A distinction must be drawn between the notion that the Supreme Being guides and controls the laws of nature that are external to Him/Her, and the more advanced idea that the laws of nature and causation are an internal manifestation of the will of Brahman-God. Natural laws and regularities are expressions of the Supreme Being’s nature and wishes and are not independent of them. The laws of causation are not separate from Brahman-God but proceed from His/Her own being. The Divine Being is immanent in nature acting from within, conserving and directing the development of the universe. Brahman-God as immanent pervades the gross physical realm and is of a subtler mental nature. This raises the question, do the laws of nature as known by the Divine Being differ from our understanding of them? We observe the operations of the laws of nature ‘from the outside,’ while Brahman-God experiences and knows them ‘from within’ in all of their internal relationships. Human knowledge is often an approximation of the underlying relationships and hidden regularities operative in the Supreme Being’s world of creation.14

When Brahman-God intervenes in the world as an act of grace, He/She works internally through the laws of nature. The Divine Being reacts to prayer by altering both external events and our thought process. Neither of these require the suspension of any law of nature. The great mystics experienced Brahman-God consciousness making contact with the internal nature of Brahman-God that brought about a transformation in them. People who meditate regularly have some awareness of this. Though internal causation is the dominant method of Divine action, one cannot limit Brahman-God’s activity and say that external causation is not employed.

**Whole-part causation**

Vivekananda disclosed, ‘We have resolved the whole universe into two components, into what are called matter and energy, or what the ancient philosophers of India called Ākāsha and Prāna.’ ‘Now both Ākāsha and Prāna again are produced from the cosmic Mahat, the Universal Mind, the Brahmā or Ishvara [God].’15 ‘... there is something beyond Ākāsha and Prāna. Both can be resolved into a third thing called Mahat—the Cosmic Mind. This Cosmic Mind does not create Ākāsha and Prāna, but changes itself into them... The Mahat becomes changed into vibrating thought; and that becomes in one part changed into the organs, and in the other part into the fine particles of matter. Out of the combination of all these, the whole of this universe is produced.’ ‘The next step is to resolve this Ākāsha [Matter] and the Prāna [Energy] into...
their origin. Both can be resolved into the still higher entity which is called mind. It is out of mind, the Mahat, the universally existing thought-power, that these two have been produced. Thought is a still finer manifestation of being than either Ākāsha or Prāna. It is thought that splits itself into these two. The universal thought existed in the beginning, and that manifested, changed, evolved itself [by transformational causation] into these two Ākāsha and Prāna: and by the combination of these two the whole universe has been produced."16 ‘The mind is universal. Your mind, my mind, all these little minds, are fragments of that Universal Mind, little waves in the ocean; and on account of this continuity, we can convey our thoughts directly to one another.’ ‘The whole of the universe is built upon the same plan as a part of it. So, just as I have a mind, there is a Cosmic Mind. As in the individual, so in the universal. There is the Universal Gross Body; behind that, a Universal Fine Body; behind that, a Universal Mind; behind that, a Universal Egoism, or consciousness; and behind that, a Universal Intelligence. And all this is in nature, the manifestation of nature, not outside of it.’17 Briefly:

Mahat (the Cosmic or Universal Mind) is a self-consistent systematic Whole forming a single individual experience . . . the Whole (Mahat) expresses its nature in the system of its parts (Ākāsha-Prāna) . . . determining the characteristics of each of its components . . . . Some lesser unities (individual minds and physical objects) reveal more of the nature of the Whole to which they belong than others. Each part of Ākāsha-Prāna contributes its own particular content to the total system, and an alteration in any component would then change the character of the Whole. In this way Mahat and its constituent members interpenetrate one another and form a perfect systematic structure . . . . In a comprehensive system, no single member can be missing or different from what it is, without altering the basic configuration of the entire unified system . . . Mahat forms a single and direct experience, while its component experiences are more fragmentary and less immediate . . . . The all-embracing experience that constitutes Mahat is a concrete individual (Ishvara, God), being a unified Whole totality determined by reference to its own internal structure. The lesser individual experiences that constitute Ākāsha-Prāna can never be entirely individual and self-determined in themselves, since they are not a completely self-contained system . . . we seek the ground of the entire process not in temporally preceding events (the cause), but in its own underlying principle (the law) by which it operates. In which case the past is determined by the future (teleology) just as the future is determined by the past (causation).18

Following Vivekananda’s cosmology one might ask how does Mahat, the Universal Mind and Body, effect individual minds and bodies and the universe of matter [Ākāsha] and energy [Prāna]? Though Arthur Peacocke did not teach the ideas of a Cosmic Mind and Body, nevertheless his idea of whole-part downward causation supplies a possible answer to this question that should be considered. His approach is based on the concepts of modern science and the New Biology:

