THE UNIVERSE IN A SINGLE ATOM ACCORDING TO THE DALAI LAMA

The Dalai Lama on Science and Religion

GUILLERMO ARMENGOL

Chair of Science, Technology and Religion, Universidad Comillas

The recent book of the Dalai Lama constitutes an original form of memories in which, based on his personal encounters with an interminable number of top rank scientists, he reflects on the image of the universe, on life and on man in science from the point of view of the Buddhist religion. The Dalai Lama offers us his point of view evaluating the great progress of science, and showing us the frequent coincidences with Buddhist doctrine and also the points of disagreement. Science and Buddhism can illuminate each other in order to re-orientate knowledge of reality which is progressively more profound. As regards quantum mechanics and cosmology, science and Buddhism have more evident coincidences. However, in the explanation of life and, especially, the explanation of human consciousness (of the «soul») the differences with science become inevitable and decisive.

In the recent book of the Dalai Lama (*The Universe in a Single Atom*, Ramdon House, N.Y. 2006, Spanish translation in Grijalbo), he again astonishes us with his humble, simple, open temperament, and his profundity and intelligence. It is admirable that a person with an essentially Buddhist training has been capable of achieving precise and extremely well formulated knowledge (although this is neither technical nor professional, but is the knowledge of a simple, curious person who is intellectually concerned, as he himself said) with the most complex themes of modern science.

His concern takes in an enormous variety of fields: from the physics of matter, through cosmology to modern biology, genetics, neurology and psychology. Great scientists, like himself, give a personalised account, and contribute with their personal teaching to this suggestive scientific and cultural training of the Dalai Lama: David Bohm, Niels Bohr, Popper, Richard Davidson, Paul Davis, Paul Ekman, Daniel Goleman, Eric Lander, Robert Livingston, Francisco Varela and Carl F. von Weizsäcker, among others.

BUDDHISM A PHILOSOPHY WITHOUT A «BOOK»

The Dalai Lama initially insists on the fact that Buddhism is a philosophy without a «Book». While Christianity and Islam are Book religions (the Bible and the Koran), Buddhism does not have any canonical writings which must be considered to be «revelation», or an absolute point of reference which enables the unequivocal access to the truth of the religion. In fact Buddhism is an ancestral philosophy which has constituted a body of doctrine which is accepted, but has numerous variants in almost all its points. It is as form of spirituality which constitutes a powerful tradition and remains faithful to grand traditions which have been tested throughout the centuries.

He insists that this philosophy has endeavoured to know the truth and guide man towards overcoming suffering and towards happiness through the use of reason. Thus, Buddhism is submitted to reason in the sense that, just as reason was exercised in its ancestral tradition, so today it can continue to be exercised in order to show the perfecting of its overcoming suffering and the perfecting of its spirituality.

Thus, the Dalai Lama is an enthusiastic expert in and admirer of modern science. Science is also (like Buddhism) the exercise of reason and can contribute much to Buddhist beliefs. Throughout his book he refers to his interest in the fact that the knowledge of science has been added to the academic syllabus of the Tibetan monks.

LIMITS TO THE PHILOSOPHICAL FLEXIBILITY OF BUDDHISM

The Dalai Lama insists that even the texts attributed to Buddha are not an absolutely regulated reference. However, it is true that the texts of Buddha and those of other important Buddhist philosophers, as well as texts of the philosophical tradition of India, constitute a heritage of thought in which Buddhist spirituality is firmly rooted. The wealth of texts and authors, in diverse philosophical traditions and in several countries is extensive. On occasions the same problem gives rise to different opinions, which, in fact, are irreconcilable.

Among this enormous amount of philosophical possibilities, the Tibetan tradition of Buddhism has its preferred texts and authors. Thus, in general, Tibetan Buddhism is situated in the tradition of Mahayana Buddhism. The Dalai Lama knows how to choose the texts and authors who are most apt in order to converge with the results of science in each case. That is why his considerations must refer to Tibetan Buddhism, leaving aside the analysis, which is also possible, of the relationship of science with other Buddhist traditions such as Tantric Buddhism (very common in Tibet) or Chinese or Japanese Zen Buddhism.

