

**FOUR CONVERGING MODELS SUGGESTING A STRUCTURE FOR  
THE STUDY OF CONSCIOUSNESS**

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## FOUR CONVERGING MODELS SUGGESTING A STRUCTURE FOR THE STUDY OF CONSCIOUSNESS

### Introduction

In approaching spirituality in the West the challenge is to reconcile the vastly flexible, “subjective” processes and more or less unknown phenomena of spiritual transformation:



with the classic dependence in the West on third-person, “objective” testimony:



Subjective” data is summarily dismissed as untenable and invalid.

I shall present four different takes on this basic problem.

### 1. Nicholas Maxwell's *Aim-oriented Empiricism*

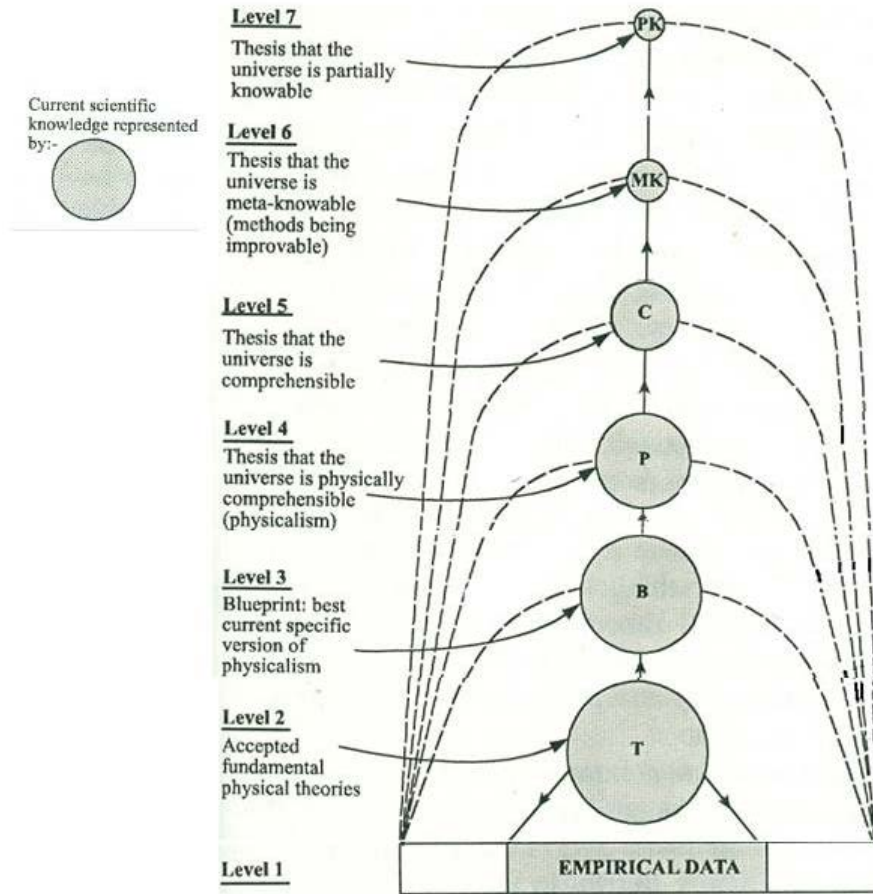
Nicholas Maxwell is a physicist and theoretician of science who highlights the mainstream notion of the West that the universe is physically knowable and its insistence on unified (explanatory) theories that attribute the same laws to all the phenomena to which the theory applies (Maxwell, 2013, p.594).<sup>1</sup> Maxwell asserts that this approach necessarily often overlooks or suppresses other “disunified” rivals that are empirically more successful than accepted theories and often have the potential to enlarge the scope of science itself (Ibid., p.595).

Assuming that Maxwell's “rivals” are not simply other concepts but also new and experiential discoveries, his answer to this problem of dogmatic concept suffocating its rivals is to expand the basic assumption into a hierarchy of assumptions, “each assumption in the hierarchy becoming less substantial and more nearly such that its truth is required for science, or the acquisition of knowledge to be possible at all” (Ibid.). Maxwell presents Figure 1: *Aim-oriented empiricism* (Ibid., p.596).

The progression here is:

- I. Empirical (that is physical) data.
- II. Accepted fundamental physical theory.
- III. Best current specific version of physicalism.
- IV. The universe is physically comprehensible.
- V. The universe is comprehensible.
- VI. The universe is meta-knowable.
- VII. The universe is partially knowable [presumably through mere conceptual knowledge of matter].

