

# Twin 5x5 Matrices of Consciousness in the Light of Co~Eventum Mechanics

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**Abstract:** *This paper applies the conventions of bra and ket events to a large Indian database on the historical transformations of consciousness of Vivekananda (1863-1902). He subsequently propounded in both India and the West a contemporary form of Vedanta, integrating traditional Indian transcendentalism with Western secularism and materialist science. Vedanta traditionally rests on a systematized, "atemporal" "bra library" of several levels of consciousness coupled with the active accession in sequence of related "ket states" which mirror the content of the levels but are accessed in a time frame in specific circumstances. In the first millennium CE the Indians proposed "proto-matrices" based on their tradition. I present the elements in this dynamic in Integral Vedanta, emphasizing the occurrence of five samadhis, events in which a total internal separation of bra and ket elements leads to "non-local" thought processes and phenomena, such as the very integration of Indian and Western paradigms that Vivekananda propounded. I present how Vivekananda learned and assimilated the spectrum of five interrelated bra experiences **simultaneously** with considerable issues of counterintuitivity. The generation and resolution of that counterintuitivity is imputed to the non-verbal experience of the classical gamut of state experiences, for which I deduce five lines of indirect evidence, including, perhaps most conclusively, the occurrence of samadhi itself at key junctures of level and state, which provide the stability and ongoing expansion of content of the matrices.*

**Keywords:** *Transformation of Consciousness, Bra and Ket Events, Matrices of Consciousness, Integral Vedanta, Vivekananda, Levels, States, Samadhis, Twin Matrices, Yoga, East-West Integration, Eventology, Co~Eventum Mechanics.*

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## 1 Introduction

This article is in response to a request from Professor Oleg Yu. Vorobyev for an explanation of the database, methodology, construction and analysis of matrices in my doctoral thesis *Learning in Depth: A Case Study in 5x5 Twin Matrices of Consciousness* [11]. These matrices apparently seem to support his own work in Eventology, despite the fact that his field of eventum mechanics seems rather remote from my own studies in Integral Vedanta.

My understanding of the basic process in *Eventology* as laid out in Vorobyev's paper *Co~Eventum Mechanics* [27] is that we bring to objective observation of the external world, normally thought to be subject to the familiar laws of causation, firstly, *bra* events, which make up verbalized and systematized experience from accumulated prior experiences. Second are *ket* events, which are the as-yet-unknown-but-about-to-happen experiences outwith immediate conceptualization, ultimately to be assimilated into the *bra* file, but with the ability to make or break all that preceded it in the *bra* element. Importantly, the final event that arises from the *bra-ket* conjunction is influenced greatly by the choice of the perceiving subject.

My work in Integral Vedanta deals with the subjective approach to experience central to the traditional mode of Indian thought, which classically eschews conceptualization of externally observed events in favor of at best phenomenology of experience of the interior world. By rigorously "regulating" and systematizing the inner workings of the psyche, this methodology results in the establishment of an enduring, conceptualized "*bra*" spectrum which I see as an ontology of *conceptual levels* in an essentially atemporal pattern<sup>1</sup> that actually transcends the notions of Western laws of causation.

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<sup>1</sup>This pattern does change over time, but in what appears to be a time frame of millennia. As will be presented, Integral Vedanta

Each succeeding level broadens the scope of its predecessor, producing a systematized series of nested *contexts* in conceptual mode. The other element in perception is a sequence of rigorously cultivated and systematized experiential states (*ket* events), which are fresh events appearing in succession over time, like a drive shaft creating new content of expanding experiential depth and therefore an epistemology within the pre-existing contexts of the levels. These state/*ket* events are, of course, what the *bra* file is built from originally, so there is a “genetic” similarity built into the system. Both Vedantic tradition and the data of my study indicate that there are four to five naturally occurring progressions of both levels and states in which the context of *bra* experience and the content of *ket* events reflect and interact with each other and, as we move “up” and “along” the pathway of both, radically expand the meaning and scope of the final result on each level.

