

Meeting Points of Science and Spirituality

I have always believed that the ultimate aim of humanity is genuine happiness and satisfaction. That is what I believe and what I take as the basic starting-point. In order to achieve the maximum happiness and satisfaction, we need to understand everything that is connected with mankind and his quest for happiness, whether it be in the field of matter or the spiritual field. Then, taking advantage of our knowledge of the different approaches, we have to find the right method to follow in order to achieve that aim.

The knowledge of external phenomena, and the application of that knowledge, is that which nowadays we call science. The approach and methods which focus primarily on internal phenomena-consciousness or the mind-constitute another sphere of knowledge. Both have the same objective, the achievement of happiness and satisfaction, which are the intimate concern of every human being. Not only the objective, but the method is also directly related to human beings as it is the individual person who puts it into action. The scientists investigating external phenomena is still a living human being who wants happiness; whether it is his profession or not, consciousness, is also his concern. The spiritual person, whose interests lies in consciousness or meditation, has to deal with matter. No one single way is sufficient; indeed if just one approach had been found to be so, the need would never have been felt to bring these disciplines together.

Both approaches are therefore very important, and I should like to say a few words to relate them to one another.

The fundamental view or philosophy of Buddhism is that of 'dependent arising'. When one talks about the view of dependent arising one means that things exist in dependence or that they are imputed depending on something or other. In the case of a physical phenomenon, one would specify that it exists in dependence on its parts, whereas non-physical composite phenomena would be described as existing in dependence either on their continuity or an aspect of their continuity. Consequently, whether it be external or internal phenomena there is not anything that exists except in dependence upon its parts or aspects.

If one were to investigate to find a basis for the imputation in any given phenomenon, since one would not find anything at all which actually is the phenomenon-no solid lump of anything that one could point one's finger at, which represents the phenomenon-then one says that phenomena exist through the imputation of the mind.

As phenomena do not exist independently of the imputing mind, one speaks of 'emptiness', which means the lack of any intrinsic existence that does not depend upon the imputing mind. Since things do not exist just of their own accord, but in dependence on conditions, they change whenever they encounter different

conditions. Thus, they come into existence in dependence on conditions and they cease in dependence on conditions. That very lack of any intrinsic existence, independent of cause and conditions, is the basis for all the changes that are possible in a phenomenon, such as birth, cessation and so forth.

It may be interesting to compare the scientific interpretation of the role of the observer or 'participator' with the Buddhist view that observed phenomena do not exist merely as a mental image, a projection or vision of the mind, but rather that they exist as separate entities from the mind. Mind and matter are two separate things. Matter is separate from the mind which cognizes it and denominates it. This means that, with regard to all phenomena without exception, though they are not simply a creation or manifestation of the mind having no entity of their own, yet their ultimate mode of existence is dependent on the mind that imputes them-the 'imputer'. Their mode of existence is therefore quite separate from the imputer, but their existence itself is dependent on the imputer. I feel that this point of view perhaps corresponds to the scientific explanation of the role of the observer. Although different terms are employed to explain them, their meanings are somewhat related.

On the surface, the dependent arising and emptiness explained above may seem to be quite contradictory. Yet if one analyses them on a much deeper level, one can come to understand that phenomena, on account of their being empty, are dependently arising or dependently existing, and because of that dependent existence, they are empty by nature. Thus one can establish both emptiness and dependent arising on a single basis, and thereby two faces which, on a general level, seem to be contradictory, when understood on a very profound level, will be seen to fit together in a very complementary fashion.

The mode of existence of phenomena is differentiated from their mode of appearance. Phenomena appear to the mind differently from their actual mode of existence. When the mind apprehends their way of appearing, believes in that appearance as being true, and follows that particular idea or concept, then one makes mistakes. Since that concept is completely distorted in its apprehension of the object, it contradicts the actual mode of existence, or reality itself. So this disparity or contradiction between 'what is' and 'what appears is due to the fact that although phenomena are in reality empty of any intrinsic nature, yet they do appear to the ordinary mind as if they exist inherently, although they lack any such quality. Similarly, although in reality things which depend on causes are impermanent and transient, undergoing constant change, they do appear as though they were permanent and unchanging. Again, something that in its true nature is suffering appears as happiness. And something which is in reality false appears as true. There are many levels of subtlety regarding this contradiction between the mode of existence of phenomena and their mode of appearance. As a result of the contradiction between 'what is' and 'what appears', there arise all manner of mistakes. This explanation may have much in common with scientists;

views of the difference in the modes of appearance and existence of certain phenomena.

