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Buddhism and Science: When Complementarity establishes Irrelevance

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Introduction

It is proposed that the rhetoric of the discourse on science and Buddhism exhibits an often non-deliberate predisposition to establish and perpetuate a kind of compartmentalization which consigns both science and Buddhism to two different and irrelevant to each other realms in the minds of the wider, general, and non-scientifically involved Western Buddhist population. This emerges non-deliberately, for the purpose of avoiding any essential influence between the two subjects, despite the sincerely expressed aims of the proponents of science—Buddhism complementarity to avoid that separation. However, this paper will also argue for the importance of the continuation of science—Buddhism collaboration as this provides evidential instances of actually practicing the Buddhist emphatic belief in the importance of not separating the pursuit of knowledge from the aim of understanding, producing, and maintaining happiness. Indeed, it is the epistemological incompatibility between the two disciplines, and the compartmentalization effectuated by the notion of complementarity between them, that makes the Buddhist emphasis on attaching the aim of happiness to scientific pursuit all the more real, persuasive and potentially imitable.

There is more talk of complementarity than compatibility: “The picture of a science—Buddhism collaboration that Buddhists proponents of complementarity do not wish to encourage is one of naïve contemplatives reporting to naïve cognitive scientists.” (Thompson, 2008). Buddhism seeks to appear as not an underling of science but a useful yet unique partner in the search for truth. Yet, fears have been expressed regarding costly compromises: “To see Buddhism as ever-modern comes at a cost...It is perhaps useful to recall those elements of Buddhism that are so starkly premodern and to ask what is at stake in their loss. (Lopez, 2010, p. 216)

On the contrary, as this paper argues, the claim to complementarity maintains compartmentalization while at the same time rejects incompatibility, on the one hand, and

maintains distinctiveness on the other. Despite (mostly Tibetan) Buddhist claims of prioritizing scientific proof over scriptural authority, the Buddhist aim in the discourse is not so much to present a modern face of Buddhism but rather to reform (actually to join and encourage the already existing post-modern attempt at reform of) science into a more pluralist epistemology, and to make it accept subjective esoteric states as facts rather than reported data. Given the main aim of religion to address existential angst and concerns on future and survival, the majority of Buddhists will be less likely to engage in a disciplined and sustained study of the relationship between science and Buddhism and more likely to follow the religious teachings which the adherents' already existent commitment regards as the path to solving or enduring the above-mentioned concerns. As a result, the already committed may continue to disregard science without the necessity of admitting the anti-scientific attitude inherent in such disregard. The examples of science-related preconceptions that follow indicate the emergent rhetorical pattern which postulates science as in need of reform

Scientists research only what they can measure; the rhetoric of overlapping magisteria

In a conference between the Dalai Lama and specialists in various scientific fields, the late Harvard biologist Francisco Varela commented on, "the really hard problem of consciousness for Westerners. These subtle levels of consciousness are by definition pre-individual [thus] they appear to Western eyes as a form of dualism and are quickly dismissed...[Yet, they] are not theoretical..." (Varela, 1997, p. 216).

The implication of the above is that Buddhism need neither shed any of its esoteric views, nor water them down for appeasement of Western rationalist sensitivities to the point where Buddhism all but vanishes. Science must become flexible. The Western Buddhist is free to follow his or her commitment to a tradition which has far surpassed science in terms of time and experience and whose insights are just too intricate for Westerners to comprehend. The sentiment is succinctly expressed by Wallace (Wallace, 2003, p. 11) and also in Matthieu Ricard's claim that, "Buddhism can't accept any quasi-metaphysical claims [of science's] ultimate explanation...[No need] to make fundamental changes...just to follow whatever direction the wind of scientific discoveries happens to be blowing at the moment. (Revel & Ricard, 1998, pp. 279-280) A decade later, Wallace voiced similar sentiments about Medieval scholastics refusing to look through Galileo's telescope because of their insistence on Biblical and Aristotelian authority to the point of being sure that "if they saw anything that refuted their own metaphysical assumptions, [then] that must have been a hallucination...That's exactly the attitude of many cognitive scientists today...(Wallace, 2009) For these reasons, Wallace calls for approaching consciousness in a manner free from both transcendentalist explanations and material reductionism (Wallace & Hodel, 2009, p. 8)

Wallace attempts to present Buddhism as complementary to science on a basis of *equal partnership*. He posits science as able and obligated to *include within its ranks* studies of subjective experience as not the subject but the methodological tool.