This conjunction of two elements consistently interacting within the same system in two apparently opposite modes suggests quantum complementarity within the “macro” system of Vedanta. Such complementarity occurs all the way through the matrices, along with how it is resolved, but available space precludes that discussion here.

## 2 Three Key Elements of the Indian Matrices

### 2.1 The Indian Systems of Levels of Consciousness

Levels of consciousness — not ordinarily accepted by conventional, scientific, materialistic contemporary science — stand for the accumulated and codified knowledge or wisdom in any tradition, up till now largely systems that explore the inner aspects of human perception and knowledge. In most traditional spiritual or interior domains levels are multiple and interconnected in a hierarchical structure, conventionally presented on a vertical axis of “evolution” in terms of expansion of understanding and conceptual scope.

In this paper I will concentrate on the data and analysis of the Indian materials, which will hopefully offer to the West the opportunity to compare the Indian approaches with the more familiar ones of the West and perhaps to engage in dialog with what I see as the cultural complementarity innate in the comparison. As a possible first step in such a process, I invoke a recent theory: the invariance principle, known in quantum as *isomorphy* [29, Walach, 2011]. The basic idea is that the self-same reality can be looked at in infinitely different ways which may seem radically different, due to different cultures and experiences of the observer. They are connected, however, by the basic configuration and pattern they are observing; what makes the difference is the way in which the fundamental reality is being observed and articulated in language and other modes of demonstration. I refer readers to my recent paper on the subject [14, MacPhail, 2017] where I seek to show, in the context that such models have been developed in all of the major systems of spirituality worldwide, the correspondence between what I would now call the “*bra* component” in contemporary models of reality in care of the sick, in physics, in spiritual psychology, and finally in my own field.

In addition, there is a recent literature presenting a variety of levels, including Aurobindo’s *Synthesis of Yoga*, based on articles from 1914 to 1921; Jan Smuts’s *Holism and Evolution* (1926); C. G. Jung’s *The Psychology of Kundalini Yoga* (1932); Arthur Lovejoy’s *The Great Chain of Being* (1936); Ken Wilber’s *The Spectrum of Consciousness* (1977); Jean Gebser’s *The Ever-Present Origin* [7, 1985], Andrew Fort’s *The Self and Its States* [5, 1990]; and Evan Thompson’s *Waking, Dreaming and Being* [24, 2014].

Most of these sources are indebted to a greater or lesser extent to the traditional Indian system of levels of consciousness, worked out over millennia in the Upanishads [21], where they are in substance largely pre-rational accounts of the profound interior experiences of rishis or direct seers of truth. Texts on the nature of human consciousness, they are built on the in-depth and systematic exploration of that consciousness through methodologies of exterior and interior self-transformation that were systematized by Patanjali around 200-400 CE [25]. Historically, the system presents changes, not only in the number of what I am here terming levels presented, but also in their terminology. Limitations of space preclude a discussion of detail, but suffice it to say that the terminology begins to appear in the earliest Vedantic texts as *waking, dreaming and deep sleep*, from their detailed description clearly metaphors for internal states of being. The later *Taittiriya Upanishad*, probably the oldest extant example of the whole range of levels, deals with five levels which are largely the phenomenological aspects of the human body

is related to the emergence of such a change during the Common Era.

and psyche. A later text, the *Mandukya Upanishad* [19], offers a more metaphysical content of four levels, while the seven-fold system of the Tantrics (the *kundalini*) is clearly linked to the structure of the human nervous system and the interior experiences related to its whole range, from basic biological functions to the most expanded levels of consciousness (MacPhail, 2013, 173-176). Aurobindo Ghosh (1872-1950) offers a fivefold contemporary version that partakes of Western psychology (MacPhail, 2013, 31-38).

Despite these various nomenclatures, it is clear that all are talking about the same overall structure, using terminology that “evolves” over what could as long as several thousand years from the purely mythic through the biological and on to the psychological.

