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## An Appraisal of Buddhism in the light of Science

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### Abstract

*Questions relating to the compatibility, or otherwise, between Science and Religion have haunted educated minds from time immemorial in as much as both are important facets of modern life. The relationship between Science and Religion has typically been characterized as one of conflict, especially on the issue of origins of life in our planet Earth centering around the discourses on creationism vs. evolutionism. The historical reality, however, is that science and religion have more often than not been complementary and dynamic to each other. Both science and religion are bent upon discovering greater forces, knowledge, wisdom and understanding the universe. Hence there appears to be quite a few core beliefs held by both the ideologies simultaneously. People have dreams and to fulfil them, they will move forward no matter what. Neither the roar of science nor religion will stop them and thus science and religion, the two potent sources of human life, need to reconcile and cooperate and harmoniously help people attain their goals.*

*The relationship between Buddhism and Science is a subject of contemporary discussion and debate among Buddhists, Scientists and Scholars of Buddhism. The nature of matter, the nature of physical reality, problems of space and time are all implicit in Buddhist teachings. This Paper has attempted to explain Buddhism in the context of history of religions and to establish that Buddhism is not incompatible with the fundamental principles of the sciences.*

**Keywords:** Buddhism, Scientists, Scholars, Religion, Relationship, Compatibility, Dalai Lama.

### 1. Science and Religion: An Overview:

Questions relating to the compatibility, or otherwise, between Science and Religion have haunted educated minds from time immemorial in as much as both are important facets of modern life. Therefore, at the outset, let us delve a while to settle the apparent contradictions between the two in an attempt to expose ways that have been used to categorize Science and Religion. Let us also examine the strategies for evaluating the big questions concerning them.

The relationship between Science and Religion has typically been characterized as one of conflict, especially on the issue of origins of life in our planet Earth centering around the discourses on creationism vs. evolutionism. The historical reality, however, is that science and religion have more often than not been complementary and dynamic to each other. While the term 'Science' is



generally used to designate knowledge of the natural world, the original definition was simply knowledge (as opposed to wisdom, which was considered superior). Before the 19<sup>th</sup> century, many people practiced natural philosophy, which sought to study the natural world and natural theology, which attempted to use the natural world to learn more about God. Natural philosophy eventually gave rise to physics and science according to its modern definition. It is worth noting that various branches of science have significant differences in their methods, e.g., physicists and chemists can perform controlled experiments, while astronomers and paleontologists must rely on observations. Notwithstanding differences of methodologies adopted by numerous disciplines that comprise and constitute the sciences, study of the objective material world, laws of motion and underlying interconnectedness are the threads that bind them.

Most philosophers of science agree that it is impossible to prove anything conclusively and infallibly in science. If we think about it, scientific proof would entail showing that something happens the same way in all circumstances in the present, the past, and the future. Since the future and past cannot be tested, all statements within science must be considered as being tentatively true. Note that a single instance can disprove a scientific statement. Empirical knowledge is obtained by the senses. In science, the senses are enhanced by microscopes, telescopes and other forms of technology.

Science seeks to explain the natural world. There is some difference between the definitions of hypothesis, theory and law, but in general, hypotheses are testable statements of a narrow topic. Theories entail a number of hypotheses that are (and have been) tested and have never been disproven. For example, Einstein's theory of relativity predicted the bending of light as it passes by a large object. The bending was experimentally verified years later exactly as predicted. The term "law" is almost never used for new explanations, perhaps because of the fear that they will be disproven. We speak of Newton's laws and Einstein's theory of relativity even though they explain the same things. To some degree, laws are more mathematical than theories. Regardless, a scientific theory describes a powerful explanation rather than a guess (1-4).

Religion is probably harder to define than Science if one takes into account all religions. The supernatural power may be God or Gods or Forces that act on humans (as in Buddhism). The Institutions of religion include churches and the Church Universal as well as religious leaders and the power and influence they exert. The Practices associated with religion serve to unite believers in community, to educate them and to change their lives in positive ways. The Institutions serve to educate leaders and provide resources to make a difference in individual believers, in the community and in the world. Religion seeks answers though most believers hold that the answers cannot be known (at least in this world) by mortals. The importance of religion lies in the striving



towards exploring the answers rather than the answers themselves.

