppressing, fighting with ourself, then what is controlled and overcome on one day will have to be controlled every day, which means all of life becomes a battlefield. It is not a religious life to live constantly in battle with oneself. In fact, the moral code has added to our problems because one not only has this problem of violence but one also develops the additional problem of guilt. We feel guilty every time we feel violent. We have to examine whether that feeling of guilt helps us to enquire at all, or it just sends us into another emotional reaction of remorse and confession and all that, which becomes another way of coping with the situation without understanding it, without solving it. All disorder has a cause and so long as the cause exists the disorder will exist. So the religious quest is an inquiry into the causes of disorder in our mind. Just as a scientist cleans his instruments and lenses to ensure that they do not distort his observation of what is, the religious man has to eliminate the disorder from his mind since that is the instrument with which he observes. Disorder is caused by the illusions in the mind and the illusions end only with the direct perception of the truth. But the mind itself is both the observer and the creator of the illusions.

So there are all these difficulties with the religious quest. However difficult it may be, if that is what is needed, we have to do it. At present, we are not attempting it at all in our education. There is no emphasis on self-knowledge, not even one hour in the day is set aside for it. We are left to fend for ourself, find out and may be get it from our parents or

from our church. Society does not care whether a child comes upon self-knowledge or not. As long as he builds our bridges and runs our computers, that is all we seem to want. We arrange for him to spend 20 years in school and collage to learn how to run a computer and how to send a rocket to the moon because that enables him to perform certain jobs in society. We look upon the child as raw material for doing this work and fashion him accordingly. After spending 8 hours a day for 20 years he gets his Master of Science degree but he knows nothing about himself. He does not come upon a sense of beauty, he does not come upon joy, he does not know whether pleasure is the same thing as happiness, he does not know anything about the religious quest. His consciousness goes in all kinds of directions, he lives with conflict and confusion---marriages break down, relationships break down but society does not care so long as its work is getting done.

We must find out what kind of education we must give so that the mind can be both scientific and religious at the same time. Religious in the true sense, not just going and doing mass on a Sunday morning in a certain church which has nothing to do with being religious. Religion is a quest for understanding oneself, coming upon self-knowledge. Is it possible through education to help children to come upon the art of living? The art of living is a by-product of self-knowledge. Virtue is a by-product of self-knowledge. Knowing oneself means understanding desire, discovering the right place of everything in our consciousness. Can we help a child to become an enquirer in the religious field? #/  
Socrates said: "An unexamined life is not worth living"  
Einstein said: "Religion without science is blind and science without religion is lame." If we have only one leg to stand on, we need to build the other one. At present in society we have a lopsided development of the human being. We have trained the intellect very cleverly in one direction



and it works very well as an expert in that direction. But it is lame because it needs to have also religious understanding, love, compassion, peace of mind. In that direction, we have not even posed the questions to that consciousness. So how will it come upon it? Why have we, the educationists and all those who have set up the education system, ignored this aspect? Is it because, in the name of secularism, we think we must not teach any particular religion? In the name of secularism we have done away with the religious quest altogether, which is like throwing away the baby with the bathwater. Religious inquiry has nothing to do with the labels of Buddhism, Christianity or Hinduism. There is only one religious mind and that is the mind that knows itself, that has ended illusion, come upon love and compassion and freed itself of conflict. Only such a mind is a religious mind. Should we give up the religious quest because we feel it will have to be either Buddhist or Christian or Hindu and that divides mankind? Or do we need to go beyond all these religions and take the essence of the religious quest? All these religions were by-products of the religious quest. Can we have the religious quest without any denomination at all? Can we address the questions raised by Christ, by Mohammed, by the Buddha knowing that their words have little value for us unless we investigate them. We must not reduce them only to knowledge if we are interested in perceiving the truth.