A major difference between science and Buddhism is that scientists largely exclude subjective experience from the natural world and attribute causal efficacy only to physical phenomena...All conditioned phenomena arise from multiple causes, and the central theme of Buddhism is to identify especially the inner causes of joy and sorrow, for they have been found to be more crucial than *outer*, physical causes. This is perhaps the most scientific aspect of Buddhism. (Wallace, 2003, p. 8)

If science were to be thus reformed, then what need would there be for a Buddhist who follows a tradition which thousands of years old to engage in a practice of mutuality between the two disciplines when the results of the religious practice have been, in such a hypothetical case, as both successful and scientifically accepted? Jose Ignacio Cabezón describes a similar attitude of the German writer under the pen name of Subhadra: “even if [they] are complementary...it is Buddhism that is ultimately worth knowing, so that [at] the end of the Buddhist path [there is] no further need of science. (Cabezón, 2003, p. 37)

Science is young and arrogant: colonialist attitude that sees Euro-American science as international science.

The natural inclination of philosophers of science to praise the tentativeness with which current paradigms are viewed, given the historical journey of the discipline (assuming science can be viewed as so monolithic) is often used as a sort of sincere show of modesty and humility – a kind of sportsmanship, so to speak -- in the company of other disciplines with which the scientist simply knows he or she will not collaborate on an equally contributive basis. Piet Hut comments, “Physics has to change much more than Buddhism...The house of science has begun to be built very recently...Scientists usually cheat and ...do not often tell you that they rebuilt the foundation.” (Zajonc, 2004, p. 203) Earlier statements read, “science has never been able to stand on its own, as far as worldviews go...Science is still far too young to weave a story about the world we live in...” (Hut, 2003, p. 411) Hut continues,

Ask a scientist whether science has anything to say about meaning and values, and chances are [he or she will say that] science avoids that question... Later, in a full and contradictory reversal, [he or she will be] denigrating ... all kinds of non-scientific views as ... superstition... Talk about having your cake and eating it too! To exclude whole areas of human life...from scientific analysis, and then to use the self-assigned non-scientific character of those areas as a reason not to take them seriously is nothing

but a logical fallacy. ...” (Hut, 2003, p. 411)

In this, our post-modern world, etiquette dominates – and that is a good thing. Firm convictions of epistemological superiority need neither be compromised nor paraded arrogantly. However, there is a sense in which etiquette, in the case of the relationship between science and Buddhism, becomes more than a model of epistemological pluralism (the acknowledgement of, and the *academic* interest in, the variety of different claims of epistemological exclusivity); it rather tends to encourage at least the concept, if not the practice, of epistemological relativism: natural (scientific) truth, if it exists, can allegedly be arrived at by any of the various methodologies. And, reportedly, even science has changed a few over the course of its development (Revel & Ricard, 1998, pp. 279-280). This inherent uncertainty of science was also mentioned by Wallace elsewhere: “His holiness ... acknowledges the anecdotal nature of his evidence and echoes the caveat earlier framed by Churchland and Damasio that science can very rarely claim one hundred percent certainty for anything ... It was not so much a concession ... as a demonstration of willingness to engage with them on their own terms. (Houshmand, Livingstone, & Wallace, 1999, pp. 45-6). In fact, the narrative is remarkably similar in attitude with an earlier comment, about “a startling lack of consensus among the participants on even the most basic criteria for determining whether an organism is conscious ... The scientific exploration in the West is so young that we lack even a definition of consciousness that would allow us to recognize it unequivocally.” (Houshmand et al., 1999, p. 41) In *The Universe in a Single Atom*, the Dalai Lama similarly states, “science is coming closer to the contemplative Buddhist insights of emptiness and interdependence.” (Lopez, 2010, p. 136) The implication is that science is catching up, finally, with what Buddhism has always known.