Ideally, science is repeatable and is the same for everyone (though some philosophers of science dispute this in practice). Science is most repeatable when it controls all variables except the one being measured, though this is hard to do. When controlled experiments can't be carried out, observations and inferences drawn from them must suffice<sup>1</sup>. Scientists generally say that about 1000 hours of observation are needed to draw meaningful conclusions<sup>2</sup>. Ethology is the study of animal behaviour in the wild. Once obtained, scientific methods, data and conclusions are published in journals where they are available to all scientists and researchers.<sup>3+4</sup>

Both science and religion are bent upon discovering greater forces, knowledge, wisdom and understanding the universe. Hence there appears to be quite a few core beliefs held by both the ideologies simultaneously. People have dreams and to fulfil them, they will move forward no matter what. Neither the roar of science nor religion will stop them and thus science and religion, the two potent sources of human life, need to reconcile and cooperate and harmoniously help people attain their goals.

## 2. The Context:

Buddhism is an Asian religion that is based on teachings attributed to Siddhartha Gautama, an upper-class male born in north-eastern India in the fifth or sixth century BCE. Gautama became the "Buddha" ("awakened one"), according to tradition, upon achieving "enlightenment" as a result of engaging in a series of spiritual practices, most notably meditation. After achieving enlightenment, the Buddha is said to have gained a perfect understanding of the nature of the world and of human existence, and he spent the remainder of his life traveling and teaching as an itinerant mendicant. The religion of Buddhism is based largely on the teachings attributed to Gautama-Buddha. Many authors and practitioners of Buddhism claim that not only are Buddhism and Science compatible, but that Buddhism is inherently scientific<sup>5</sup>.

The relationship between Buddhism and Science is a subject of contemporary discussion and debate among Buddhists, Scientists and Scholars of Buddhism. Historically, Buddhism

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<sup>1</sup> Stenmark, Mikael (2010). "Ways of relating science and religion", *Cambridge Companion to Science and Religion*, pp 278-295.

<sup>2</sup> Nancey Murphy (1985). "A Niebuhrian Typology for the Relation of Theology to Science," *Pacific Theological Review* XVIII, (Spring 1985), pp16-23.

<sup>3</sup> John F. Haught (1995). *Science & Religion: From Conflict to Conversion* (New York: Paulist Press, 1995), Ch. 1.

<sup>4</sup> Ted Peters, Ed. (1998). *Science & Theology: The New Consonance* (Boulder, Colorado: Westview Press, pp. 13-22.

<sup>5</sup> Austin, J. (1998). *Zen and the brain: Toward an understanding of meditation and consciousness*. Cambridge, MA., MIT Press.



encompasses many types of beliefs, traditions and practices, so it is difficult to assert any single "Buddhism" in relation to science<sup>6</sup>. Similarly, the issue of what "science" refers to remains a subject of debate, and there is no single view on this issue<sup>7</sup>. Those who compare Science with Buddhism may use "science" to refer to "a method of sober and rational investigation" or may refer to specific scientific theories, methods or technologies<sup>8</sup>. Here are many examples throughout the Buddhist world of non-scientific worldviews, such as dogmatism, fundamentalism, clericalism, devotion to supernatural spirits and deities.<sup>9 + 10</sup> Nevertheless, since the 19th century, numerous modern figures have argued that Buddhism is rational and uniquely compatible with science. Some have even argued that Buddhism is "scientific" (a kind of "science of the mind" or an "inner science").<sup>11 + 12</sup> Those who argue that Buddhism is aligned with Science, point out certain commonalities between the scientific method and Buddhist thought. The 14th Dalai Lama, for example, in a speech to the Society for Neuroscience, listed a "suspicion of absolutes" and a reliance on causality and empiricism as common philosophical principles shared by Buddhism and Science.<sup>13</sup>

Buddhists also point to various statements in the Buddhist scriptures that promote rational and empirical investigation and invite people to put the teachings of the Buddha to the test before accepting them.<sup>14 + 15</sup>

Furthermore, Buddhist doctrines such as impermanence and emptiness have been compared to the scientific understanding of the natural world. However, some scholars have criticized the idea that Buddhism is uniquely rational and science friendly, seeing these ideas as a minor element of traditional Buddhism<sup>16 + 17</sup>. Scholars like Donald Lopez Jr. have also argued that this narrative of Buddhism as rationalistic developed recently, as a part of a Buddhist modernism that arose from the encounter between Buddhism and western thought.<sup>18</sup>

<sup>6</sup> McMahan, D. L. (10044). "Modernity and the Early Discourse of Scientific Buddhism". *Journal of the American Academy of Religion*. 72 (4), (2004).pp 897–933.