# AIM-ORIENTED EMPIRICISM



It is clear from this that the concept *physical data* at the moment totally outweighs any understanding of the “higher” concept of knowledge, but that there have been attempts to go beyond the multiplicity and endless variety, as well as the mutual exclusivity of empirical physical data to find deeper and more unifying views.

In addition to this vertical core of the model we also see from levels 2 through 6 alternatives to the levels:

At level 2: *Increasingly restrictive non-empirical methodological principles* (symmetry or invariance principles, which imply that the same thing is being described in different ways)<sup>2</sup>.

At Level 3 *Physically comprehensible alternatives to the current blueprint* appear, not diffusely but as represented in two white alternatives, whose position suggests that one

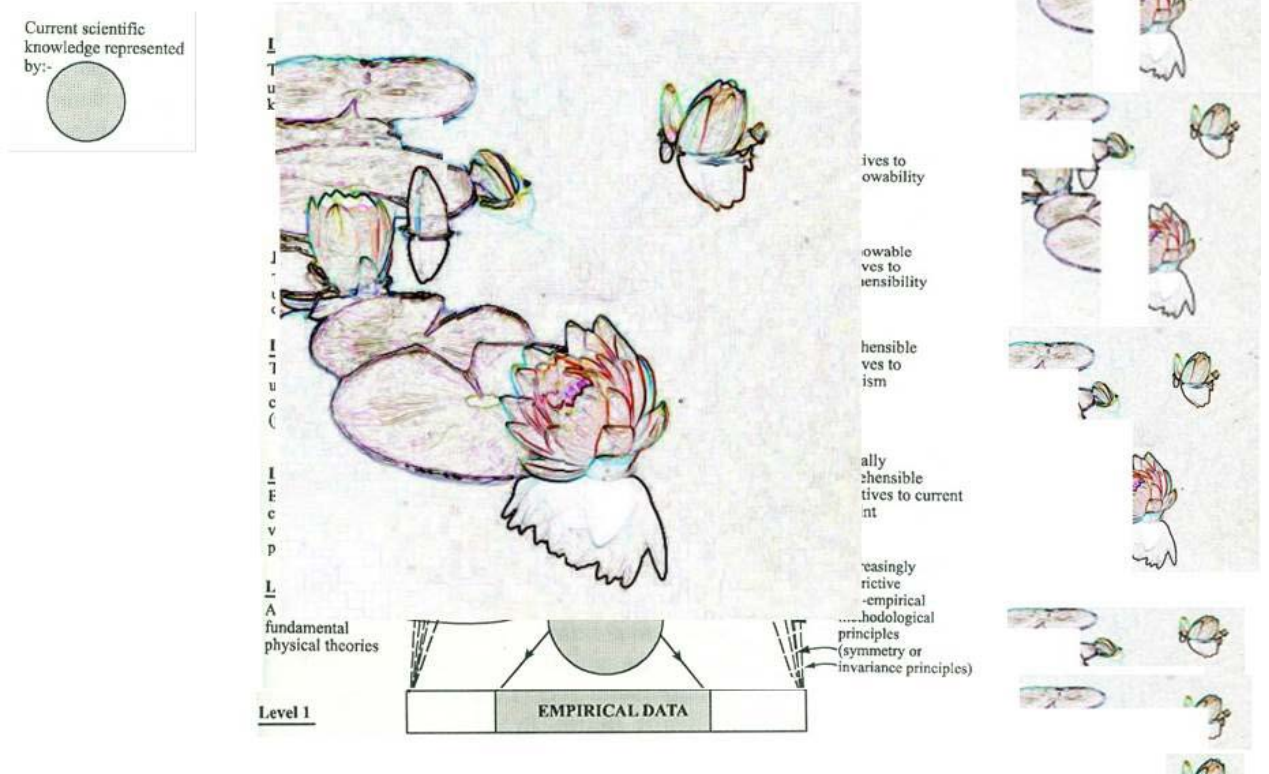
is more conceptual and the other more questioning the concept. This arrangement appears from here on in.

At Level 4 we have the same arrangement, with the caption *comprehensible alternatives to physicalism*.

At Level V we have *meta-knowable alternatives to comprehensibility*.

Level VI gives us: *Alternatives to meta-knowability*.

## AIM-ORIENTED EMPIRICISM



Just what is meant by *alternatives* Maxwell never makes clear, but his impassioned writings demonstrate that what he seeks to validate are the qualia or non-conceptual aspects of the human psyche, what we actually *experience*. Maxwell's thesis is that adding these into our overall conceptual map of knowledge is what will establish valid human values and take us to the wisdom we so desperately need, especially in the scientific and academic fields.