Another characteristic example comes from Denis Noble who remarked on Charles Sherrington, Nobel Laureate of Physiology, 1932, about his Cartesian concept of the Self: “The science that man did is phenomenal ... [Yet, he accepted] a philosophical position which we would now all regard as absurd ... Science itself often falls into the kinds of traps our language or culture holds in store for us. (Voices from Oxford, 2010) Similarly, during a 1992 meeting between the Dalai Lama, Francisco Varela and Jeremy Hayward, the discussion was on the impact of culture and politics on scientific research. Varela commented, “...today what ordinary citizens all over the place would consider real science is fundamentally European-American science.” (Hayward & Varela, 2001, p. 31) An example was the Chinese practice of acupuncture about which Newcomb Greenleaf commented, “Westerners are still very puzzled that acupuncture seems to work...They don’t like it...They would like to regard the Third World as somehow scientifically primitive” (Hayward & Varela, 2001, p. 31) B. Allan Wallace talks of “ideological hegemony” (Wallace, 2003, pp. 5-7). Thus, it is our Western categories

which must change.

Buddhist non-negotiables: Verifying cognition as the Buddhist criterion for validity.

A question was submitted, on the evidence for the belief that an initial condition of primordial consciousness must have existed, the result of actions of sentient beings in the universe previous to our own. The Dalai Lama replied: that,

Neither [science nor Buddhist philosophy] is dealing with...one hundred percent conviction. In this way, we are both faced with options, out on a philosophical limb. The factor that determines the existence or non-existence of something is verifying cognition, or awareness: the awareness that verifies. (Houshmand et al., 1999, p. 49)

There is, in addition the appeal to personal decision in accordance with personal investigation. One must make up one's own mind and decision: (Hayward & Varela, 2001, p. 33) But then, in 1992, the Tibetan leader responded to questions which aimed at rationalizing exotic Buddhist elements by saying that if he were to follow that path then the Buddha would be reduced to just a nice guy. (Lopez, 2010, p. 5) Wallace confirmed such a position (Wallace, 2003, p. 9)

Validating agents of Tantra: teachers, yogic meditation

Again, the pattern of rhetoric will emerge whereby science, not Buddhism, must be reformed as an epistemological image in the eyes of the general Western-Buddhist public. The Dalai Lama stated that what we feel certainly as an absolutely authentic experience is the basis for inferring the teacher's authenticity, which in turn validates the commentaries the teacher relies on [and, thus] the authenticity of ... the Tantras themselves. (Hayward & Varela, 2001, p. 43) The same independence minus the Eastern devotion elements and plus the definite contrast to Christianity and colonialism, is presented for the Buddhist approach by Robert Thurman:

In theory, Buddha said... "I understand the nature of life by having ...deeply analyzed it...Therefore, you can also do this, ...And you can understand it, because I was like you, and I did understand it..."He never said if you believe the world is such and such you will be saved, [or] if you believe in me you'll be fine...(Thurman, 2009)

This brings forth the issue of personal choice and critical ability independently of religious or other authority.

The Buddha said, 2500 years ago, there was no atom...Everything is infinitely divisible and will...dissolve under analysis...Just 50-80 years ago, people figured that out. And they are desperately hoping [to find] something...that they can then own [so that] they can manipulate the nature of the world...with some sort of egotistical cognitive control. But the Buddha said...when you try to pin it down it will dissolve under analysis. But if you interact with it, relationally [it benefits] yourself and others. (Thurman, 2009)

