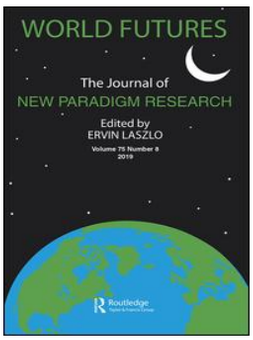

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Understanding Oneness: How Science and Spirituality See the World*

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PERSONAL PERSPECTIVES

Understanding Oneness: How Science and Spirituality See the World*

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ABSTRACT

The enterprise of science, as a disciplined inquiry into the nature and workings of the world, is coming to affirm many of the intuitively sensed and viscerally known insights long held by various wisdom traditions of spirituality. Both science and spirituality have come to affirm the essential underlying oneness of the world. How is it that these two traditions of inquiry, so different in their methodology, have come to a common meeting ground on the ontology of reality? This essay explores these two perspectives and how each of them expresses the insights they offer into our miraculously coherent universe. Each author addresses these respective views in turn. Ervin Laszlo takes the first part to explore the view from science and how it has come to an understanding of the oneness and coherence of being and the world. Alexander Laszlo takes the second part to consider how the view from spirituality relates complementary accounts regarding the unity and coherence of the world. Taken together, these two views of the world provide the understanding of science as well as the consciousness of spirituality in a holistic conception of being and the world; what Alfred North Whitehead anticipated as the possibility that 'a reconciliation of a deeper religion and a more subtle science will be found.'

KEYWORDS

Coherence; holotropism; oneness; science; spirituality

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There is a soul force in the Universe,
which if we permit it,
will flow through us

and produce miraculous results.

– Mahatma Gandhi

Science's Account of the Miraculously Coherent Universe

Ervin Laszlo's Contribution

The gist of the miracle of the world is that the universe we inhabit is coherent—coherent enough to be comprehensible. Why is it not just an unordered heap of unrelated things? How the order we find in the universe would have come about is, at least statistically, extremely improbable. Beyond our amazed perception, there is an explanation provided by science. It is not a full and complete explanation, but it is as far as an explanation based on observation and experiment can reach.

The probability that the kind of order we find in the universe would have come about through random interactions among the things that emerged in space and time is nearly nil. Yet this is precisely what mainstream physicists have been asserting until quite recently. In recent years, however, with the advent of powerful computation and more wide-ranging and precise observation, it turned out that the order exhibited in the universe is so complex and precise that random processes would take longer than the age of the universe (which is presumably about 13.8 billion years, the time that elapsed since the Big Bang).

The order exhibited in the universe is complex and precise, and highly sensitive to alteration. A change amounting to no more than one billionth of the value of the mass of the proton would change the rate of the expansion of the universe and it would make impossible the evolution of enduring systems such as stars, and thus prevent the creation of enduring flows of energy from "hot" stars to their planets. This would make the universe a lifeless sphere of physical processes.

But if not mere chance is responsible for the coherence that makes the universe comprehensible—and life in it possible—then what is? Must we assume that it is due to the design of a higher intelligence? Not necessarily. There is design behind the evolution of the universe, but it may not be design exercised by an extra-universal, transcendental Being. It could be, and most plausible is, not a consciously injected design, but a system of laws that together introduce nonrandomness into otherwise random

processes. In science, this nonrandom effect of the laws of nature constitutes what is called a systemic "attractor."

Attractors are assumed to be present in the behavior of complex systems that manifest some form of order. Systems "governed" by attractors tend toward some specifiable state or condition in preference to others. These can be recurring states, governed by periodic attractors, or a goal state which suggests that presence of a point-attractor. Elements of randomness can be mixed with nonrandom elements, as in the case of systems governed by "strange" or "chaotic" attractors.

The attractor at work in the universe appears to be a formative influence that orients the state of the universe toward forms and elements of integration, coherence, and order. This attractor is best described by the term Stanislav Grof used in regard to the orientation of the subconscious mind toward order: "*holotropic*" (made up of *holos*—meaning wholeness or whole in Greek—and *tropein*, meaning oriented in some direction). We can say that the universe at large is governed by a holotropic attractor, as manifested by its overall orientation toward coherence and wholeness. This attractor works statistically and not as a mechanical principle. Whenever there is an element of freedom in the selection among alternatives, there is a bias built into the universe that selects toward those alternatives that enhance coherence and wholeness.

As a consequence of the action of the holotropic attractor, the systems that evolve in the universe tend to be integral ensembles of their parts: "wholes" and not "heaps." A whole is distinct from a heap: it is a dynamic entity as contrasted with a random agglomeration of unrelated items. The diverse elements of the whole function together to maintain it in its environment. The paradigm for such a whole is the living organism. Here cells that are often highly diverse among themselves form multicellular systems that complete and complement each other. The manifest course of evolution in the universe indicates that there is an underlying trend in evolution toward the integration of diverse elements in integral cooperative wholes.