<sup>7</sup> Thompson, Evan (January 2020). *Why I Am Not a Buddhist*. Yale University Press. p. 36.

<sup>8</sup> Lopez Jr., Donald S.(2009). *Buddhism and Science: A Guide for the Perplexed*. University of Chicago Press.

<sup>9</sup> Wright, Robert (2017). *Why Buddhism is True*, Simon & Schuster. p. 256l (2017).

<sup>10</sup> A Review of Buddhist Fundamentalism and Minority Identities in Sri Lanka", *Journal of Buddhist Ethics*. *Buddhistethics.org*. Archived from the original on April 16, 2009. Retrieved March 4, 2013.

<sup>11</sup> Safire, William (2007). *The New York Times Guide to Essential Knowledge* p.718.

<sup>12</sup> Deegalle, Mahinda (2006). *Popularizing Buddhism: Preaching as Performance in Sri Lanka* p.131.

<sup>13</sup> Wallace, B. Alan (2003). *Buddhism and Science: Breaking New Ground* (Columbia University Press) p. 52.

<sup>14</sup> Yong, Amos (2005). *Buddhism and Science: Breaking New Ground* (review) *Buddhist-Christian Studies* – Volume 25, 2005, pp. 176–180.

<sup>15</sup> Lopez Jr., Donald S. (2009). *Buddhism and Science: A Guide for the Perplexed*. University of Chicago Press.

<sup>16</sup> Thompson, Evan (2020). *Why I am Not a Buddhist*. Yale University Press. p. 1.

<sup>17</sup> "Talking Up Enlightenment." Christina Reed, *Scientific American*, February 6, 2006

<sup>18</sup> Dalai Lama (2005). "The Neuroscience of Meditation." November 12, 2005, speech given by the Dalai Lama.



Furthermore, while some have compared Buddhist ideas to modern theories of evolution, quantum theory, and cosmology, other figures such as the 14th Dalai Lama have also highlighted the methodological and metaphysical differences<sup>19 + 20</sup> between these traditions. For the Dalai Lama, Buddhism mainly focuses on studying consciousness from the first-person or phenomenological perspective, while science focuses on studying the objective world.<sup>21</sup>

### 3. Buddhism in the light of Science:

**3.1 John Dunne**, Distinguished Professor of Contemplative Humanities at the Centre for Healthy Minds, University of Wisconsin-Madison, USA has exhorted the discernible scholars to take a closer look at the ongoing debate about whether Buddhism should be primarily thought of as scientific or religious<sup>22</sup>. Starting as far back as the mid-19th century, various people have tried to promote Buddhism as scientific. The idea started among various Asian intellectuals, some of whom were pushing back against colonialism by demonstrating the strength of their culture. Later, Western Buddhists also promoted this claim. So, is there any truth to it?

One way to approach that question is to look at how the claim has informed some useful dialogues between scientists and Buddhists, perhaps most prominently His Holiness the 14th Dalai Lama. There are good reasons those conversations work well. First of all, Buddhism endorses the notion that if we want to prove something, we need to use empirical evidence. If there is a contradiction between what we can observe—either directly or through inferences based on perception—and what Buddhist scriptures say, then we are expected to reject the scriptures and go with what we have established empirically. In other words, the evidence of our own experience and reasoning has to be the touchstone.<sup>23</sup>

There's a quote often cited in the Tibetan tradition (it was originally in Sanskrit) in which the Buddha says, *"Just as a goldsmith test to see whether something is gold by touching it to a touchstone, by rubbing it, by heating it, so too, oh monks, you should accept my words only after examining them and not out of respect for me."*<sup>24</sup> Scripture is useful, but it is not what we need in the end. In the context of Buddhism, what we actually need is experience—the kinds of experiences that transform our habits. Mere intellectual understanding isn't sufficient. No matter how many of the Buddha's discourses we read, it will never amount to experience. So, from its earliest days, the tradition had a built-in sense that while the Buddha's discourses are necessary

<sup>19</sup> Donald S. Lopez Jr. (2008). *Buddhism and Science: A Guide for the Perplexed*, (University of Chicago Press).

<sup>20</sup> Flanagan, Owe (2011). *The Bodhisattva's Brain*. MIT Press. p. 4.