One may note the contrast to the soteriological allusions, the belittlement of grand discoveries through claiming, for one's religious tradition prior knowledge, and the simultaneous contrast to colonialism and authoritarianism through the use of verbs such as *own*, *pin it down*, *control*, and *manipulate*, as well as their opposite (*interaction*, *relational*, *benefit*, etc.—for the connection to colonialism, see above). The same scientific concession to Buddhist precedence is observed during a 1997 gathering where the question was whether there is forgetfulness involved in the patient who returns from a near death experience. The assumption was that separation of consciousness from the brain would result in memories non-contingent upon neuronal activity; therefore, return to the body would probably entail loss of such memories. “Once more, His Holiness was years ahead in designing experiments and testing evidence way beyond what seemed possible. Joan could only admit...that there was no available answer. (Varela, 1997, p. 197) In the same context, much later in the conference, anthropologist Joan Halifax agreed. The same is observed in the comments of Hut and the Dalai Lama on the role of interpretative filter. Hut addressed the Dalai Lama, stating that,

the knowledge structure is constantly changing. But as the filter is being modified, then hopefully our understanding of experience is improving...[E.g., on the uncertainty of the nature of subatomic particles] I really think that this truth was discovered . much earlier in your tradition than in the scientific tradition. (Zajonc, 2004, pp. 208-9)

The confirmation of that was offered by the Dalai Lama: “The dichotomy [nominalism--realism]...is resolved in Tibetan Buddhism by the development of a third, or middle, way: Madhyamika philosophy. A comparable middle way is largely missing in the Western debate.” (Zajonc, 2004, p. 106). Similarly, yogic perception is not presented by the Dalai Lama as precognitive or supernatural but only as simply a further, higher category, of the same quality of mental perception.

In Buddhism, we have precognition or heightened awareness. All these kinds of experiences are also direct mental perceptions. Yogic direct perception is not easy to describe... it is a separate category. ..Until you perceive the ultimate nature of phenomena directly...you are not able to overcome the influence of your own doubts. ... The nature of that direct realization is a yogic perception. This provides your criterion [for verifying]

other experiences. (Hayward & Varela, 2001, p. 47-8)

This self-reference is, furthermore, not a revelatory engagement or dogmatic adherence to scriptural authority but a description of personal attainment: “Here, I think, there are big differences from science...Someone who already has this experience knows it.” (Hayward & Varela, 2001, p. 489) Once, however, this statement is expressed, the methodological similarity between science and Buddhism is swiftly restored through the description of *obvious, hidden, and extremely hidden phenomena*. “[A]lthough I have never seen [the earth,]...I know [it is] round by relying on [someone’s words and photos]. This is called inference based upon,,an informed [not blind] belief. (Hayward & Varela, 2001, p. 48) Wallace’s (Wallace, 2003, p. 9) and Ricard’s (Revel & Ricard, 1998, p. 44) views are identical. For most Buddhists interested in science, the issue need not proceed further than the Dalai Lama’s sincere statement that scientifically proven (with 100% certainty) postulates which contradict Buddhist views must always be followed and such Buddhist views abandoned. (Dalai Lama, 2001, p. 24) The repetition of such affirmation has been most notable (Revel & Ricard, 1998; Wallace, 2003, p. 26)

Buddhism: religion or philosophy?

Wallace makes it clear that “Buddhism may be characterized as a form of empiricism, rather than transcendentalism.” (Wallace, n.d.). Matthieu Ricard supports this view:

Only in the West is ... the philosopher... usually a professor, who...once he goes home, lives exactly like [others] without what he teaches having the slightest influence on ... his life ... Although there are professors of philosophy in the East, too, [they live what they teach. Their teaching]...is never based on sheer intellectual curiosity. (Revel & Ricard, 1998, pp. 118-9)

The implication is, it *is* Philosophy, whether in the East or in the West. These presuppositions are not designed to make religion scientific but science less rigid. The probability of the *average* Western Buddhist’s ignoring, rather than studying, scientific and Western philosophical approaches in addition to Buddhist practice is further implied by Lopez’s explanation of the primacy of the authority of Buddhist fundamentals (the reverence to the Buddha’s authority) rather than the claimed willingness to submit even the Enlightened One to the test of logic. Lopez explains how the most quoted scripture in the Buddhist world is not the famous segment of the Heart Sutra but the declaration on karma (Lopez, 2010, p. 147) which elevates that doctrine to the highest position among the teachings. This places the Dalai Lama’s insistence on the skeptical position against the theory of evolution and natural selection in a more peculiar context of, not necessarily searching of scientific evidence for truth but rather of avoiding possible demonstrations of the Buddhist truth’s inaccuracy, since