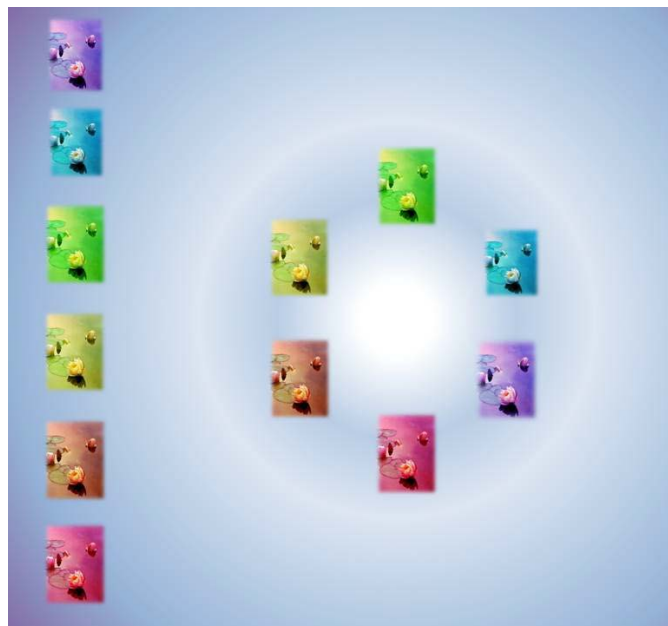
## 2. Evan Thompson's *Waking, Dreaming, and Being*

Evan Thompson is a professor of philosophy whose work *Waking, Dreaming, Being*<sup>3</sup> presents the traditional phenomenological continuum of the Indian model of consciousness verified and codified over millennia, which he couches in Western modes, not necessarily reflecting their full meaning in the Indian context:

1. Waking. Here we perceive matter as essentially *empirical data* and *accepted fundamental physical theory*, in which the existence of any entity automatically excludes that of all others.
2. Dreaming. This is the first move from the waking to a more inclusive and subjective level that I compare with Maxwell's *best current specific version of physicalism* and *the universe is physically comprehensible*. In the Indian context, it includes imagination, creativity and love.
3. Deep, dreamless sleep. I align this with Maxwell's *the universe is comprehensible*. In both circumstances we are carrying our efforts to unify and integrate beyond the mere physical world to the universe, thus vastly expanding our inquiry or experience, with a strong suggestion that this step is taken by leaving behind physical theory itself and in the case of the more experiential model of Thompson, by resolving the whole conflict of subject and object and touching base with an identity in experiential Ground that supports them and also goes beyond them.
4. The death process: passing from awareness of matter to awareness of spirit. I align this with Maxwell's *the universe is meta-knowable*, i.e. we see all of the foregoing from a position of a witness which can discern the overall arrangement from matter to the depths of the human psyche in a much more unified way, usually taking the form of some kind of hierarchy or evolution.
5. What is the experiential Self and how does it enact its reality that relates to all other realities? Here we have the maximum unification of all of the preceding in a holistic pattern discerned from the deepest level of human consciousness. Maxwell's *the universe is partially knowable* takes its meaning from this vastly expanded mode of integral knowing.



In accordance with holism and the actual properties of color this range of levels can also be organized as follows:





Comparing the experiential content of Asian phenomenological levels with the findings of classic neuroscientific methodology Thompson makes it very clear that even at the most entry-level *Waking* there is gulf between them that is almost impassable. This discrepancy becomes more and more marked as we move along the Asian continuum. The conclusion drawn is that the West has not yet grasped the experiential side of its theories and is therefore unable to comprehend the deeper levels that are normative to the Asians.

Philosophically, the author offers from the Buddhist texts that it is possible to reach such understanding because, ultimately, objective and subjective worldviews are in fact two sides of a much deeper reality embedded in human consciousness (Ibid, p.61).





### 3. Harald Walach's Quantum Complementarity

Harald Walach, a research psychologist, proposes, in parallel with Maxwell and Thompson, that human growth and progress rely upon communication of the "inner" world of experience and the "outer" world of concept. <sup>4</sup>

Walach defines this issue in terms of *complementarity*, coined by the father of quantum mechanics, Nils Bohr<sup>5</sup>:

## NILS BOHR'S COMPLEMENTARITY

**“Two descriptions which are maximally incompatible are necessary to describe one and the same thing, yet they need to be applied conjointly if that thing—in our case a human being—is to be understood properly.”**

Two descriptions which are maximally incompatible are necessary to describe one and the same thing, yet they need to be applied conjointly if that thing—in our case a human being—is to be understood properly” (Ibid., pp.6, 80).

