

Parallels between Science and Religion: A Comparative Study

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Abstract: *In this paper the author searches for the possibility of relating science with religion and vice versa. Taking into account the views of Ian G. Barbour and Eugenie Scott he addresses the methodological issues involved in this process of relating the two diverse and unique disciplines. The author finds an adequate model in the integral vision of Ken Wilber, namely "All Quadrant, All level." Such a model comprises of the exterior and interior realities which are both subjective and objective in nature. It integrates deep religion with broad science by showing that deep spirituality is in part a broad science of the farther reaches of human potential. It also integrates deep religion with narrow science, because even deep spiritual data and experiences can be carefully investigated and interpreted with narrow science. The richness of the integral vision is further fostered and nourished by the insights of J. Arthur Thomson, Fritjof Capra, Swami Vivekananda and Bhagavad-Gita. The article ends by portraying an integral approach to science and religion for a holistic understanding of reality.*

Keywords: *Integral Vision, Epistemological Pluralism, Translative Spirituality, Transformative Spirituality, Mysticism, Consciousness, Narrow Science, Broad Science, Sadhana, Jijnasa.*

1. Introduction

The question of science and religion are getting more and more importance to man in the modern age. They are two great disciplines which, in light of Indian wisdom, reveal that, when relied on separately, can be counter-productive in the long run, when combined harmoniously, can bring about an all round development of human genius and total fulfillment. But unfortunately, for the last few centuries, the relationship between the

two in the western context has not been quite happy. In the twentieth century, however, a new approach is becoming evident, and the representative thinkers among scientists and religious people are beginning to discern a close interrelation between them. They are slowly changing direction round to the point of view that science and religion can heartily embrace each other, without detriment to the cause for which each stands, and work for the good of humanity. It is being realized more and more by both that there are elements in science that religion can adopt in order to fortify itself, and elements in religion that can deepen and strengthen science. In this regard, we quote Albert Einstein who said, "Science without religion is lame, religion without science is blind." Science and religion have so much in common when both are considered as human endeavors. Both in turn are achievements of mankind to make their life worth while and make them capable to add value to human life.

In this paper we start with various possibilities of relating science with religion and vice versa. Taking into account the views of Ian G. Barbour and Eugenie Scott we address the methodological issues involved in this process of relating the two diverse and unique disciplines. In the process of looking for an adequate model we find the integral vision of Ken Wilber, namely "All Quadrant, All level," relevant which comprises of the exterior and interior realities which are both subjective and objective in nature. The richness of the integral vision is further fostered and nourished by the insights of J. Arthur Thomson, Fritjof Capra, Swami Vivekananda and Bhagavad-Gita. The article ends by portraying an integral approach to science and religion for a holistic understanding of reality.

So, one thing is certain that any truly integral vision will have to reconcile, one way or another the relation between science and religion. In this connection, it would be relevant to discuss the views of Ken Wilber² who in his several writings has tried to address this delicate issue. The main books by Wilber *eye to eye*, 'the marriage of sense and soul', and 'integral psychology', are worth mentioning here in which he has attempted to include direct contemplative and experiential spirituality in this debate' whereas most writers on the topic simply want to discuss the philosophical or scientific ideas involved : not direct experience but abstractions.

2. Ken Wilber's Views on Science and Religion

Several theories have classified the typical stances that have been taken concerning the relation of science and religion. All of these classifying schemes are basically quite similar moving from conflict between science and religion, to peaceful co-existence, to mutual influence and exchange, to attempted integration. In this connection let us state the views of Ian G. Barbour³ and Eugenie Scott.⁴ Both above expressed four ways of the relationship between science and religion. According to Ian G. Barbour science and religion are related to each on the basis of : (1) Conflict : meaning thereby, science and religion are at war with each other, one is right and the other wrong; (2) Independence : both can be 'true' , but their truths refer to basically separate realms, between which there is little contact ; (3) Dialogue : Science and Religion can both benefit from a mutual dialogue, where the separate truths of each can mutually enrich the other ; (4) Integration : Science and religion are both part of 'Big Picture' that fully integrates their respective contributions.

Again according to E. Scott : (1) Warfare : Science trumps religion, or religion trumps science , end to the weaker ; (2) Separate realms : Science deals with natural facts, religion deals with spiritual issues ; they neither conflict nor accord ; (3) Accommodation : religion accommodates to the facts of science, using science to interpret , but not abandon, its core theological beliefs, a one way street.