This is the evolution Bohm called "holomovement." It is a progressive movement toward the formation of wholes from parts through coherence among the parts, and between the wholes constituted by the parts and the rest of the universe. The coherence-building process occurs and recurs on multiple levels, on higher and higher scales of order and dimension of size. The emerging whole-systems jointly form super-systems, building the manifest universe into an embracing super-super system.

This evolutionary process is based on the minute bias toward coherence that is built into every element of the interconnected system. Just as a butterfly flapping its wings can create a storm through the minute alterations from randomness created in the weather-system, so every minute

"bias" in the quanta that constitute the basic architecture of the world can create a coherently ordered universe. All that is needed for this to occur is a strongly interconnected system, with not-entirely random connection among its elements. The dynamic impetus that introduces bias into the system is what we call the holotropic attractor—and the religions and spiritual systems call divine will and cosmic intelligence.

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Spirituality's Account of the Miraculously Coherent Universe

Alexander Laszlo's Contribution

The common narrative in spiritual accounts of the above story of unity and coherence in science is that of oneness. Indeed, while the holotropic paradigm is gaining purchase through areas of scientific research in quantum physics, cosmology, the sciences of complexity, psychoneuroendocrinoimmunology and similar transdisciplinary and integral fields of study, spiritual traditions have long asserted the communion of all with all.

There are as many ways to define spirituality as there are people willing to argue them. However, in essence, spirituality can be understood simply as all that which brings us into sacred relationship with the world (both the inner world of contemplative reflection and the outer world of interactive engagement). It means accepting and drawing on information sourced from domains beyond those accessible to the standard five senses (or the sciences that validate them and the technologies that augment them). It does not rely on faith or belief any more than does empiricism. In fact, it enriches, augments and extends empirical understanding by offering the opportunity for complementary insight. In this sense, volunteer work could be spiritual. Meditation could be spiritual. Taking out the garbage could be spiritual. Or none of them could be—it depends on how we engage with reality and where we draw the boundary of "legitimate information input" and "illusionary information input."

When we work with the understanding that spirituality is the embodied and enacted awareness of the interdependence of all things, it serves as a pathway to sourcing, sensing, and coming into sacred relationship—with self, others, the more-than-human world, our ancestors and future generations, and the deepest realms of cosmic being (Laszlo, 2020). Spiritual exploration of the lived pattern-that-connects, or the sensed quintessence of cosmic harmonies that run through and tune all beings with each other, expresses similarly to scientific exploration of holotropic attractors and the evolutionary pattern Bohm referred to as holomovement. Through a biding respect for the animate matrix of life and the

interconnectedness of all things throughout the vast reaches of the universe, the path of spirituality expresses a quest for communion, transcendence, connection and interbeing.

Four recurrent themes tend to characterize this quest. These include engagement in what Terence McKenna would refer to as *a trip* that involves travel through planes of existence not commonly accessed by our five senses in states of corporeal existence. Such trips often are undertaken in an *ecstatic trance* that provides powerful access to extra-ordinary states of consciousness. These states are associated with the attaining of vision-beyond-vision, bringing insight in ways not normally attained in association with the mundane dimensions of physical reality. In the process, some form of *transformation* typically occurs, often in ways that bring new *power* in the form of "medicine" with knowledge of how to use it. This healing, protective and vitalizing medicine is then brought back into the day-to-day reality of ordinary consciousness as deep wisdom. Here it can be applied to aid in the connection between life and the life-giving patterns and energies that abide in the spirit realm.

Not all spirituality follows this pattern of engagement, though often enough it seeks to approximate it to some degree. The knowledge obtained through spiritual inquiry is fundamental, direct, unprocessed and raw. It is not at all the processed, refined, considered and deliberated knowledge obtained through scientific pursuit. According to John Heron and Peter Reason (Heron & Reason, 1997), there are four types of knowledge domains, though the Western mind tends to acknowledge and focus almost exclusively on the last two domains, dismissing and often disparaging knowledge derived exclusively from the first two. These are: *experiential, presentational, propositional* and *practical* forms of knowing. Heron posits that these four forms of knowing can be seen as aspects of human intelligence and ways through which we dance with the primal cosmos to co-create our reality (Heron, 1992).

Experiential knowing means direct encounter, face-to-face meeting: feeling and imaging the presence of some energy, entity, person, place, process or thing. It is knowing through participative, empathic resonance with a being, so that as knower one feels both attuned with it and distinct from it. It is the co-creative shaping of a world through mutual encounter. Experiential knowing thus articulates reality through inner resonance with what there is, sourced from domains that include, but often transcend, those accessible in normal states of waking consciousness. When integrated with other forms of knowing, it provides essential grounding for them.

Presentational knowing emerges from and is grounded in experiential knowing. It clothes our encounter with the world in the metaphors and analogies of esthetic creation. Presentational knowing draws on expressive

forms of imagery, using the symbols of graphic, plastic, musical, vocal and verbal art-forms, and is the way in which we first give form to our experience, expressing it through metaphor, analogy, simile, and hypocatastasis. These forms of nonintellectualization symbolize both our felt attunement with the world and the primary meaning which it holds for us.