A number of terms have in recent years been applied to this effect of the higher level whole on the behaviour of its constituents, for example ‘downward causation’ or ‘top-down causation’ or my preferred term, ‘whole-part influence.’ . . . Here the term
whole-part influence will be used to represent the net effect of all those ways in which a system-as-a-whole, operating from its higher level, is a causal factor in what happens to its constituent parts, the lower level. We have seen that causality in complex systems made up of units at various levels of interlocking organization can best be understood as a two-way process. There is clearly a bottom-up effect of the constituent parts on the properties and behaviour of the whole complex. However, real features of the total system-as-a-whole are frequently an influence upon what happens to the units (which may themselves be complex) at lower levels. The units behave as they do because they are part of these particular systems. What happens to the component units is the joint effect of their own properties, explicable in terms of the lower-level science appropriate to them, and also the properties of the system-as-a-whole which result from its particular organization. When that higher level can also be understood only in terms not reducible to lower-level ones, then new realities having causal efficacy can be said to have emerged at the higher levels. We have also seen that the world-as-a-whole may be regarded as a kind of overall System-of-systems, for its very different (e.g. quantum, biological, cosmological) components systems are interconnected and interdependent across space and God’s interaction with the world time, with wide variations in the degree of coupling. There will therefore be an influence on the component unit systems, at all levels, of the states and patterns of this overall world-system and of its succession of states and patterns. . . . If God interacts with the world-system as a totality, then God, by affecting its overall state, could be envisaged as being able to exercise influence upon events in the myriad sublevels of existence of which it is made without abrogating the laws and regularities that specifically apply to them.

Any such interaction of God with the world-System would be initially with it as a whole. One would expect this initial interaction to be followed by a kind of ‘trickle-down’ effect as each level affected by the particular Divine intention then has an influence on lower levels and so on down the hierarchies of complexity to the level at which God intends to effect a particular purpose . . . which occurs between God and the totality of the world-System and this, from a panentheistic viewpoint, is within God’s own Self. . . . But one has to recognize that there will always be a distinction, and so gulf, between the nature of God and that of all created entities, structures, and processes. . . . The model is propounded to be consistent with the monist concept that all concrete particulars in the world-System are composed only of basic physical entities, and with the conviction that the world-System is causally closed. There are no dualistic, no vitalistic, no supernatural levels through which God might be supposed to exercising special Divine activity. In this model, the proposed kind of interactions of God with the world-System would not, according to panentheism, be from ‘outside’ but from ‘inside’ it. The world-System is regarded as being ‘in God.’ . . . But if God incorporates both the individual systems and the total System-of-systems within Godself, as in the panentheistic model, then it is readily conceivable that God could interact with all the complex systems at their own holistic levels. God is present to the wholes [sic] as well as to the parts.19

An example of a ‘downward causal effect’ is mental phenomena affecting the body, such as the mind causing the bodily movements like speaking or raising the arm.20 As Nobel Prize winning scientist Roger Sperry stated, ‘As things stand, I no
longer need to believe, as a scientist, that I and my world are governed solely from below upward through the ‘fundamental forces of physics’ in a totally mindless and purposeless cosmos, indifferent to human concerns. In our new downward-control paradigm we are moved and surrounded in the modern world by higher, more-evolved vital, mental, cultural, and other social forces.’

In the above quote Vivekananda mentions thought coming from Mahat, and Peacocke information from God. Concepts like information must be used since Brahman-God is a conscious personal agent (more than an impersonal force) whose creative activity involves rational purposes and intentions. For Peacocke, ‘There is a flow of information from higher to lower levels in a single, hierarchically stratified complex. The higher level is seen as constraining and shaping the patterns of events occurring among the constituent units of the lower one. Although “information” is a concept distinct from matter and energy yet, in real systems, no information flows without some exchange of energy and/or matter. . . . The concept of information is indeed very apt for situations in which a form at one level influences forms at lower levels—a process that can then be conceived of as a transfer of information, as distinct from energy or matter.’ God’s action involves supplying both energy and ideas.

Tāmasik Ākāsha (matter, material cause), the material, is worked on by rājasik Prāna (energy, efficient cause), the source of change or stability. Following Aristotelian logic, there is also an internal formal cause that Vivekananda calls thought and Peacocke refers to as information. It represents the sāttvik element that determines how Prāna will affect Ākāsha, in order to bring about a specific physical or mental form, or pattern. The form pre-exists internally and potentially, and is eventually actualized.