## 2.2 Relationship of Levels to Eventology

The Indian system presents perennial categories that guided Indian thought by laying out a “playing field” constructed on a vast compilation of interior, experiential events systematized in a definite sequence, confirmed in the moniker *fourth* in the *Mandukya Upanishad* in the early years of the Common Era and also *beyond the fourth* (i.e. *fifth*) in Tantra and contemporary times. Where they differ from Western *bra* events is in their very definite arrangement in numerical sequence as compared to the contemporary notion that our experiences are more or less random, confined to an individual and therefore “*bra*-arranged” in personal “files”. In arriving in India at the quite definite, reliable, and universally accepted map of human consciousness so radically different from that of the West, it was taken as normal to undertake systematic self-transformational exercises that open up such perceptions and the reality that accompanies them, and the greatest kudos went to those who succeeded in attaining to the more “exalted” or universal inner states and how to express them in personal and public behavior.

## 2.3 Levels in Integral Vedanta

The first leg of my own study was to create exhaustive compilations of commentaries on the Upanishads from the work of Swami Vivekananda (1863-1902), an Indian monk whose life and work had a huge impact on both India and the West [1], [4]. The Vedantic tradition calls for any spiritual teacher of note to give out commentaries or fresh interpretations of the Upanishads. Although Vivekananda did not live long enough to do so formally and systematically, there was more than enough such material in his published works to support my compilations. I organized the materials into more or less rational “commentaries”, based on Vivekananda’s own assessments and also on basic Western logic and sense of cause and effect, an effort that took twelve years to complete. At the conclusion, the main impression I had was of four bi-cultural levels — nevertheless cognate with pre-existing “levels” — that Vivekananda constantly referred to throughout his presentations on the Upanishads:

*IV. Hololution.*

*III. Maya as an Attitude of Mind.*

*II. Yoga as a Science.*

*I. Spiritual Humanism.*

In addition, I confirmed from the data that, contrary to one line of authoritative, classical Vedantic thought, there was a fifth level (*turiyatita* or “beyond the fourth”) that I dubbed *V. Holism*, in which the guiding principle is that while it is easy to see the part in the whole, it is paramount to see the Whole in the part. This was clearly the logical conclusion of the line of thought, not only of himself, but of the Upanishads, and its thrust in phenomenology was:

Absolute fullness of self, full of consciousness and bliss. Found not only in samadhi, but in *each and every activity of the world* [10, Lakshman Jee, 1989, 83],

i.e. to interconnect the transcendental consciousness of Level IV with that of materialism on Level I — but clearly in a different way than mere materialism. In the Vivekananda materials it was quite clear that he was introduced by his spiritual teacher Ramakrishna to the fifth level as an entity on its own, known as *vijnana*, a better knowledge [23, Sharma, 1989: 34, 42] which had emerged from a similar process of “epistemology” as had all of the other levels. This led not only to deeper understanding of the inner world, but also to an active and zealous involvement with all manner of things material, including

Western science, social restoration, education, art, psychology, philosophy and religion, all of which had been taboo to the foregoing “pure” non-dualists because they regarded them as “unreal”.

With regard to Vivekananda’s own concept of levels in his general teaching work he refers to what he terms *planes*, or occasionally worlds, without going into detail more than the familiar formulation: *matter-mind-spirit* [26]. In all cases his stress is on how each successive plane expands and deepens human consciousness over the previous ones and, in particular on the need to transcend all of these and find what lies behind and controls them. This is the traditional goal of Vedanta, as formulated in Level IV/State 4; and is the necessary basis for the experience and understanding of Level V.

## 2.4 The Cultural Dynamics behind Levels in Integral Vedanta

Vivekananda’s presentation was a product of the British Indian Education Bill of 1836 that decreed that higher learning in India was not to teach the traditional Indian subjects in their native languages, but to present the whole image of Western modernity in English. Vivekananda emerged with a total command of the English language, Comtean positivism, Western philosophy, including Darwin’s theory of evolution, and all else pertaining to the Western mindset, including a radical disapproval of the social conditions created by the Indian caste system, for which he blamed Hinduism and its traditions. In addition, he suffered from a kind of cultural schizophrenia similar to what he describes in his Indian classmates, over the conflict between his native Indian-ness and the elaborate “Western” persona that was driving him. In 1881 he met Ramakrishna (1836-1886), who was totally his opposite. He was a humble “country boy”, who had refused to go to any kind of school and was therefore totally self-taught and steeped in the shamanism that permeated Indian religion at the time. Nevertheless he had managed to work through the primary purpose of the Indian system and had arrived at a further (fifth) stage and its workings, which he was finding more and more impossible to convey to others, embedded as they were in either their orthodox Hindu ways or in the superimposed personae of materialistic Westernism.