<sup>21</sup> Snodgrass, Judith. (2007) *Defining Modern Buddhism: Mr. and Mrs. Rhys Davids and the Pāli Text Society*, Comparative Studies of South Asia, Africa and the Middle East – Volume 27, Number 1, 2007, pp. 186–202.

<sup>22</sup> <https://www.johnddume.net>

<sup>23</sup> Gyatso, Tenzin (The 14th Dalai Lama) (2005). *The Universe in a Single Atom: The Convergence of Science and Spirituality*. Morgan Road Books.

<sup>24</sup> Ibid; See Footnote-23.



for teaching the path, at a certain point, we need to leave that behind in favour of our own direct experience. This is one way in which one could say that Buddhism is scientific. In our cultural history, to be scientific, in part, means to turn away from the kinds of knowledge claims we find supported by our scriptural traditions in the Abrahamic religions. For a Christian, Jewish, or Muslim scientist, the appeal to scripture has to be set aside, but Buddhism set it aside at the very beginning.

Another way in which Buddhism can be said to be scientific is how it engages in a very detailed examination of the mind. Within the Abhidharma, one of the three forms of canonical Buddhist literature, there's a great deal of discussion about the mind itself and various ways of analyzing how it works. It asks: How do attention and perception work? If I am attached, how is attachment operating? How does it make me behave? How do I counteract attachment? How do I learn to recognize attachment? These various ways of analyzing the mind that we find in the Abhidharma literature are quite detailed and profound and have already proven to be of great interest to scientists who are seeking some alternative perspectives on the workings of the mind.<sup>25</sup>

One of the key aspects of these Buddhist accounts of the mind is that they do not assume that there is a single controller or ego that is running all of these processes. That belief has turned out to be a commonly accepted position among neuroscientists, who have not identified a part of the brain that controls everything else. There's no evidence of any single controller within the various brain processes that constitute consciousness. So, Buddhism's robust account of the workings of the mind along with the position that rejects the idea of a single controller is another way in which Buddhism aligns fairly well with our contemporary sciences of the mind. When we look at all these narratives, then it makes good sense to say that there is a possibility for a good dialogue with science and also that in a certain way Buddhism is scientific. But let's not be too confused about this, because to say that there really is a Buddhist science requires some qualifications.

### 3.2 The Scientific Method:

Although there are amazing and detailed theories within Buddhism about the workings of the mind and so on, many of those theories have not gone under any revision for centuries. But that type of revision is central to the scientific method, in which a theory leads to hypotheses that are then tested, and if they don't work out, in principle, we revise our theories. From there, we continue onward, all the while making some advancement. We don't quite see that in Buddhism, where many of the fundamental theories have not been revised for centuries. Does this mean that there is something wrong with Buddhism? If those theories are good enough for the training of people and if we're not interested in what is objectively true, which itself is a very problematic idea within

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<sup>25</sup> Ibid; See Footnote-22



Buddhism, then perhaps we don't need to have so much theory revision. But whether or not theory revision is necessary or desirable, it's certainly not present in Buddhism in the same way that it is in the scientific traditions in the West. So, we need to be cautious when talking about Buddhist science or the ways in which Buddhism is scientific.

At the same time, we do see contemporary figures, most importantly His Holiness the 14th Dalai Lama, who are interested in some theory revision.<sup>26 +27</sup> The Dalai Lama wants to engage in dialogue with scientists so both sides might learn and revise their theories. We see this slowly happening in the Tibetan monastic institutions in exile and to some extent within Tibet, too, where there's an entire programme of scientific education that is ongoing. In any case, the idea of Buddhism as science has often been a way for Buddhism to negotiate its identity within modernity.<sup>28 + 29+30</sup>

#### 4. History of the Buddhist Modernist Discourse:

##### 4.1 Modernism in 19<sup>th</sup> Century :

A commonly held modern view is that Buddhism is exceptionally compatible with science and reason, or even that it is a kind of science (perhaps a "science of the mind" or a "scientific religion"). This view arose in the modern era, as part of what has been called "Buddhist modernism",<sup>31</sup> and was defended by figures such as Migettuwatte Gunananda, Anagarika Dharmapala, Paul Carus, Shaku Sōen, D.T. Suzuki, Henry Olcott, and Edwin Arnold.<sup>32</sup> These modernists accepted and promoted modern scientific theories such as evolution and held that they were consistent with the Buddhist understanding of Dharma (sometimes interpreted as a "natural law").<sup>33</sup>