This view shifts the issue from one of a radical, objective divide to that of how we perceive anything: we may see reality as matter or as mind, or, indeed, as the whole continuum of options that Thompson lays out for us.

Neuroscience has now thrown light on the basic existence and interaction of complementary brain processes: the causal and holistic modes of brain function (p.81), which Walach compares to the particle and wave complementarity of quantum physics (pp.146-147).

The fact that there is some evidence of complementary function in the brain, and that the balance between them is constantly adapting to meet whatever exigencies are at hand once again raises the possibility that there is some as yet unknown substratum in which both are embedded and play their respective roles. It also suggests that there is no intrinsic reason why concept or experience should be privileged over the other, as has been the case over the two millennia of the Common Era.

As and when we gain some expertise in such a flexible dynamic, we would be in



a position to address the many challenges presented in Walach's last chapter, from climate change to an equitable facing of the universal problem of evil.

#### 4. Vivekananda's Integral Vedanta

My fourth "exhibit" is the Integral Vedanta of Swami Vivekananda, an Indian spiritual teacher, the development of whose model I studied for my doctoral thesis.

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**MacPhail, Jean C. (2013)  
*Learning in Depth: A Case Study in Twin 5x5  
Matrices of Consciousness.***

**[http://opus.kobv.de/euv/volltexte/2013/83/  
pdf/MacPhail\\_Learning](http://opus.kobv.de/euv/volltexte/2013/83/pdf/MacPhail_Learning)**

His case is relevant to this discussion because he underwent a formal, rigorous<sup>6</sup> education in Western Positivism. In addition, starting in 1881 he went through five years of intensive self-transformation under the direction of a consummate yogi of the old school, highly experiential and immersed in millennial yoga practices that apparently bore no relationship whatsoever to the mass of Western conceptualism Vivekananda had embraced. An embodied complementarity, if there ever was one! As later presented by Vivekananda himself his vision revolved around five basic concepts (Symbols by Dr. Nik Warren):

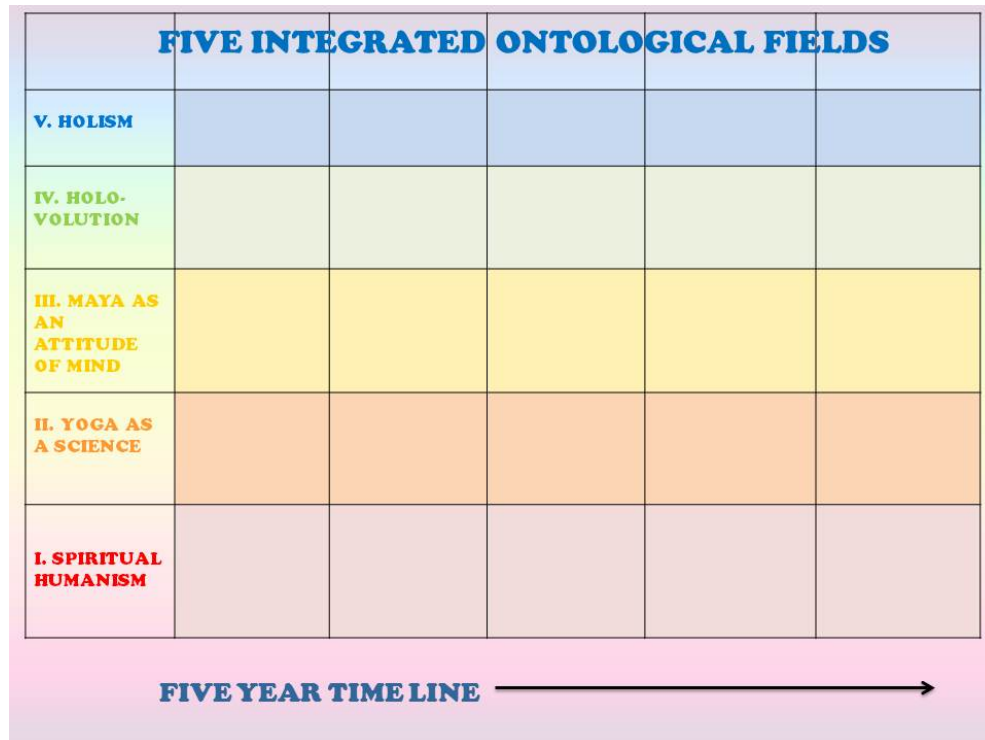


1. *Spiritual Humanism*, a clear link with the concept of the importance of individual, embodied, mutually exclusive humans, related to the materialist/waking stage of consciousness, and also to the possibility of transcending it.