57

The scientist posits the truth as the unknown, and he wants to progress towards it by the scientific method of successive approximations, improving his model and so on. That method is not valid here, but the same approach may still be valid. That is, I posit the truth as the unknown. I do not know what the true religious mind is. I do not know what God is. I do not want to speculate and accept the speculation of one religion or another religion. I want to find out what God is. When we posit it as the unknown, we can enquire into it. And in not knowing, we are all together. The fact is that we do

4-4

not know. You believe something, I believe something else and that divides us. But the fact is that we do not know. Why not have the humility to accept the fact and say "I don't know, but I want to find out"? When we know something very clearly, like the fact that fire will burn our fingers, we do not need to believe in it. We maintain a belief only when we do not know, and belief divides us, it prevents inquiry, therefore it is not religious. At present we say if you believe in this, you are a Christian, if you believe in that, you are a Hindu and so on. Which means we choose an illusion, attach ourselves to it and then get a label. That is just like joining a club! Religion is a much more serious affair than just joining a club or becoming part of some group. Those groups are built around illusions, because unless we have discovered what is true, mere speculation is an illusion.

It is clear therefore, that science and religion are both inquiries into reality. They are two complementary quests. Any feeling of antagonism between them is a product of a narrow vision. Science deals with what is measurable; religion is the quest for discovering and understanding the immeasurable. A scientist is not intelligent if he denies the existence of the immeasurable. There is nothing that is anti-science but there is a lot that is beyond science. The two quests have to go hand in hand. We not only need to have an understanding of the laws that govern the phenomena occurring in the external world around us but also we need to discover order and harmony in our consciousness. Human understanding is incomplete unless it covers both aspects of reality--matter as well as consciousness. There are several questions that lie on the border between the fields of science and religion, which are therefore of concern to both. What is consciousness? How did it originate? Is it a property of matter or is it something apart? Is the mind separate from the brain but needs the brain to operate through, or is it just the brain itself? This is related to the age-old question whether there is a soul that sur-

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vives the death of the body or the physical death is the end of the consciousness as well? If we could synthetically put all the atoms that build up a person's body in the position in which they are, would that automatically generate the consciousness of that person including his memory? We do not know the answers to these questions. They are both scientific and religious questions. Conversely, we could posit the question in the following manner. We know from science that all matter is built up of some hundred and odd elements which are listed in the periodic table. So the human being, the dog, the tree, the mountains and rivers are all built up of the same atoms. How do the atoms know how to behave in a plant, in the body of a dog and in our body? Are they associated with a different kind of consciousness or is it the same consciousness but the physiological structure limits its operation to different extents? What decides the period of time for which a living object will grow and then begin to wither away? Why does that happen after 12 years for a dog, after 60 or 70 years for a human being and after several hundred years for some trees or for the whale? We do not know.

Consider another related question. The scientists now have a reasonable model of the origin of the universe. They know fairly well the initial conditions that must have existed at the time the Big Bang took place as well as the laws that have governed the subsequent development of the universe. Now, if every particle of matter in this universe moves in accordance with certain universal laws which are fixed, then its motion can be predicted and where it will be the next moment is dependent on how it is moving now and the forces acting on it. Knowing that, if one can predict where it will be the next moment, we can use that information to predict where it will be another moment later. Since one can repeat this process indefinitely one can in principle, predict where it will be at any other time. It may be very complicated to do this because there may be too many factors to take into account but that is only a matter of difficulty of making predictions.

The philosophic question is whether everything in this universe is therefore predetermined ? If consciousness is a property of matter then it must also be predetermined if the position of all particles of matter is predetermined. If so, what is will ? Can anyone predict whether I will walk out of this room in the next five minutes or not ? It does not seem to be predetermined. So there is this paradox. We really do not know. The scientists still do not know what life is or how it originated. They have not been able to create even an amoeba or a virus in the laboratory, starting with chemicals and other non-living matter. Lots of efforts are being made to resolve this mystery but as yet we do not know how life or consciousness originated in the completely dead universe of the physicist. There are those who maintain that the laws observed and deduced by the scientists are all parts of a tremendous intelligence that is operating in the universe, and this intelligence was there even before the universe, as we know it, came into existence. Is that intelligence part of a universal consciousness which manifests itself in all living and non-living things including ourselves ? We do not know. How does consciousness interact with matter ? We do not know.

These are all questions which are both scientific and religious at the same time. Indeed the division between the scientific and religious quests is itself the creation of the human mind. Reality is one undivided whole which includes both matter and consciousness. Our thoughts, being limited by our experience, divide the external world from the inner world of our consciousness, in much the same way as our mind divides time from space though they are both two aspects of a single continuum. Both the scientist and the religious man need to be acutely aware of the limitations of the human mind and transcend them if they aspire to have a holistic perception of reality.

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