They also held that Buddhism was a rationalist religion that did not require faith in revelation, a God, superstition and religious ritual but was based on an understanding of causality and empiricism. According to Geoffrey Samuel, some of these modernists even "suggested that Buddhism was barely a religion at all in the Western sense, but a scientifically-based philosophy in its own right." Some of these figures also dismissed the "irrational" elements

<sup>26</sup> Ibid; See Footnote-23

<sup>27</sup> Ibid; See Footnote-22

<sup>28</sup> [https://en.wikipedia.org/wiki/Emile\\_Durkheim](https://en.wikipedia.org/wiki/Emile_Durkheim)

<sup>29</sup> [https://monoskop.org/images/Durkheim\\_Emil](https://monoskop.org/images/Durkheim_Emil)

<sup>30</sup> David Barash, Is Buddhism the Most Science-Friendly Religion?, Da<https://blogs.scientificamerican.com>

<sup>31</sup> McMahan, D. L. (2004). "Modernity and the Early Discourse of Scientific Buddhism". *Journal of the American Academy of Religion*. 72 (4): 897–933.

<sup>32</sup> Lopez Jr., Donald S. (2009). *Buddhism and Science: A Guide for the Perplexed*. University of Chicago Press.

<sup>33</sup> Wright, Robert (2017). *Why Buddhism is True*. Simon & Schuster. p. 256l, 20.



of Buddhism as folk superstition.<sup>34</sup> According to Martin J. Verhoeven, Buddhist modernists downplay mythic and religious elements such as traditional Indic cosmology, belief in Miracles and rituals in favour of the rational and psychological aspects of Buddhism. The idea that the Buddhist worldview was rational and scientific is also seen in the popular *Buddhist Catechism*, written by Henry Olcott. This book contained a chapter on Buddhism and science that rejected miracles as an explanation for the Buddha's supposedly supernatural feats and instead offered natural explanations<sup>35+36</sup> for them (such as hypnotism and theosophical occult science). This modernist view was also promoted by early Buddhist societies in the West<sup>37</sup>, such as Karl Seidenstücker and George Grimm's Society for the Buddhist Mission<sup>38</sup> in Leipzig and the British Buddhist Society.<sup>39</sup>

Georg Grimm's (1868–1945) *The teaching of the Buddha, the Religion of Reason (Die Lehre des Buddha, die Religion der Vernunft)* is an important exposition of this rationalistic Buddhism. According to McMahan, western commentators on this topic were responding to "the Victorian crisis of faith and the emergence of the immense symbolic capital of scientific discourse." José Ignacio Cabezón notes that there were different opinions among American Buddhist modernists during the late 19th century. Some were happy to note the similarities between science and Buddhism and believed Buddhism was more compatible with science than Christianity (which was more likely to die out due to scientific findings). Other Buddhist modernists like Carus saw Buddhism as the "Religion of Science," which would make scientific truth "the last guide of a religious conception of mankind"<sup>40</sup>.

#### 4.2 20th and 21st Centuries:

As noted by David McMahan, the modernist idea of Buddhism as being compatible with science continued into the 20th century and remains strong today, having become "not only more voluminous but far more sophisticated throughout the late twentieth century and is now at its productive and creative zenith".<sup>41</sup> The Buddhist modernist view has also been expounded by a variety of western intellectuals, including Nobel Prize-winning philosopher Bertrand Russell, who described Buddhism as "a speculative and scientific philosophy."

<sup>34</sup> "Journal of Buddhist Ethics, *A Review of Buddhist Fundamentalism and Minority Identities in Sri Lanka*". Buddhistethics.org. Archived from the original on April 16, 2009. Retrieved March 4, 2013.

<sup>35</sup> Safire, William (2007). *The New York Times Guide to Essential Knowledge* ISBN 0-312-37659-6 p.718, 2007.

<sup>36</sup> Deegalle, Mahinda (2006). *Popularizing Buddhism: Preaching as Performance in Sri Lanka* ISBN 0-7914-6897-6 p.131.

<sup>37</sup> Wallace, B. Alan, ed. (2003). *Buddhism and Science: breaking new ground* (Columbia University Press) ISBN 0-231-12334-5.

<sup>38</sup> Verhoeven, Martin J.(2013). *Science through Buddhist Eyes, On the imperfect harmonizing of Buddhism with science*. The New Atlantis, 39.