2. *Yoga as a Science* states that the transformational principle of yoga, related to imagination and creativity is as cogent, valid and necessary for human development as is the conceptual string of theories that underlie Western science. Such yoga applies to physical work, love, self-knowledge, intuitive knowledge, and integral knowledge.
3. *Maya as an Attitude of Mind*. Here we are looking at the classical Indian notion of maya which could be stated as: “the good I would I do not, and the evil that I would not, that I do.” Humanistically, maya is regarded as outwith human control, an idea that Vivekananda counters with the statement that when one has penetrated deeply enough into the depths of human consciousness to the “deep sleep” stage and found the still point there, maya is overcome.
4. *Holovolution*. In keeping with the stepwise approach of humanism and spirituality, this is an integration of the Western notion of evolution, which moves from the least organized to increasingly organized forms, and the Indic notion of involution that what is most organized and powerful also morphs into the least organized and powerful. This is a yin-yang type of integration, moving “up” and “down” in a constant, almost seamlessly aligned interchange, as happens in the fourth “death” level.
5. *Holism*. Here the emphasis is on the notion that not only is the part in the whole, but the whole is in the part, i.e. the human individual contains the whole universe as much as it contains her, akin to Thompson’s enactive self. This is the ultimate integration that gives human beings an empowerment and a flexibility not of this world that can overcome and resolve the horrendous confrontation and conflict we are presently mired in on a daily basis.

Because time is so short, I cannot get into detailed comparison, but I think it is pretty clear that this progression compares quite well with that of both Maxwell and Thompson, and also resolves, as each level succeeds the other, a complementarity that is present to some extent all the way through, moving from the frank oxymorony of *Spiritual Humanism* to the interconnectedness and integration of *Holism*.

In addition, in the material I work with, this ontological pattern *as a whole* is expressed from the beginning right up to the end of the training. These facts permit us to project the image of five integrated ontological fields:



The evidence also supports the development within these conceptual fields and over the period of transformation of the five experiential *states* of consciousness defined in Vedanta and corroborated (in his own way) by Thompson, though he conceives of them more as conceptual levels comparable with scientific concepts than as actual states, which are by definition not constrained by concept, but following an invariance pattern with the models of Maxwell and Thompson.<sup>7</sup>

From our discussion we postulate that these experiences are complementary and therefore, following the principles of quantum theory, orthogonal to the basically conceptual fields:



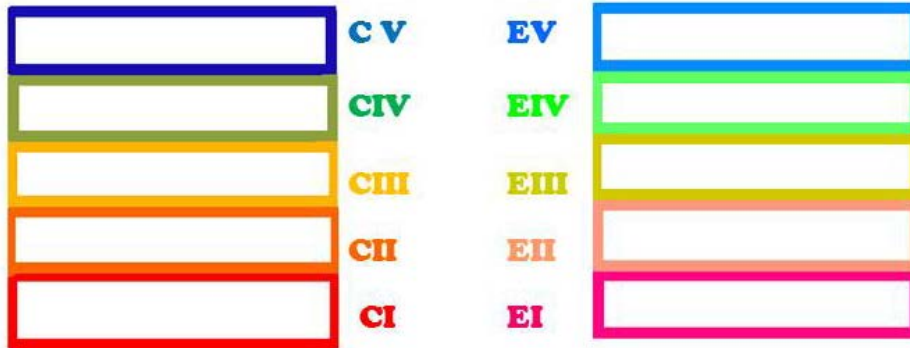
	1. WAKING STATE	2. DREAM STATE	3. DEEP SLEEP STATE	4. WITNESS	5. NONDUAL
V. HOLISM	●	●	●	●	●
IV. HOLO-VOLUTION	●	●	●	●	●
III. MAYA AS AN ATTITUDE OF MIND	●	●	●	●	●
II. YOGA AS A SCIENCE	●	●	●	●	●
I. SPIRITUAL HUMANISM	●	●	●	●	●

**THE PROGRESSION OF STATE EXPERIENCES AND STAGES ACROSS THE ONTOLOGICAL FIELDS**

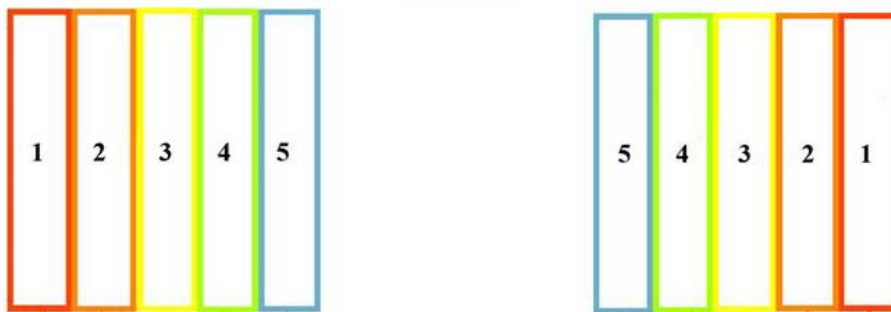
In addition, these fields were expressed in both conceptual language and historical experiential events giving rise to twinned fields that when transected by state