In the process of the conciliation of Buddhism and science, the Dalai Lama has a much easier way to deal with matters of physics, whether this has to do wit cosmology or microphysics (quantum mechanics) or deals with themes of biology (evolution) or anthropology. Specifically, a crucial point is the ancestral doctrine of Buddhism on reincarnation. In this regard, modern science (the neurological idea of man, emergentism or the theory of mind) offers no basis to think that anything like re-incarnation is possible or scientifically likely.

This is where the opening up of Buddhism to the innovation which reason can offer from science in our time clearly reaches its limit. In this point the Dalai Lama seems, in fact, to know that science does not endorse re-incarnation. However, it considers that it does not demonstrate that this is not certain, therefore, it continues to be maintained in Buddhist tradition.

This means that there are limits in which, if certain things are not accepted (for example, re-incarnation), the axis of Buddhist doctrine and spirituality collapses. In these cases, the flexible opening up of Buddhism to dialogue with the reason cannot be maintained as it cedes under the weight of its ancestral tradition.

QUANTUM MECHANICS

Classical Buddhist doctrine show that everything is impermanent and transitory. Everything comes apart and passes, and this is the fundamental reason for suffering. Hinduism and the ordinary view of man grants ontological stability and consistency to real things or mundane circumstances. However, this is a profound error which causes suffering.

Buddhism changes the point if view and establishes the universal law of «dependent originating» which tells us that all phenomenic states are inconsistent and are only moments in a chain of dependent interactions. This chain of causes and effects produces the illusion of a phenomenal phenomenic world which is pure transitory inconsistency. The origin of suffering consists of the *karma* which traps us with this false consistency of the phenomenic world. Liberation consists of fleeing from the transitory world and avoiding falling into it through re-incarnation.

Quantum mechanics, according to the explanation the Dalai Lama insists on, has contributed to explaining micro-physical matter (the true basis of things) as an inconsistent flow which is very similar to the traditional doctrine of Mahayana Buddhism. Both atomic theory and the theory of particles were pre-figured in Buddhist physics, with an idea of «emptiness» as the basis and origin of things.

«The paradoxical nature of reality, as revealed by the Buddhist philosophy of emptiness and modern physics, represents a great challenge to the limits of human knowledge. The philosophical problem addressed by physics in the light of quantum mechanics is whether the very notion of reality, defined in terms of constituents of matter which are essentially real, is sustainable. What the Buddhist philosophy of emptiness can offer is a coherent model of the comprehension of reality which is not essentialist» (pages 88-89).

Cosmology

The Dalai Lama explains versions and content of ancient cosmologies in the Buddhist tradition which are today incompatible with science. However, there are traditions which present significant coincidences. The universe is inconsistent, according to the law of dependent originating: it is a continual, illusory becoming and coming apart and no originating cause or basis can be attributed to this.

«At the centre of the Buddhist cosmology there is the idea of the existence of multiple cosmic systems, infinitely more than the grains of sand of the River Ganges, according to some texts, and also the notion that these are in the constant process of formation and destruction. This means that the universe has no absolute beginning. The questions this idea poses for science are fundamental. Was there a single *big bang* or were there many? Is there a single universe or are there many, or even an infinite number of these? Is the universe finite or infinite as the Buddhists state? Will our universe continue to expand indefinitely or will it decelerate, will it even stop and everything end in a grand implosion? Does our universe form part of a cosmos in an eternal state of reproduction? The scientists debate these questions intensely. From the Buddhist point of view, an additional problem arises. Even admitting that there was only one grand cosmic explosion, we can ask if this was the origin of the entire universe or only the commencement of our cosmic system in particular. The fundamental question, therefore, whether the *big bang*, which, according to modern cosmologists, marks the commencement of our current cosmic system, was the beginning of everything» (page 103).