Let us now come to Ken Wilber's view points on the basis of his book 'The Marriage of Sense and Soul' in which he has explained the relationship between science and religion in five ways:

2.1 Science Denies Religion:

This is to still one of the most common views among today's Scientists, aggressively represented by such thinkers as Richard Dawkins, Francis Crick, and Steven Pinker. According to Wilber; Religion is pure and simple, either a superstitious relic from the past, or, at best, a survival gimmick that nature to reproduce the species.⁵

2.2 Religion Denies Science:

The typical fundamentalist stand is that science is part of the fallen world and thus has no access to real truth.

2.3 Science and Religion Deal with Different Realms of Being, and Thus Can Peacefully Coexist:

This is one of the most sophisticated stances and it has two versions: strong and weak. Strong version is ‘epistemological pluralism’ which maintains that reality consists of various dimensions or realms—such as matter, body, mind, soul and spirit, and that science is dealing mostly with the lower realms of matter and body, while religion is dealing mostly with higher realms of souls and spirit. In any event, both science and religion are equally part of a “big picture” that makes ample room for both, and their respective contributions can be integrated into this big picture. The traditional Great Chain of Being falls into this category which is represented by and included in the philosophy of Plotinus, Kant, Schelling, Coomaraswamy, Whitehead, Frithjof Schuon, Huston Smith and Ian G. Barbour. Weak version is “nonoverlapping magisteria”⁶ the term used by Stephen Jay Gould for the idea that science and religion are dealing with different realms, but these realms can not be integrated into any sort of ‘big picture’ since they are fundamentally incommensurate. They are both to be fully honored, but they cannot be fully integrated.

2.4 Science itself Offers Arguments for Spirit’s Existence:

This view claims that many scientific facts and discoveries point directly to spiritual realities, and thus science can help us directly reveal God or Goddess. For example, the Big Bang⁷ seems to require some sort of Creator Principle; evolution appears to be following an intelligent design; the entropic principle implies that some sort of creative intelligence is behind cosmic evolution as Bergson uses the term ‘*Ilan Vital*’ in order to discuss his theory of Creative evolution. This view is similar to Scott’s one-way street accommodation as discussed earlier, where science is used to enrich religion, but usually not vice versa. It is also similar to what Barbour calls “natural theology” as opposed to “a theology of nature”. In the former, Spirit is found directly from a reading of nature, as with many eco-philosophers, in the latter, a revealed Spirit is used to interpret nature

in spiritual terms. Barbour favors the latter as discussed earlier. This view may also be cumbered with the division of theology made by Miller in “God and Reason” as raveled or dogmatic or un-philosophical theology and philosophical or natural theology. In this division natural theology is based on reason and science.

This is a very common approach to this topic and probably the most common among popular writers on the “new scientific paradigm which proves or supports mysticism”.

2.5 Science itself is Not Knowledge of the World but Merely One Interpretation of the World, and Thus It Has The Same Validity No More, No Less:

This is, of course, the typical “post modern” approach. Whereas the previous approach is the most common among popular writers on the topic of science and religion, this approach is the most common among the academic and cultural elite, who are not dedicated to constructing any sort of integration, but in deconstructing anything of worth that anybody else has to say on the issue.

All the above classifications just discussed may claim to be successfully interpreted the integration theory for the relationship between science and religion, but according to Wilber all those lists from Barbour’s to him are basically lists of failures, not successes. Because, they are usually silent as to the revolutions in cognitive science, brain science, and contemplative phenomenology, which taken together point to a much more spectacular integration of science and religion than has previously been suggested.

3. The Integral Vision

Let us therefore, summarize the more integral view of Ken Wilber regarding the science and spirituality {religion}. Wilber first of all analyzes the approach of Stephen Jay Gould, according to which religion and science are both important, but Belong to different and non overlapping realms. Here Gould States; “The lack of conflict between science and religion arises from a lack of overlap between their respective domains of expertise: science in the empirical constitution of the universe, and religion in the search for proper ethical values and the spiritual meaning of our lives’”.⁸

In order to maintain this view, Gould has to create a rather rigid dualism between nature and human. 'Nature' will be the realm of facts disclosed by science and 'human' will be the realm of values and meaning disclosed by religion. Disagreeing with the above view Wilber states as follows; "It is this awkward, dualism in any of its, many forms, facts and values, nature and human, science and religion, empirical and spiritual, exterior and interior, objective and subjective-that has driven the attempts to find some sort of bigger picture that seamlessly weaves together these two realms, and does not simply proclaim them to be for ever fated to work different sides of the streets".⁹

Thus, it is an intensely difficult and intricate problem. The standard theological response to this dualism "empirical vs. spiritual" may be given by claiming that Spirit created the empirical world and thus they are related in that sense.