<sup>39</sup> Talking Up Enlightenment." Christina Reed *Scientific American*, February 6, 2006

<sup>40</sup> Ibid; See Footnote-39.

<sup>41</sup> Ibid; See Footnote-37.



In the late 20th century and the early 21st, numerous publications discussing Buddhist ideas and science were released (such as James H. Austin's *Zen and the Brain* and works by Francisco Varela and Daniel Goleman). Furthermore, according to McMaha<sup>42</sup> "the compatibility of Buddhism and modern science has not only become a staple of popular Buddhist literature, it has also become a hypothesis in a large number of quite sophisticated experimental studies".<sup>43</sup> The Mind and Life Institute is at the forefront of such studies. The Institute hosts conferences on Buddhism and science and sponsors research on Buddhist meditation. McMahan also argues that "perhaps no major tradition has attempted to adopt scientific discourse<sup>44</sup> more vigorously than Buddhism."<sup>45</sup> Geoffrey Samuel remarks that these dialogues point to the fact that westerners (including scientists) have come to take Buddhist ideas much more seriously as a valuable system of knowledge. The Mind and Life Institute has also influenced how Tibetan Buddhism is presented to western audiences, and it is also closely connected to the 14th Dalai Lama's promotion of scientific education among Tibetan Buddhist monks.<sup>45</sup>

### 5. The Problem of Scientific Materialism:

Buddhism rejects all materialistic theories which attempt to reduce consciousness to the functions of physical properties. The 14th Dalai Lama states that "from the Buddhist perspective, the mental realm cannot be reduced to the world of matter, though it may depend upon that world to function."<sup>46</sup> Because of this, while Buddhists like the Dalai Lama embrace the findings and methods of neuroscience, they do not accept the assumptions of some neuroscientists that consciousness can be fully explained as a function of the brain (which is a metaphysical assumption). He further argues that "there is as yet no scientific basis for such a categorical claim," since neuroscience mainly studies correlations between brain states and first person pare "grounded in the phenomenology of experience" and "include the contemplative techniques of meditation" could assist in the development of a more holistic cognitive science that makes use of introspection. The Dalai Lama sees these methods as first-person empirical processes.<sup>47</sup>

### 6. Conclusion:

There can be no question that Buddhism is the one system, excepting perhaps science itself, which achieves an objective and detached view toward the nature and destiny of man. This striking objectivity divorces the Buddhist system from the realm of orthodox religion. It allies it at once with the kind of scientific search for truth which characterized India in the Gupta and other early

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<sup>42</sup> Ibid; See Footnote-37

<sup>43</sup> Ibid; See Footnote-31

<sup>44</sup> Ibid; See Footnote-37

<sup>45</sup> Ibid; See Footnote-34

<sup>46</sup> Ibid; See Footnote-23

<sup>47</sup> Ibid; See Footnote-23



periods of its civilization and which affords a major preoccupation to most of the intellectual world, both east and west of today. Buddhism, therefore, is not a typical religion. It is a system for life and living in a world which is circumscribed with difficulty and beset with suffering. Buddhism is not a religion, if, in scientific terms, we define religion as the mystic experience, the psychic thrill. It is not a religion because it de-emphasizes faith in the unknown and unknowable and it rejects dogmatism. However much these latter features may obtrude themselves in Buddhist lands, no serious student can regard them as other than superfluous growths, digressions from the scientifically conceived Dharma of the founder. This Article holds that in the strictest sense, Buddhism as a system and scientific endeavour as a comparable system, are one. But there is also a difference. The Buddhist thinker is clear as to his aims. If he uses science and its methods, he does so with the realization that science is a means to an end and not an end in itself. In other words, the Buddhist sees in science, reflections of principles expressed and reiterated by Lord Buddha at a time when there was no absolute methodology of science as such. Since today the world is wedded to the methods of science, we have only to note how wholly compatible with science is the system founded in India over 2,500 years ago. Modern scientific achievement serves merely to lend added perspective to the concepts of impermanence, of the illusory quality, and of anattā which were put forth so long ago. As an end in itself, science may solve immediate problems - it feeds more people so that there are more people to feed; it prolongs life and finds more effective means of destroying life. Science as viewed today, is a method and to make a cult of it, to find in it the answer to problems and questions of the ultimate forms of human destiny is rank error. It is making a dogma of science where no religious emotion or attitude is ever intended. This indeed was the fallacy of some of the sectarian forms of ancient Hinduism. In seeking to explain the universe by means of an atomic theory, however correctly conceived, the Brahmins of India of the past stopped dead and found human salvation, if it may be called so. Nor is the contemporary world too different despite the fact that the scientific goal is material rather than spiritual. The method of science admits primarily the formulation of a hypothesis, the testing of that hypothesis and the stating of new hypothesis, predicated on knowledge obtained by such experimentation. Lord Buddha experimented with ideas, not with things—he employed the crucible of life in which to measure human experience.