Following another approach, Arthur Peacocke suggests God’s relationship to the world as analogous to the way in which the mind influences the body. ‘This psychosomatic, unified understanding of human personhood partly illuminates the use of a panentheistic model for God’s relation to the world. For, according to the model, God is internally present to all the world’s entities, structures, and processes in a way analogous to the way we as persons are present and act in our bodies. This model, in the light of current concepts of the person as a psychosomatic unity, is then an apt way of modeling God’s personal agency in the world as in some sense “personal”.’

Philip Clayton adds: ‘Thus an analogical relationship suggests itself: the body is to the mind as body-mind combination—that is, human persons—is to the Divine. The world is in some sense analogous to the body of God. God is analogous to the mind which dwells in the body, though God is also more than the natural world taken as a whole . . . there would be no qualitative or ontological difference between the regularity of natural law conceived as expressing the regular or repetitive operation of Divine agency and the intentionality of special Divine actions.’ God controls the world like our mind and thought controls our body through willing intentions. ‘The regularities of natural law represent the autonomic or, as it were, habitual operation of Divine action apart from God’s specific or focal intentions. . . . Natural regularities within God’s universe, then, would be roughly analogous to
autonomic responses within an individual’s body [e.g. breathing]—the things that one’s body does without conscious interference or guidance. In one sense, such behaviors are still one’s own “actions”, even though they occur through the body’s operating in a regular or autonomic manner and one thus performs them unconsciously.24 Just as human thought can bring about changes in the physical world, so also God can do the same. Seeing the world as God’s body is more compatible with the modern ideas of ecology and respect for nature.

The Infinite and the finite

Philip Clayton makes the point, ‘The infinite may without contradiction include within itself things that are by nature finite, but it may not stand outside of the finite. . . . There is simply no place for finite things to “be” outside of that which is absolutely unlimited. Hence an Infinite God must encompass the finite world that He has created, making it in some sense “within” Himself.’ A fully Infinite God cannot be limited by something external to Itself.25 Clayton also discerned:

The concept of the infinite can be understood in a determinate and an indeterminate sense. In the latter case it becomes merely the indefinite extension of number, space, or time [infinite yet never reaching the end]; in the former, it refers to a particular reality that is qualitatively distinct from the finite. This determinate sense can in turn be taken negatively—as the negation of the finite—or positively, as that which precedes and grounds all finite things. Finally, the positive view can be construed monistically (the One excludes any independent existences) or dualistically (a world of finite objects can exist apart from the infinite) or as some combination of the two (the world is within God, though God is also more than the world) . . . it inclines one toward a world-within-God (Panentheism) rather than the separation of world and God . . . one can best speak of the “transcendental” infinite: the infinite is prior to finite things in that it is the condition of the possibility for conceiving them as what they are . . . the infinite would have to exclude the finite—unless the finite could be understood as existing within the infinite. But if we exist “within” God then we are not really separate from the Divine; we are in some sense modes of the One . . . if the world really participates in God, there is no place for a final ontological separation of the participating beings from their participated source. For Spinoza and Schelling, God is the All; there is no “space” outside God (if one wishes to speak in spatial terms); hence the world is within God, as are we. Yet theism requires that the world not be identical with God. Here we reach perhaps the most difficult question: How is one to specify the world’s difference from God? Theologians have not always seen that this is the crucial issue: not how the world can be connected to its infinite source, but rather how things in the world are to be individuated given such a source. We have found that the logic of the infinite is inescapable: the absolute can only differentiate Itself into self and other, infinite and finite, God and world. The reason an adequate theism remains inescapably dialectical is that what results must both be not-God (as finite) and God. Given that there can be nothing outside the infinite, whatever becomes remains in some sense still part of the infinite. How then is one to separate God and creatures? The answer lies in the understanding of God as the ground of being. We are the beings that stem from this ground.26

Vivekananda explains the infinite-finite
relation differently. He says, ‘The whole universe is a play of unity in variety, and of variety in unity. The whole universe is a play of differentiation and oneness; the whole universe is a play of the finite in the Infinite. We cannot take one without granting the other. . . . That is the peculiar claim—not that this unity has to be made, but that it already exists, and that you could not perceive the variety at all, without it. God is not to be made, but He already exists. This has been the claim of all religions. Whenever one has perceived the finite, he has also perceived the Infinite. Some laid stress on the finite side, and declared that they perceived the finite without; others laid stress on the Infinite side, and declared they perceived the Infinite only. But we know that it is a logical necessity that we cannot perceive the one without the other. So the claim is that this sameness, this unity, this perfection—as we may call it—is not to be made, it already exists, and is here.’