Again, the eco-spirituality theorists try to respond the above dualism in their own way. Instead of a transcendent, other worldly God who creates nature, they postulate a purely immanent, these worldly God, mainly nature and natures evolutionary unfolding. But Wilber thinks all the above responses to the said dualism fare no better, they are not successful failures.

Many traditional theorists from Plotinus to Huston Smith to Seyyed Nasr attempted to hand this difficulty by resorting to the Great Chain of Being as mentioned earlier. The idea is that there really are not just two rigidly separate realms such as matter and Spirit but there are at least four or five realms, infinitely shading into each other such as matter, body, mind, Soul and Spirit. The upper most realms are the non dual ground of all the other realms, so that ultimate spirit suffers no final dualisms. However, as spirit steps down into creation, it gives rise to various dualisms that, although unavoidable in the manifest realm, can be healed and holed in the ultimate or non-dual realization of Spirit itself.

Of all the typical interpretations on the relation of science and religion, Ken Wilber has expressed his views in favour of the traditional presentation of the relation between science and religion in his book, that the traditional presentation of the Great Chain suffers a series of grave limitations, many of which; are no different from those faced by the simpler dualistic models, such as Gould¹⁰ has presented earlier. Thus, the question

about the relation between science and religion remains unanswered. Wilber, now tried to explain the above relation in his own ways.

In order to respond the above dualisms and the above problem of relation between science and religion, Wilber gives an integral model, namely “All Quadrant, all level”¹¹ about which we are not going to discuss here in detail. We are giving here only some main points of his views. In this framework, he attempts to accommodate all of the above facts just discussed earlier. To quote him as follows; “The facts, that is, of both interior realities and exterior realities, “Scientific” experiences, subjective realities and objective realities. It finds ample room for the traditional Great Chain of Being and Knowing from matter to body to mind to soul to spirit – but it plugs those realities into empirical facts in a definite specifiable fashion.”¹²

In order to reconcile the levels of science and religion Wilber makes a distinction between good science and deep religion.¹³ In the area of spirituality, for instance, we need at the very least to distinguish between (1) Horizontal or Translative Spirituality – which seeks to give meaning and solace to the separate self and thus fortify the ego and (2) Vertical or Transformative Spirituality – which seeks to transcend the separate self in a state of non dual unity consciousness that is beyond the ego. Wilber simply calls those, “narrow religion” and “broad religion” or shallow and deep, depending on our preferred metaphor.

Wilber, in his book *A Sociable God*¹⁴ also makes the same distinction to which he calls the difference between (1) legitimate religion and (2) authentic religion, the former offering effective translation or change in surface structures, the latter offering effective transformation or change in deep structures.

Likewise, with science, Wilber makes the distinction between (1) a narrow and (2) a broad conception. Narrow science is based mostly on the exterior, physical, sensor motor world. It is what we usually think of as the “hard sciences”, such as physics, chemistry, and biology. There is a broader science that attempts to understand not just rocks and trees but humans and minds. In fact, we should acknowledge these types of broader sciences, sciences that are not rooted merely in the exterior, physical, sensory motor world, but have something to do with interior states and

qualitative research methodologies. We call these broader sciences the “human sciences”. Psychology, Sociology, Anthropology, linguistics, semiotics, and the cognitive sciences – all of these “broad science” attempts to use a generally “Scientific” approach to the study of human consciousness. In short, narrow science whose data come mostly from the interior realms or the science that follows the three strands of evidence, accumulation and verification.