Science is characterized by its tough-mindedness. The search for truth is not always easy, nor indeed, always pleasant. It has been said that the truth may hurt. It does, but it remains truth for all that. Pristine Buddhism offers an attempt, a successful one, it may be added, to come to grips with truth in an objective way. To those of us who, now living, are seeking a few moments of respite, of surcease from worry, in short, what might be called happiness, the Buddha says in effect: “All right, just remember, it doesn’t last; it may be here today but it is never permanent.” Just as science seeks to define its answers, objectively, without emotion, so also does Buddhism



hit squarely at the target and, free from emotional stress, informs us concisely what is what. We may not like it and we may have to toughen ourselves to take it, but it is proven. An example of the kind of scientific “tough-mindedness” which the Buddhist has to take is seen in the concept of karma. What indeed could be simpler and yet what could be more scientifically conceived? If one chooses, one may take on faith, to be sure, the saṃsāra principle. Objectively, however, previous existences, however envisioned in time or space, remain a matter of complete indifference. What is significant is that “I” am not the same individual that “I” was yesterday, a year ago, or even a moment ago. Ego has changed, physical form has changed, however imperceptibly. Moreover, the “I” of the individual, having volition, free will, can and does act. Acts, however, are preconditioned by foregoing acts. A deed of to-day begets its effects of tomorrow, effects of future action and thought. We think this is the karmic principle with meaning and application. It is scientific. There is nothing esoteric about it. So much has been said regarding the relations between Buddhism and the natural sciences that it is scarcely worth belaboring the point further here. The nature of matter, the nature of physical reality, problems of space and time are all implicit in Buddhist teachings. We must confess that we cannot care less about such mystical relationships as are conceived as between mind and matter. Our interests lie in the connections between Buddhism and the social sciences, that wide area which seeks to understand the relation between man and man, not that between atom and unpopulated universe. In such social sciences as anthropology and sociology, an attempt is made to understand how men behave in groups and why they act as they do. A related aspect is seen in economics and in its handmaiden, political science. Still further, may be added, the discipline which seeks to evaluate the individual, psychology. In all of these fields, one thought becomes paramount: human beings act because of their conditioning or the anthropologist would say because of their cultural heritage. We come to realize that what one people regards as right, another may view as wholly wrong. The social sciences teach the relativism of human behaviour. Granted that human behaviour be relative, it follows that there are no absolutes of good or evil. Indeed, good and evil, as concepts, are likewise wholly relative. As a trained social scientist, one who has information regarding the differing ways of the peoples of the world, one has to believe this. Only in Buddhism is some order restored from the resulting chaos. Note that the Buddha does not say: “Thou shalt not ...” He does say that it is a good idea to avoid certain kinds of behaviour and he issues a series of wholly positive injunctions on his followers. Regardless of background, regardless of belief, regardless of economic or political systems, Buddhism has application. It makes sense as nothing else can to restore balance to men. Not that it is even desirable to affect a balance from the Buddhist point of view. To realize the concept of anicca is unquestionably for all men enough. But the Buddhist could assist his own goals by a realization of the objectivity of the social scientist. Here the scientist takes the view of detachment toward his fellow man. He does not seek amelioration. The Buddhist can and should do the same. By so doing, he may achieve by indirection solutions to the problem of human



suffering. The Lord Buddha realized that the man who helped himself would inevitably help others. He comes concretely to grips with problems of society and personality. Psycho-analysis may in some measure be compared with enlightenment, but the enlightened man does not need to be told how to live with his fellows. The nature of enlightenment brings this inevitably about. The Buddhist can adopt the contemplative detachment of the scientist. In so doing, he makes himself a better Buddhist and follows infinitely more closely the basic precepts. Objectivity in human affairs remains his watchword.<sup>48+49</sup> It has, therefore, to be concluded that Buddhism is not incompatible with the fundamental principles of the sciences.

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