Faced with Vivekananda’s intense distress, Ramakrishna was able to get access to the young man’s inner being through his shamanistic approach and to engage with him deeply. Over a period of five years from 1881 up to and including 1886, when Ramakrishna passed away, the two men engaged in what I perceive as a replication of the whole process of development as described in the Indian sources. Vivekananda emerged as a spiritual teacher of great power and persuasion, still deeply committed to Western humanism, democracy, science and human rights, but now completely tuned into the meaning and gist of the Indian spiritual tradition. He demonstrated an ability to speak with equal persuasion and transformative power as well as entrepreneurial action in both India and the West, a rare ability which he had totally mastered (MacPhail, 2013: 4-215). These unique abilities most likely informed and created the five categories or levels of what I discerned as the swami’s agenda in both his Indian and Western work. Not surprisingly, each of these levels presents as more or less an oxymoron, i.e. joining together two elements that are commonly held to be opposites or not compatible. But, as I shall discuss, they can be correlated with the traditional levels of Vedanta in the same manner that the nomenclature of the pre-existing systems had themselves evolved over at least three thousand years (See page 56).

Level I: *Spiritual Humanism* in particular strikes the note of oxymoron. But on examination its meaning lies in Vivekananda’s fervent commitment to the physical human individual, not a feature of traditional Vedanta, which emphasized caste duties and conventions rather than any notion of valid individuality or of universal rights. In this regard we may see him as relating to the first traditional level, the “waking” state: that of the physical human individual who perceives and works through the physical world, including all of Western science; and certainly to *vaishwanara*, the “everyman” of the *Mandukya Upanishad*, verse 3. However, the supreme value he puts on any human being from any position on the globe is his or her engagement with the innate human ability to engage with, work through, and make their own his or her own position on the spectrum of levels from the purely material to the transcendental.

This first level presents a radical integration of Western humanism and Indian spirituality, which Vivekananda strove to establish in both India and the West through an emphasis, in the West, on the development of spiritual self-transformation, and in India in the grasp and embrace of humanism, as well as the foundation of centers of learning and teaching including Western science, and human services to all without exception and based on respect for their human dignity and capabilities. I present and illustrate this in *Spiritual Humanism — a Model That Works* [12].

Level II: *Yoga as a Science* refers to the Indian systems of self-discipline and transformation which sought a yoking together (*yoga*) of the awareness of matter and spirit, or inner and outer. It calls for a “move” from the purely material “objective” world to the inner world of the subject (“dream”), which begins to show the physical world less as a “given” and more as a substratum for self-expression, creativity, and love, which can perhaps be correlated with the *taijasa* or brilliance of verse 4 of the *Mandukya Upanishad*. In the Indian systems, this move is not left to chance, but is approached through a prescribed series of steps which are to be followed in the “mode” of yoga one is engaged in. Himself aware of the methodology of Western science, and also of yoga, which he pursued to its conclusion under the direction of Ramakrishna, Vivekananda points in the yoga system to the clarity of the underlying paradigm, the precision of the instruments involved in each yoga and the necessity of engaging them strictly in accordance with protocol, as well as translucent truthfulness in the ensuing perceptions and conclusions drawn; and finally, the need for testing and trying the results in collaboration with qualified co-practitioners. This — the basic protocol of research in the physical world — is the basis of Vivekananda’s repeated assertions that yoga can indeed be regarded as a science. The difference between yoga, which focuses on the subjective, and Western science is that the West has opted to confine science entirely within the objective world, even going so far as to reject the possibility of any other methodology or even of any other “world”. As would be expected, Vivekananda oriented his Western teachings toward the practice of traditional yoga and his Indian teachings to the issue of how to reach concrete forms that embody what is experienced in yoga.