**CONCEPTUAL FIELDS**

**EXPERIENTIAL FIELDS**

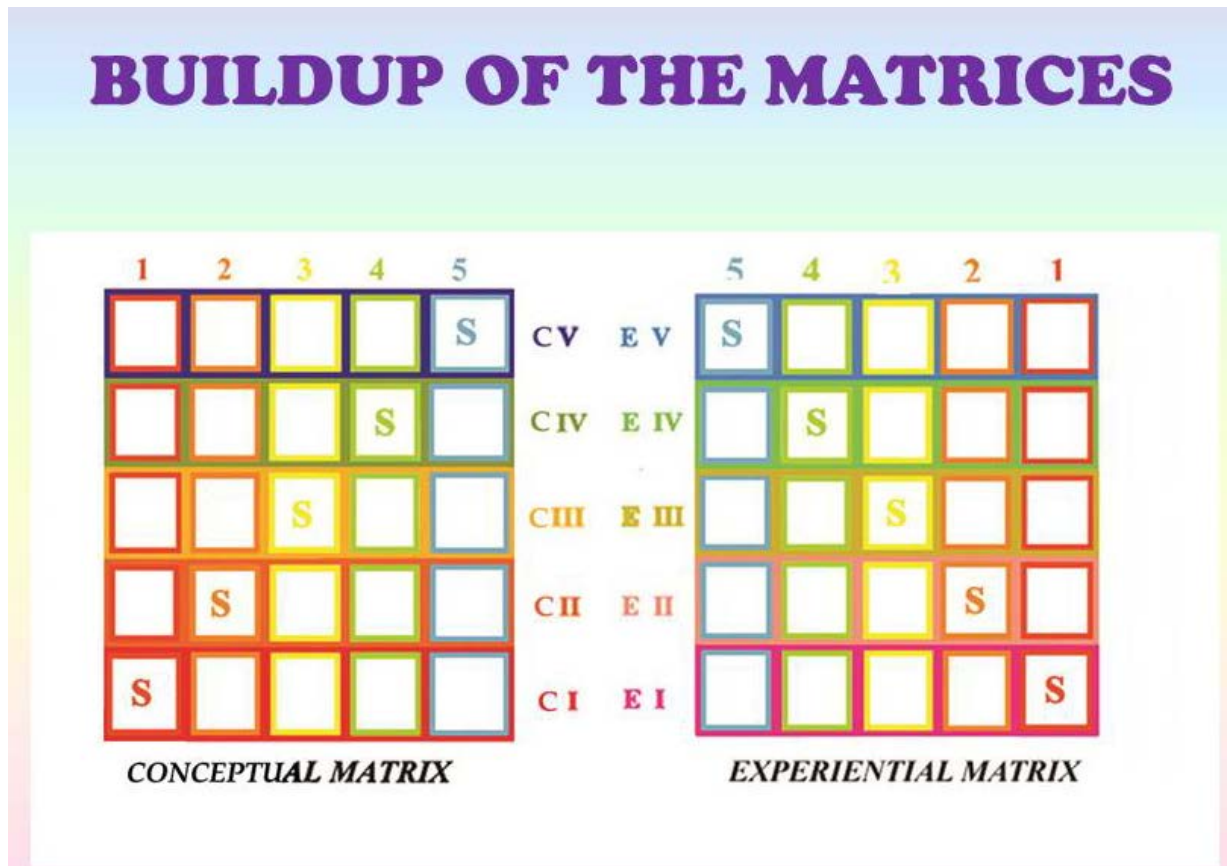


← **TIME** →



**STATE EXPERIENCES**

experiences, produced twinned 5x5 matrices,<sup>8</sup> in each and every cell of which is actual conceptual *context* and experiential *content*. This integration of concept and experience in actual lived data is a unique feature of this database. From these we can deduce a great deal about the workings of spirituality over the widest possible range that we know at present.