“without Karma, the cycle of existence would cease to exist.” (Lopez, 2010, pp. 148-9) Lopez thus shows that the empirical means which are celebrated by the Dalai Lama as the only way in which truth is most safely verified are based on Buddhist scripture. (Lopez, 2010, p. 138, 145) Thus, “Buddhism does indeed accord great authority to experience, that is, the experience of the Buddha” (Lopez, 2010, p. 139) Ricard’s statement, mirrors this:

Buddhism’s more a philosophy than a dogmatic religion. [It has] a metaphysics...derived more from philosophy than revelation. In a way there’s revelation in Buddhism too: [that] of the ‘truth’ the Buddha...an increasingly deep inner experience that would be difficult to attain using [philosophy alone]. But [though] revealed truth, it’s one...dedicated seekers can find for themselves by following the Buddha’s...teachings. (Ricard, 2008, p. 146)

Conclusion.

This paper concludes with the belief that intrinsic value remains in the claims of complementarity. It has been commented that the attempts at convergence between the two disciplines “is a concrete and highly significant transformation of Buddhist traditions themselves.” (McMahan, 2008, p. 114) Bringing together Buddhists and scientists in common acknowledgement of the centrality of both learning and socially interacting, *especially given the apparent incompatibility* is itself an encouraging statement for the human potential to function in a socially edifying manner. The claims to complementarity will add to, rather than render futile, the realization of the *commonality* of the journey toward knowledge. This is not mere romanticism. The catalyst in the realization of such hopes seems to be the unique combination of Buddhist rigor of examining esoteric phenomena and Buddhist eagerness to appear modern.

Some practices and beliefs, like, for example, the doctrine of rebirth, are a fundamental and seemingly impossible to compromise. Yet there are attempts by Western admirers of Buddhism to do just that. Stephen Batchelor’s *Buddhism Without Beliefs* and Richard Hayes’ *Land of No Buddha* are cases in point. (Batchelor, 1998; Hayes, 1998). Nevertheless, they display the same effort and anxiety to defend the Buddha’s infallibility position by basing their critical and dismissive (of rebirth) stance on the Buddha’s own directive to test everything. The Buddha, Batchelor says, accepted the already embedded in Indian psyche doctrine of rebirth but he emphasized its psychological aspects (Batchelor, 1997, pp. 36-38) -- the different doctrinal interpretations which emerged over the ages being “speculations [which] lead us far from the Buddha’s agnostic and pragmatic perspective and into a consideration of metaphysical views that cannot be demonstrated or refuted” (Batchelor, 1997, p. 36). Similarly, Hayes states, “[*Western Buddhism must be*] purged from some of the Asian habits it has acquired down through the millennia...[A]ll the teachings of the Buddha were founded

[on impermanence, including] the effectiveness of the teachings.” (Hayes, 1998, p. 59) Interestingly, then, the way to approach the relationship between science and religion is to keep the two separate as two disciplines which are irrelevant to each other and which cannot have any validating or invalidating influence on each other: “Dharma practice can never be in contradiction with science: not because it provides some mystical validation of scientific findings but because it simply is not concerned with either validating or invalidating them.” (Batchelor, 1997, p. 37)

It is quite remarkable, then, that the secular Buddhist who strips the religious system of its metaphysical elements and who *could* appeal to science in such an endeavor deems science irrelevant. And the religious practitioners who would most benefit from a complete separation between science and Buddhism seek to draw them together as equal collaborators. Keeping in mind the Dalai Lama’s emphasis on happiness as the purpose behind seeking knowledge (Dalai Lama, 2009, p. 8), the reader may perceive the benefit to humanity through maintaining the science-Buddhism dialogue: the alternative is either the overzealously attempted dilution of the religious discipline (Hayes and Batchelor), or the stubborn dismissal of scientific discoveries and the adherence to doctrine and tradition especially due to the vague awareness that tradition and science seem to converge.

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