Level III: *Maya as an Attitude of Mind* begins to enter the realms of the arcane in most Western minds. But its goal is basically to get past *maya*, an obstacle that besets all of us no matter what our *modus operandi*: namely the difficulty in achieving goals despite all of our best efforts. In yoga especially the effort to interconnect objective and subjective brings out in high colors this inbuilt obstacle. Prior names for this level — “deep sleep” (which is a state of obscuration) and in the *Mandukya*, verse 5 *Prajna*, or knowledge that goes beyond — give an indication of its content and a pointer to how it directs us to knowledge other than that in “waking” or “dream”.

Vedanta offers many explanations for this phenomenon, to which we might add the notion of *entropy* of our Western savants. Vivekananda took the position that we have to learn that our minds, no matter how well-developed conceptually, are prone to entanglement with this entity. His nostrum is to develop our minds in a totally different mode that opens out to what he calls the Atman, the powerful inner Self of humanity, which underlies and at the same time connects our conceptual thinking with our deepest experiential life and thereby achieves a dynamic equilibrium between outer and inner that cannot be disturbed by any challenge whatsoever. And in this particular system, still continuing with the conviction of the validity of spiritual humanism and yoga, this can be done by the individual within his or her psyche when a sufficiently advanced stage of yoga has been reached. In Vivekananda’s presentation of this line of thought he emphasized in the West a verbal articulation of the problem and the challenge to strive for the experience of the Atman, which he saw as innate in the human soul, tremendously powerful, but also deeply loving and engaged — when directed “upwards” from the world of any conflict with matter. In India, saturated with the notion of *maya* and more or less paralyzed by its metaphysics, he dwelt on ways and means to direct the power of the Atman “downward” to responsible and effective action in the imaginal world and also in physical work. He seemed to feel that this infusion of spiritual power would blow away the cobwebs and rejuvenate a culture mired in entropy.

Level IV: *Hololution*, is based on Vivekananda’s own experiences as well as on his understanding of Western evolution that works from pure matter to the highest embodied forms and also the traditional spiritual models where the locus of origin is in the totally non-material that “involves” into various forms and ultimately matter. He maintained that involution presents a logically necessary complement to evolution, which has no explanation of where anything came from or where it ultimately goes. This may seem very fanciful, but the fact is that all of the spiritual traditions of the world work from an involutionary standpoint, indicating that there is a necessity in the human psyche for such thinking if a balanced picture is to be seen.

This position presupposes that the psyche working with it has reached a position of a pure witness (*turiya* or fourth in *Mandukya* verse 7 [24]), with no need to invest in anything particularized or limited and therefore with the ability to work dynamically “up” or “down” the whole system. Aurobindo gave it the name *intuition* (MacPhail, 2013, 32-35). As I discuss in *Ibid.*, 479, traditional Vedanta dwells largely on the totally detached witness state, but later traditions and also Vivekananda himself speak of the ability it confers to move freely along either direction and to interrelate the phenomena experienced on either

side with each other. This might be thought of “double-stranded” evolution, which liberates the human mind from the narrowly conceived categories of both evolution and involution.

Level V: *Holism* was introduced to Vivekananda by Ramakrishna under the imagery of *vijnana*, or a greater, more encompassing knowledge than even that of the fourth. *Vijnana* is a state where one sees supreme validity, creativity, value and importance to every single entity, event, or level whatsoever. Here the mind no longer separates things from each other, even in an evolutionary manner. The claim is that one can experience true meaning and value in everything and is at the same time able to sort out exactly the correct response to each and how to relate them to each other in any given situation.