The similar views have also been expressed by another author J. Arthur Thomson¹⁵ who classified science limited in scope and unlimited in scope. The science limited in scope includes the particular branches of sciences like Physics, Chemistry etc. but the science itself is unlimited in scope which is the second and higher stage of science. The various departments, starting with the study of separate fields tend, in their advanced stages, to overstep their particular boundaries and merge into one converging scientific search, the search for the meaning of total experience. In this expansive context the idea of a science of religion, the science of the facts of the inner world of man, as upheld in ancient Indian thought, becomes also scientific study of far-reaching significance.

The same idea about science has also been expounded in the modern age by Swami Vivekananda. Referring to this approach in the course of a lecture on ‘Cosmology’ Swami Vivekananda said; “There are two worlds, the microcosm and the macrocosm, internal and the external. We get truth from both of these by means of experience. The truth gathered from internal experience is psychology, metaphysics, and religion; from external experience, the physical sciences. Now, a perfect truth should be in harmony with experience in both these worlds. The microcosm must bear testimony to the macrocosm, and the macrocosm to the microcosm; physical truth must have its counterpart in the internal world, and the internal world must have its verification outside.”¹⁶

Let us look briefly at religion. We have already seen that as with science, there is a narrow religion which seeks to fortify the separate self and a broad or deep religion which seeks to transcend the self. The claim, after all, is that in some sense deep spirituality (deep religion) is disclosing Truths about the Cosmos, and is not merely a series of subjective emotional states. And here Ken Wilber in ‘The marriage of Sense and Soul’ makes a

radical claim as, “Deep Spirituality involves in part a broad science of the higher levels of human development.”¹⁷

Thus, Wilber’s thesis is simply this: deep spirituality involves the direct investigation of the experiential evidence disclosed in the higher stages of consciousness development. Wilber calls these stages psychic, subtle, causal, and non dual which are simply summarized as “Soul” and “Spirit”. These deep spiritual investigations follow the three strands of all good science. They rely on specific social practices or injunctions such as contemplation, they rest their claims on data in a community of the adequate – which is why they are correctly referred to as contemplative sciences.

Thus, Wilber’s approach intimately integrates science and religion across many different fronts. Let us, therefore, quote Wilber as to conclude his stand, on the relation of science and religion. To quote Wilber as follows; “It integrates deep religion with broad science by showing that deep spirituality is in part a broad science of the farther reaches of human potential. It also integrates deep religion with narrow science, because even deep spiritual data and experiences such as mystical experiences nonetheless have real correlates in the material brain, which can be carefully investigated with narrow science. It even makes room for narrow religion”.¹⁸

4. Integral Vision: Indian Perspectives

The Indian thinkers discovered by their investigation that there are two fields in which man lives and functions; one the external world; the other, the internal. These are two different orders of phenomena i.e. science and religion, both are complementary to each other. The study of the one alone does not exhaust the whole range of experience. Also the study of the one from the stand point of the other will not lead to satisfactory results, but the study of the one in the light of the conclusion from the study of the other is helpful and relevant. Even since the time of the Upanishads, India has tenaciously held to a view of religion which makes it a high adventure of the spirit, a converging life Endeavour to realize and grasp the hidden meaning of experience.

The Bhagawad Gita (VI. 44) declares that a spirit of inquiry into the meaning of religion takes an aspirant beyond the authority of the words

of scripture and mandate of tradition. He becomes an experimenter himself, instead of remaining a mere believer. Indian religious thought emphasizes experiment (*Sadhana*), as the dynamics of religion; it has recourse to Jijnasa, or inquiry (dealt with by science), for the formulation of its views, be it *Brahmajijnasa*, inquiry into the nature of Brahman (dealt with by religion), i.e. God as the one self of all, or dharma-jijnasa, inquiry into dharma i.e., social ethics and personal morality.

This sublime attitude to religion and thought is the fruit of the unified view of the mental life of man which India learned from her Upanishads and which India assimilated into her mind and mood by a universal acceptance of all forms of faith and by showing due regards to all knowledge, whether sacred or secular. Science in the modern age has lengthened man's intellectual chain or rope or tether, but this has only helped to bring into sharper focus the mystery of the unknown and the significance of the *Para-Vidya* (higher knowledge or wisdom) of which the Upanishads speak. In this connection, J. Arthur Thomson states; 'At the end of his intellectual tether, man has never ceased to become religious'.¹⁹