These ideas are supported by Sarvepalli Radhakrishnan (1888-1975), the modern Vedantic philosopher. Says he, ‘The Upanishads nowhere say that the Infinite excludes the finite. Wherever they assert that Brahman is the sole reality they are careful enough to add that the world is rooted in Brahman, and as such has a share of reality. “The finite is in the infinite. This Ātman is the entire universe (Chândogya Upanishad, II:4.26).” . . . The infinite is inherent in the finite. That is why the finite is ever struggling to break down its finiteness and reach out to the fullest freedom, and when the freedom of spirit is reached all is overcome.’

The infinite-finite distinction not only applies to space and time, but also to power, knowledge, will, feelings, values, etc. Each of these characteristics has both a quantitative and qualitative dimension. Our limited finite ideas are part of and an aspect of Brahman-God’s omniscient infinite ideas. Finite space, time and all entities, structures and processes are within the infinite. Nevertheless, there is an ontological distinction between the infinite Supreme Being and the finite, though intimately interrelated. Consequently, the world is absolutely dependent on Brahman-God for its existence and sustenance at every instant. Nothing has independent existence apart from the Divine Being. There is also an Infinite without parts that has no finite dimensions.

**Emergent evolution and possible areas of disagreement**

Originally, in the nineteenth century, Western theologians looked upon evolution very negatively. With the New Biology, evolution is now considered to be the way God (Brahman) works in the natural world. Arthur Peacocke explains the evolutionary process, ‘The natural (and human) sciences give us more and more a picture of the world as consisting of complex hierarchies—a series of levels of organization of matter in which each successive member of the series is a whole constituted of parts preceding it in the series. The wholes are organized systems of parts that are dynamically and spatially interrelated . . . the idea of an immanent God, which is the God of Evolution.’

Evolution represents hierarchical layers of organization, complexity, and levels of entities, structures, and processes. Atoms in molecules, in cell, in organs and so forth, until one reaches the entire cosmos as a single interrelated natural system.
For Arthur Peacocke, ‘The whole cosmos is in a state of evolution from one form of matter to another, and that a significant point in this evolutionary process occurred on the surface of the Earth where the conditions were such that matter was able to become living... For just as the wetness of water, or the viscosity of a nucleic acid solution, are not properties of their constituent atoms but features of their higher molecular and macro-molecular levels of organization, so the properties and behaviour of living organisms can be regarded as manifestations of the potentialities of matter if incorporated into certain organized structures... To be consistent, one would say that matter organized in the way we call man... For it seems that by taking seriously the scientific perspective, we cannot avoid arriving at a view of matter which sees it as manifesting mental, personal and spiritual activities.’

For Vivekananda it is Ākāsha due to the influence of Prāṇa (energy) that is evolving. But Ākāsha includes both physical and subtle (mental) matter.

Are not the stages of evolution an unveiling of the five koshas (sheaths)? What could be a more reasonable path of development than those presented by the five koshas? The first emergent is matter (Annamaya-kosha) the gross body of all physical things; which combines with the vital or etheric body and life force (Prāṇamaya-kosha), the biophysical sphere, resulting in plant life. In the third stage of evolution matter and the life force combine with the unfolding of the lower mind (Manomaya-kosha) endowed with the powers of instinct, thought, sense perception, memory, desires, and emotions, all found in animals. It is also known as the astral body. Next in the scale of evolutionary development, these three emergents combine with the subtle mental body or sheath of intellect (Vijnānamaya-kosha), finer and more inward than the mind, producing an I-consciousness or ego, and the discriminative faculties of reason and will found in human beings. The final stage is an unveiling of the sheath of bliss (Ānandamaya-kosha) manifested in Divine beings.

According to Arthur Peacocke, ‘Those involved in studying how the brain works have come to recognize that properties not found in components of a lower level can emerge from the organization and interaction of these components at a higher level... Reality could, it was argued, putatively be attributable to that to which these non-reducible, higher-level predicates, concepts, laws, etc., applied; and these new realities, with their distinctive properties, could properly be called “emergent”... Mental properties are now widely regarded by philosophers as irreducible to their physical ones, indeed as emergent from them, for mentalistic terms cannot logically be translated into neurophysiological ones.’