In addition, we see that at the meeting of a concept and an experience of the same stage in the progressions (i.e. I.1, II.2, etc.), a *samadhi* (represented by an S) occurs. Synonyms for *samadhi* might be an *aha moment*, an *ecstasy*, an *epiphany*, a *realization*, or a *permanent grasping of the whole* in each situation. From the data, *samadhi* is the point at which each concept is understood radically differently, it becomes possible to move to the next concept on the spectrum of concepts (a quantum jump that is difficult in



practice), and its effects are lifelong, deeply impacting thinking and behavior through supernormal insight, effectiveness and ability to transcend previous norms.

The historical outcome of this holistic worldview has been the energizing and modernization of Indian culture (conceptual matrix) and the introduction in the West of several yogas that promote radical self-transformation and social concern in a contemporary mode (experiential matrix).

### Summary

In a very brief compass I have shown four different approaches to the issue of how to relate entrenched conceptualism, perhaps the primary bailiwick of the West, with traditional Asian experientialism, embedded in its phenomenological literature and in an actual, historical life. I have attempted to indicate the common features that link the models and to focus on how the complementarity evident between concept and experience may be reduced or even eliminated by embracing more expanded concepts and deeper experiences. I suggest that the net result is a model of consciousness that might be helpful in arriving at an inclusive and comprehensive structure of consciousness itself.

My memoir of the first forty years of my life presents a partial picture of how the Integral model applies to my own experience and understanding.<sup>9</sup>

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<sup>1</sup> Maxwell, Nicholas (2013). Taking God Seriously in Diller, Jeanine and Kasher, Asa, eds. (2013). *Models of God and Alternative Ultimate Realities*. Dordrecht: Springer, p.587.

<sup>2</sup> [https://en.wikipedia.org/wiki/Invariance\\_principle\\_\(linguistics\)](https://en.wikipedia.org/wiki/Invariance_principle_(linguistics)):

The invariance principle offers the [hypothesis](#) that metaphor only maps components of meaning from the source language that remain [coherent](#) in the target [context](#). The components of meaning that remain coherent in the target context retain their "basic structure" in some sense, so this is a form of [invariance](#). [George Lakoff](#) and [Mark Turner](#) originated the idea under the name *invariance hypothesis*, later revising and renaming it as the *invariance principle*. Lakoff (1993: 215) gives the invariance principle as: "Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain".

<sup>3</sup> Thompson, Evan. (2015). *Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy*. New York: Columbia University Press.

<sup>4</sup> Walach, Harald. (20015). *Secular Spirituality: The Next Step towards Enlightenment* Switzerland: Springer.

<sup>5</sup> On being awarded a coat of arms, Bohr chose to include the yin-yang symbol, no doubt to represent his theory of complementarity.

<sup>6</sup> MacPhail, Jean C. (2013) *Learning in Depth: A Case Study in Twin 5x5 Matrices of Consciousness*. Presented as a doctoral dissertation to the Department of Cultural Studies at the University of Viadrina, Frankfurt on Oder, Germany. [http://opus.kobv.de/euv/volltexte/2013/83/pdf/MacPhail\\_Learning](http://opus.kobv.de/euv/volltexte/2013/83/pdf/MacPhail_Learning)

<sup>7</sup> The documentation of this historical phenomenon of state development in and through the full range of five conceptual levels is regarded in this study as a *database*. It is of course much different from the notion of database in reductionist, first level, materialistic science; but as we are working on the development of the full range of consciousness through many levels and states beyond materialism I co-opt the term for my present use.

<sup>8</sup> Study after I received my doctorate revealed that proto-matrices had been suggested and to some extent developed in the Vedanta tradition from around 600 CE or so (Fort, Andrew O. (1990) *The Self and Its States*. New Delhi: Motilal Banarsidass, pp.39, 68, 157). The Kashmir Shaivites (Swami Lakshman Jee. (1991). *Kashmir Shaivism*. Delhi: Sri Satguru Publications. p.83) had developed at an unspecified time phenomenological materials that bear a resemblance to the Integral Vedanta matrices, but without the notion of conceptual elements or actual matriceal development. Sri Aurobindo presents large amounts of data as also a framework that compares very well with the matrices I present, particularly in their inclusion of conceptual levels and twin conceptual and experiential matrices (Banerji, Debashish. (2012). *Seven Quartets of Becoming*. New Delhi: Printworld). His experiential data, however, is supplemental to the implied construction of the matrices and therefore does not present the unity of time, place, circumstances or protagonists of the Integral Vedanta matrices. This seems to be the reason that samadhis are not presented as occurring at regular and cogent points in the overall development of consciousness in *Seven Quartets*.