Generally speaking, an understanding of the meaning of emptiness and dependent arising will naturally lead one to a deeper conviction in the law of cause and effect, where, as a result of different causes and conditions, corresponding fruits or effects, positive or negative, arise. One will then pay more attention to the causes and also be more aware of the various conditions. If one has a good understanding of emptiness or familiarity with it, then the arising of distortions, like attachment, hatred and so on, in the mind will diminish, since they are caused by a mistaken view-mistaken in not correctly distinguishing between 'what is' and 'what appears'. One can see, for instance, from one's feeling towards something that one observes will change, depending on one's own state of mind. Although the object remains the same, one's reaction will be far less intense when one's mind is calm than if it is overcome by some strong emotional feeling, like anger. The actual mode of existence of phenomena, the bare truth of existence, is emptiness. When one understands this, and appreciates the contradictory nature of the appearance of phenomena, one will immediately be able to realize this mistaken view to be untrue. Consequently all of the mental distortions such as attachment, hatred, etc., which are based on that misconception, a deception rooted in the contradictory nature of phenomena, will decrease in strength.

We might ask: how does the different levels of the consciousness or mind that apprehends an object actually come to exist themselves? Different levels of consciousness established are in relation to the different levels of subtlety of the inner energy that activates and moves the consciousness towards a given object. So, the level of their subtlety and strength in moving the consciousness towards the object determines and establishes the different levels of consciousness. It is very important to reflect upon the relationship between the inner consciousness and outer material substances. Many Eastern philosophies, and in particular Buddhism, speak of four elements, earth, water, fire and air are supported by the element of space, which enables them to exist and to function. Space or 'ether' serves, then, as the basis for the functioning of all the other outer elements.

These five elements can be divided into two types: the outer five elements and the inner five elements, and there is a definite relationship between the inner five outer and inner elements. As regards the element of space or 'ether', according to certain Buddhist texts such as the Kalachakra Tantra space is not just a total voidness, devoid of anything at all, but is referred to in terms of 'empty particles'. This empty particle therefore serves as the basis for the evolution and dissolution of the four other elements. They are generated from it and finally are absorbed back into it. The process of dissolution evolves in the order: air, fire, water, and earth. These four are better understood in terms of solidity (earth), liquids (water), heat (fire) and energy (air). The four elements are generated from the subtle level to the gross, out of this basis of empty particles, and they dissolve

from the gross level to the subtle into the empty particles. Space, or the empty particle, is the basis for the whole process.

The 'Big Bang' model of the beginning of the universe has perhaps something in common with this empty particle. Also, the most subtle, fine particle described in modern physics seems to be similar to the empty particle. Such parallels do present something that I feel it would be worthwhile to reflect upon.

From the spiritual point of view of Buddhism, the state of our mind, whether it is disciplined or undisciplined, produces what is known as 'karma'. This is accepted in many Eastern philosophies. Karma, meaning 'action', has a particular influence upon the inner elements, which in turn affect the outer elements. This, too, is a point for further investigation.

Another area in Tibetan Buddhism which may be of interest to scientist is the relationship between the physical elements and the nerves, and consciousness, in particular the relationship between the elements in the brain and consciousness. Involved here are the changes in consciousness, happy or unhappy states of mind etc., the kind of effect they have on the elements within the brain, and the consequent effect that has on the body. Certain physical illnesses improve or worsen according to the state of mind. Regarding this kind of relationship between body and mind, Buddhism can definitely make contributions to modern science.

Buddhism also explains, with great precision, the different levels of subtlety within consciousness itself. These are very clearly described in Tantra, and research on these, in my opinion, would produce very beneficial results. Consciousness is classified, from the point of view of its level of subtlety, into three levels: the waking state or gross level of consciousness, the consciousness of dream state, which is more subtle, and the consciousness during deep dreamless sleep, which is subtler still.

Similarly, the three stages of birth, death and the intermediate state are also established in terms of the subtlety of their levels of consciousness. During the process of dying, a person experiences the innermost, subtle consciousness, the consciousness becomes grosser after death in the intermediate state, and progressively more gross during the process of birth. Upon the basis of the continuity of the stream of consciousness is established the existence of rebirth and reincarnation. There are currently a number of well-documented cases of individuals who clearly remember their past lives, and it would seem that it would be very worthwhile to investigate these phenomena, with a view to expanding human knowledge.

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