Life, evolution, human soul, genetics

As regards these important topics of modern science, it is now more difficult to find illuminating coincidences from Buddhist philosophy. The Dalai Lama recognises the lack

of coincidence but insists that the Buddhist points of view cannot be considered to be absolutely rejected by science (as this has not reached the end and there are still unexplained enigmas). This leaves an ultimate possibility to be the final truth open. The belief in re-incarnation is especially difficult to harmonise with science. The Dalai Lama maintains his beliefs and is radically critical of classical reductionism applied to biology and, especially, modern genetic engineering.

The human sciences have been constructed under the influence of reductionism, preferably by the conductist method of the «third person». However, at the present time, everyone tends to recognise the role played by empirical experience in «first person». This is where the Dalai Lama believes that the subjective, interior experience of Buddhist spirituality which has a long introspective tradition, could provide modern neurology with substantial empirical evidence which would open up a more enriched science, more real and more human.

BUDDHIST ATHEISM

Buddhism is an «atheistic» religion which must be understood with precision. The drama of human suffering from the experience of Buddha, renders it improbable to talk of God (and this connects with its criticism of popular Indian Hinduism). Thus, Buddhist cosmology has an abundance of arguments against a fundamental theist cause. The Dalai Lama, although he has great respect for the theist religions, defends the classical atheism of Buddhism.

However, in this «wheel of time», which makes the universes spin round, the souls are trapped by the *karma* in the transitory and continued to be subjected to suffering through successive re-incarnations. However, through Buddhist ascetics (the octuple way) and, especially, through meditation, «desire» is overcome, re-incarnation is avoided and the person enters *Nirvana*.

What is *Nirvana*? For Buddhism it is the final state after the cycle of re-incarnations (*samsara*). It is transcendent and cannot be explained from this side of the beyond. The minor gods or *Devas* of popular Buddhism are not in Nirvana, the form part of the phenomenic or transitory world. This is the state which corresponds to the third body of Buddha (the doctrine of the three bodies of Buddha): this is the trans-historical reality of Buddha (in Buddhism we can say «nirvanated»). Nirvana is an enigma lived as a supreme hope. What does this enigma consist of? This cannot be answered and, therefore, finally, it can neither be excluded nor affirmed that it is God; If it were possible to state something (for example that it is not God) the enigma would be revealed. Thus, we can say that Buddhist spirituality proceeds «without God» towards a final hope of salvation which receives the enigmatic name *Nirvana*.

BUDDHISM AND CHRISTIANITY

Christianity has been understood for centuries from a Greek ontology, which is today archaic in the light of science. This is true. However, Christianity is not identified with Greek ontology and may be compatible with the grand principles of the image of the universe in science. We can say that only Christianity and Buddhism are united by the profound experience of the drama of human suffering and both have a spirituality open to a trans-historical future of salvation.

The essential difference is that Buddhism runs out of words, it does not dare pronounce the word God from the experience of suffering and lives a way which is atheistic, without God, mysterious, towards salvation. Christianity, however, believes in the God who is revealed in the tradition of Israel and in the mystery of Christ. On the cross He receives the message of a God who reaches *kenosis*, nothingness or emptying of self in a world in which suffering makes sense in the history of salvation. In the resurrection He receives the message of a God who will work a final trans-historical salvation of humanity, scatologically (at the end of time) overcoming human suffering. Christianity is the acceptance of a saving God by personal, free adherence to the mystery of Christ.

From the dramatic suffering of the *samsara* Buddhism does not understand that suffering has a meaning in God. Christianity, supported by the mystery of Christ, believes (although it is difficult to understand as a living experience just as it is difficult for the Buddhist) that suffering makes sense in the plan of salvation of a transcendent personal God. Accepting divine kenosis is being religious in a Christian sense.

[Texto básico publicado en Tendencias21.net, por la Cátedra CTR, Escuela Técnica Superior de Ingeniería, Universidad Comillas, Madrid] GUILLERMO ARMENGOL