It seems likely that this material influenced Combs and Wilber in their development of the Wilber Combs lattice that to my knowledge appeared in print in 2006 (Wilber, Ken. *Integral Spirituality: A Startling New Role for Religion in the Postmodern World*. Boston and London: Integral Books, 2006, pp.88-93). The lattice has a vertical dimension based on Western concepts such as Spiral Dynamics, with the same Vedantic states of consciousness on the horizontal axis as the Integral Vedanta matrices. However, it does not present twin matrices or actual historical, unified data to fill out the cells of the lattice.

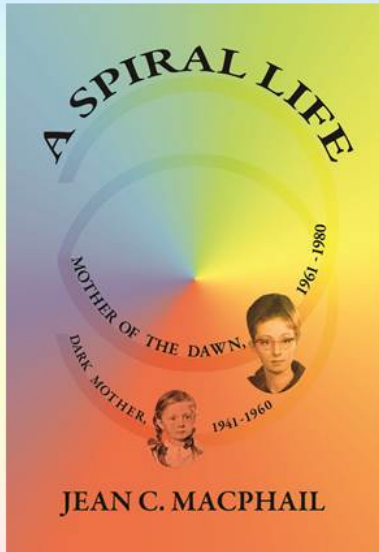
I completed my study in 1996, with no input on the notion of matrices from Combs or Wilber. I arrived at my analysis and conclusions ten years before the appearance of the Wilber- Combs lattice, purely on the basis of in-depth study of the available data, including the *Complete Works of Vivekananda* and other primary sources in Vedanta. Integral Vedanta matrices are therefore entirely their own thing.

The work I have done is unique in its unity of time, place, etc., thus providing a holistic overview of the dynamics of development of a range of conscious far beyond anything that the West is familiar with at this time. As I show in my thesis and in [Author-me.com - Samadhi—Non-locality in the ... - Facebook](https://www.facebook.com/AuthorMeCom/posts/10153184208407547) <https://www.facebook.com/AuthorMeCom/posts/10153184208407547>, the events in the database are consistent with the descriptions of spiritual development in *Patanjali's Yoga Sutras*, which is a corroboration of the data from the Indian tradition itself.

As Sri Aurobindo states, his work is inspired by that of Vivekananda and his spiritual mentor, Sri Ramakrishna (MacPhail, Jean C. (Sister Gayatriprana). 2015. *Vijnana in the Works of Swami Vivekananda and Sri Aurobindo*. <http://www.author-me.com/nonfiction/vijnana.htm>). It seems likely that these two spiritual teachers are the source of the whole integral notion of the matrix that is circulating nowadays. Certainly, the database built on the lives and teachings of these two teachers is more complete, explanatory, and fully integrated than other contemporary models of a similar nature.

<sup>8</sup> My memoir, *A Spiral Life*, gives some insight into the dynamics of these processes as I experienced them in the first forty years of my life:

### Reviews of *A Spiral Life*



[http://www.amazon.com/  
Spiral-Life-Jean-C MacPhail/  
dp/1441528660](http://www.amazon.com/Spiral-Life-Jean-C-MacPhail/dp/1441528660)

“*A Spiral Life* caught me up after the first pages; four days later I had read all five hundred pages and was very disappointed when it ended. I certainly hope there will be a volume two some day! . . . This is the real life story of a modern Western woman discovering and deepening her spiritual life in spite of numerous personal tragedies that would defeat most of us.”

Charles T. Tart, Professor (Emeritus) at the University of California, Davis and Professor at the Institute of Transpersonal Psychology, author of *Altered States of Consciousness*; and *The End of Materialism: How Evidence of the Paranormal is Bringing Science and Spirit Together*.

“A spiritual self-portrait, warts and all, which does not attempt to downplay the troubles and travails that are bound to accompany any journey towards self-realization. . . . Jean MacPhail writes beautifully! . . . I look forward greatly to the sequel.”

Steve Walker, Professor of Comparative Literature, Rutgers University, author of *Jung and the Jungians on Myth*.

“For lovers of strong, compelling narrative, the book offers a rip-roaring tale with Dickensian characters and scenes of comedy, tragedy, and high drama. For students of religion, mysticism, and the historic intersection of East and West, the author’s journey provides a vivid glimpse into the experience of a woman of science who plunges deeply into an ascetic Vedantic lineage.”

Philip Goldberg, Ph.D., author of *American Veda* and *Roadsigns on the Spiritual Path*.

See other reviews at:

[www.amazon.com/SPIRAL-LIFE-Jean-C-MacPhail/  
product-reviews/1441528652](http://www.amazon.com/SPIRAL-LIFE-Jean-C-MacPhail/product-reviews/1441528652)