Propositional knowing is knowing in conceptual terms; knowledge by description of some energy, entity, person, place, process or thing. This kind of knowing is expressed in statements, theories, and formulae that come with the mastery of concepts and classes that language and number bestow. Propositions themselves are carried by presentational forms—the etymologies, the sounds, or the visual shapes of the spoken or written word or number—and are ultimately grounded in our experiential articulation of the world even though they can only ever represent abstractions of it.

Practical knowing is knowing how to do something, demonstrated in a skill or competence. It presupposes a conceptual grasp of principles and standards of practice, presentational elegance, and experiential grounding in the spatio-temporal situation within which the action occurs. It fulfills the three prior forms of knowing, bringing them to fruition in purposive deeds, and consummating them with its autonomous celebration of excellence in accomplishment. Human feats of action upon the world, from tool making to the manipulation of matter and energy for constructing the components of civilizational advance, are expressions of practical knowing.

While science tends to thrive in the pursuit and postulation of propositional and practical ways of knowing, spirituality tends to take recourse primarily in experiential and presentational ways. The elements of the mystical and the transcendental are favored over those of the rational and this-worldly. As science begins to acknowledge the extent to which open systems become more complex and dynamic, more self-directed and able to influence their environment as they move further and further from thermodynamic and chemical equilibrium, so it forms a more vitalist conception of evolution. This conception describes an order-producing universe, which according to Sally Goerner, has dramatic implications for human beings because, like the Copernican revolution, it creates a radical shift of perspective (Goerner, 1994). It denies classical science's image of a sterile mechanistic universe of directionless colliding particles and accidental life. The Copernican revolution showed that we were not at the center of the universe. The nonlinear revolution shows that we are embedded in a deep, creative, and direction-generating process that is the physical universe. As has been long appreciated in Eastern spiritual traditions, Western thought is coming to affirm that we are part of something

much larger, more coherent and more miraculous than just ourselves (Laszlo, 2016). The idea of intuition in the work Henri Bergson, the existentialism of Martin Heidegger, the esthetic world-view of Ortega y Gasset, the pantheism of Baruch de Spinoza, and the panentheism of Karl Krause are among the classical influences in Western thought that opened pathways to complementarist approaches with Far Eastern views on and practices of knowing.

Exploration of those elements of human experience that correspond to transcendental domains has always been primary in the Hindu culture of the Indian subcontinent, combining with monotheism and occasionally with mysticism in the cultures of the Arab world. Similarly, the indigenous cultures of the many peoples of Africa express a spiritualist and animistic appreciation of life, an orientation shared among many traditional belief systems of the Orient.

For example, the Indian philosopher of the early 20th Century, Sri Aurobindo, developed an integrative evolutionism that has deep parallels with Bergson's philosophy and his insistence on the role of intuition in acts of nonintellectual cognitive prehension. Bergson's ideas on matter, consciousness, and evolution agree with Vedantic and Puranic philosophies, suggesting a basis for the contemporary complementarity between philosophies of East and West (Fitz, 2000).

These approaches from East and West speak to forays into the exploration of being and reality that contemplate the integral nature of existence. Rather than relying on notions of cause and effect and a search for validity and knowledge, the spiritual approach is more concerned with notions of attraction and co-arising and a search for rightness and wisdom. The sense that we are living in an animate universe imbued with spirit, rather than a cold and uncaring universe governed by sterile laws of action and interaction, feeds the spiritual quest for engagement with, and expression of, an all-pervasive and in-forming *anima mundi*. While this search has often been expressed in homocentric and chronocentric terms that accord with human perceptive capacity, there is an emerging trend toward exploring the underlying patterns of cosmic coherence in this miraculously integral and spirit-infused universe.

Spirituality provides powerful pathways for the contemplation of the perennial wisdom underlying and informing all of creation. The recognition of the oneness of this underlying source of all that is, has been, and will be, expresses a deep-seated need to celebrate existence; to stand in awe of the wondrous workings of a universe that speaks to us, if we know how to listen with the heart and the gut at the level of experiential knowing. Here we come into direct contact with *source*, with the quintessence of the cosmos. And what do we find there? In the spiritual traditions, it is often sensed as love, spirit, or infinite consciousness. In the

final count this is no different from the holotropic insights emerging in contemporary scientific inquiry.

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References

Fitz, H. K. (2000). *Intuition: Its nature and uses in human experience*. Motilal Banarsidass Pubs.

Goerner, S. (1994). *Chaos and the evolving ecological universe*. Gordon and Breach.

Heron, J. (1992). *Feeling and personhood: Psychology in another key*. SAGE.

Heron, J., & Reason, P. (1997). A participatory inquiry paradigm. *Qualitative Inquiry*, *3*(3), 274–294. https://doi.org/10.1177/107780049700300302

Laszlo, A. (2020). Practices that Ensoul the Cosmos: Expressions of connectedness on *Medium.com* 27 May. Retrieved 6 October, 2020, from https://medium.com/@Alex8er/practices-that-ensoul-the-cosmos-f36f4217f00b

Laszlo, E. (2016). *What is reality? The new map of cosmos and consciousness*. SelectBooks, Inc.