This has been the Indian approach to religion and science. Indian philosophy sees no conflict between physical sciences and this science of spirituality (or religion), between 'man, the known' and 'man the unknown', between the physical man and the spiritual or religious man. Fritjof Capra,²⁰ a European author has also described the relationship between science and religion in his way by giving an exploration of the parallels between modern physics and Eastern mysticism. The purpose of his book is to explore this relationship between the concepts of modern physics and the basic ideas in the philosophical and religious traditions of the East. When Fritjof refers to Eastern mysticism, he means the religious philosophies of Hinduism, Buddhism and Taoism. Although these comprise a vast number of subtly inter woven spiritual disciplines and philosophical systems, the basic features of their world view are the same. This view is not limited to the East, but can be found to some degree in all mystically oriented philosophies.

The argument of Fritjof's book could therefore be phrased more generally, by saying that modern physics leads us to a view of the world

which is very similar to the views held by mystics of all ages and traditions. Mystical traditions are present in all religions and mystical elements can be found in many schools of Western Philosophy. The parallels to modern physics appear not only in the Vedas of Hinduism, in the *I ching* or in the Buddhist *sutras*, but also in the fragments of Heraclitus and in the Sufism of Ibn Arabi.

5. Conclusion

Throughout the history, it has been recognized that the human mind is capable of two kinds of knowledge, or two modes of consciousness, which have often been termed the rational and the intuitive, and have traditionally been associated with science and religion, respectively. In the west, the intuitive, religious type of knowledge is often devalued in favour of rational, scientific knowledge, whereas the traditional Eastern attitude is in general just the opposite. The following statements about knowledge by two great minds of the West and the East typify the two positions. Socrates in Greece made the famous statement ‘I know that I know nothing’, and Lao Tzu in China said; ‘Not knowing that one knows is best’. In the East, the values attributed to the two kinds of knowledge are often already apparent from the names given to them. The Upanishads, for example, with various sciences, speak about a higher and a lower knowledge and associate the lower knowledge with various sciences, the higher with religious awareness. Buddhists talk about ‘relative’ and ‘absolute’ knowledge, or about ‘conditional truth’ and ‘transcendental truth’. Chinese philosophy, on the other hand, has always emphasized the complementary nature of the intuitive and the rational and has represented them by the archetypal pair yin and yang which form the basis of Chinese thought. Accordingly, two complementary philosophical traditions Taoism and Confucianism have developed in ancient china to deal with the two kinds of knowledge. Thus, in Indian perspective science and religion are complementary to each other and get their integration or synthesis in philosophy.

Notes

1. Dr. D. N. Yadav is Professor of Philosophy at DDU, Gorakhpur.
2. Ken Wilber, *A Theory of Everything* (Dublin: Gateway Publication & Gill & Macmillan Ltd., 2000), 2001.
3. Ian G. Barbour; *Religion and Science – Historical and Contemporary Issues*, Quoted by Wilber; op.cit. p. 155.
4. Eugenie Scott; *The Science and Religion Movement*, Skeptical Inquirer; July/ August 1999, quoted op. cit. p. 155.
5. Ken Wilber; op. cit. pp. 60-61.
6. S. Gould; *Non-overlapping Magisteria*, Skeptical Inquirer, July/ August 1999.
7. Big Bang; quoted by Ken Wilber; op. cit. p. 61.
8. S. Gould; *Non-overlapping Magisteria*, Skeptical Inquirer, July/ August 1999.
9. Ken Wilber; *A Theory of Everything*, op. cit. pp. 63-64.
10. S. Gould; “Non-overlapping Magisteria”; Skeptical Inquirer, July/ August 1999.
11. Ken Wilber; op. cit. p. 66.
12. Ibid, p. 66.
13. Ken Wilber; *The Marriage of Sense and Soul*, op. cit. pp. 73-82.
14. Ken Wilber; *A Sociable God (CW 3)*, quoted by him in op. cit. p. 156.
15. J. Arthur Thomson; *Introduction to Science* (London Home University Library Edition), p. 58.
16. Swami Vivekananda, *Complete Works*, vol. II, 9th edition”, p. 432.
17. Ken Wilber; *A Theory of Everything*, op. cit. p. 76.
18. Ibid, p. 80.
19. J. Arthur Thomson; *Introduction to Science*, p. 205.
20. Jritjof Capra, *The Tao of Physics* (Flamingo: Harper Collins Publishers, 1976), p. 23.