Emergent evolution involves qualitative changes not reducible to the prior level of development. This appears to resemble the traditional Indian Nyāya-Vaisheshika concept of Asatkāryavāda, meaning the non-existence of the effect in the cause. Every effect is a new beginning and is not born out of a cause. Conversely, Vivekananda like the Sāṅkhya philosophers and Rāmānuja before him holds to the doctrine of Satkāryavāda (or Parināmavāda) of the pre-existence of the effect in the cause, in a potential form even before its manifestation. The effect exists prior to its modification in a latent state in the cause. For example, the higher
states of evolution (e.g. self-consciousness) exist in the lower states (e.g. a plant) in seed form. The potential apple tree is hidden at the subtle level not perceivable by the five physical senses. We do not perceive a future apple tree in a seed, yet it is there.

As a supporter of Emergent Evolution, Arthur Peacocke closes on a positive note:

The more personal and self-conscious is the entity in which God is immanent, the more capable is it of expressing God’s supra-personal characteristics and the more God can be immanent personally in that entity. . . . This raises the possibility (and so hope) that the immanence of God in the world might display, in humanity at least, a hint of some kind of reflection of the transcendence/immanence of God. The transcendence-in-immanence of human experience raises the hope and conjecture that in humanity immanence might be able to display a transcendental dimension to a degree which would unveil, without distortion, the transcendent-Creator-who-is-immanent in a uniquely new emergent manner—that is, that in humanity (in a human being, or in human beings), the presence of God the Creator might be unveiled with a clarity, in a glory, not hitherto perceived. Might it not be possible for a human being so to reflect God, to be so wholly open to God, that God’s presence was clearly unveiled to the rest of humanity in a new, emergent and unexpected manner? If that were to be so, would it not then be accurate to say that, in such a person, the immanence of God had displayed a transcendental dimension to such a degree that the presence of God in and to the actual psychosomatic unity of that person required and requires new non-reducible concepts and language to express its character and uniqueness?35

Arthur Peacocke believes that even God does not know the future of quantum events. ‘The predominant view among practising physicists—to abbreviate ludicrously a sharp and unsettled question—is that this unpredictability of the effect of measurement on quantum-level systems is inherent. If one takes this view, then there is no definite knowledge of which, say, radium atom will split up in the next smallest possible time interval—only probabilistic knowledge is available. In that case there is no definite fact of the matter even for God to know, so God logically cannot know it, for omniscience is the ability to know all that it is logically possible to know. One would have to conclude that God has so made the world that God knows the outcome of such events only in a probabilistic manner. That is, God is omniscient, with only a probabilistic knowledge of the outcomes of some events. Clearly this postulate depends on the belief that God also does not know the future.’36

Peacocke is to be praised for raising these important topics, but his view is in direct contradiction to the doctrines of Indian dualism and Western theism. Brahman-God is far more than a perfected or a master quantum physicist. The Omnipotent Being (ultimate Reality) is the First cause, the ongoing and continuous creator of the universe that includes the quantum world. As the immanent creator, the Divine Being pervades the quantum world and is ontologically prior to quantum events. The quantum world is not exterior to the Lord as it is for the physicist. Brahman-God is not subject to quantum events, but they are determined by the Divine Will that decides which radium atom will next decay. Being omniscient, the Divine Being has complete understanding of every facet of quantum
physics in its entirety including its future states. The Supreme Being’s act of creating and knowing are one and the same. Quite possibly quantum events are subject to a law that the contemporary scientists have not yet discovered. According to the law of *karma*, even events that appear to be random are causally determined. If atheists/agnostics do not care for the word ‘God’ or ultimate Reality, they can coin another term for that entity that ontologically pervades and continuously manifests the laws of nature and the quantum world.

Brahman-God’s Double Agency acts in two ways. First, the laws of nature studied by the scientists that apply to all people. The Divine Mind working from within pervades and is the source of the laws of nature and the accompanying causal forces, which are determined by the Divine Will. All physical causes in the universe originate with the Supreme Being, the First Cause. Vivekananda states, ‘God is the omnipotent supporter of the universe. What is called “law” is the manifestation of His Will. He rules the universe by His laws.’

Second, Brahman-God operates through the principle of *grace* that applies to a lesser number of people who are open to it, which eventually frees (liberates, saves) a person from the control of the laws of nature. Some people consider the laws of nature to be along a horizontal plane and the workings of the Divine Being along a vertical plane.

NOTES AND REFERENCES

16 CW, I, pp. 360-61; II, p. 265.
22 Peacocke (2001), pp. 53-54.
27 CW, I, pp. 433-34.
28 S. Radhakrishnan, Indian Philosophy (2 vols.; Delhi: Oxford University, 1923, 1992), I, pp. 190, 339.
33 Web: En.wikipedia.org/wiki/ Emergent_evolution
37 CW, VI, p. 56.