### 3 States of Consciousness

The gamut of states in Integral Vedanta are transient, experiential events that occur on the background of what I describe as levels, and could be thought of as *ket* events. In the Indian tradition, and indeed in all developed spiritual systems, self-transformational exercises are employed in order to access consciously such states in the sequence corresponding experientially to that of the levels. In addition, such states can be “captured” and held for as long as required in order to accomplish a specific goal. This seems to have been the case in Ramakrishna’s training of Vivekananda, where the young man seems to have remained in the state corresponding to the level he was to “access” for as long as it took him to grasp it fully, i.e. in a samadhi event, which I shall discuss shortly. Thereafter he would “shift” to the “next” state. This developed systematism and cogency seems to be the key to the production of such complete and coherent matrices from the database that I worked with.

States are seen as complementary to levels, part of the same system, but with a different “mode of being” (*experience* versus *concept*, *content* versus *context*) which can give rise to difficulties, especially when one is prioritized over the other. In the Indian tradition, the nomenclature of states does not seem to change; the ancient terms of *waking*, *dream*, *deep sleep* are used even today. Unlike levels, their nature is not so easily pinned down in verbal forms; their impact is more on what actually happens (phenomenology) than on extensive descriptions and explanations.

For the most part the (experiential) Indian literature conceives primarily of states, while the heavily conceptual Western paradigm focuses on conceptual conventions. Recent Western literature on these entities resembling states includes Henri Bergson’s *Creative Evolution* (1907), where he contrasts the *élan vital* [*ket*] with the logical constructs of Western academia [*bra*]; A. N. Whitehead’s *Process and Reality* (1927-28), in which *process* seems to represent changing states, and *reality* the verbal forms and conceptual constructs that to a greater degree go their separate ways. Charles Tart, a parapsychologist, has advocated for *Altered States of Consciousness* and their importance since 1969, but without arranging them in the kind of sequence of the Vedantic tradition. Nicholas Maxwell, a physicist and historian of science has been pleading since 1976 and notably in [17, 2010], for the Western academy to factor in Aim-Oriented Empiricism or “soul” (which could be equated with *ket* events) into what he calls *Knowledge-inquiry* in order to leaven the strangulating lump of scientific [*bra*] conceptualism. Amit Goswami [8, 1994], a quantum physicist, also brought out this issue in his discussion of classical, reductionist conceptual theory of the function of the brain, playing the role of stultifier versus the quantum brain, the aspect of mental function that leaves the open spaces and possibilities of choice that seem to correspond to the experiential aspect of mind.

Taking up the issue in historical mode, Iain McGilchrist, [18, 2009], after a discussion of contemporary methods of neuroscience including neuro-imaging, discusses the “left” (conceptual) and “right” (experiential) modes of functioning in the brain and draws a picture of Western history that purports to show that the West has permitted the narrow, dogmatic focus of the left brain to take over and almost destroy the open, imaginative, and multi-layered function of the right. In a recent volume about Aurobindo’s work overall [2, Banerjii, 2012], it can readily be discerned that Aurobindo works with states as well as levels, though these are not formally mentioned or explained. However, it is evident that Aurobindo is able to balance these and arrive at integrations of them similar to those in the Vivekananda matrices [15, MacPhail, 2015b]. Finally, Thompson (loc. cit.) presents a Westernized version of the content (*ket* events) of the traditional Indian array of levels and how Western science (the “left brain villain” of most of these works) is unable to replicate the beneficial effects of Indian practices of self-transformation, which relate to voluntary state-change, or to demonstrate neuroscientific data that can characterize states satisfactorily.

### 3.1 States within States in the Indian Traditions: Proto-matrices

Indian tradition has characteristically been averse to much conceptualization — such as is involved in creating levels — which has been considered inimical to the development of appropriate *ket* events per se, especially the more advanced or integral states, 3-5. Nevertheless, beginning in the eighth century CE, we find a theoretical proposal of “states” within “states” [specifically, I.1, I.2, I.3 in my nomenclature], emanating from the highly authoritative Shankaracharya, using the traditional terms of *waking*, *dream*, *deep sleep* for what had originally been phenomenological aspects of the different *ket* states (Fort, 1990, 39). This was followed with a more detailed investigation by his disciple Sureshwaracharya, who carried the apparently theoretical investigation into more domains (Ibid., 68, fn 1). By postulating “states within states”, these eminent authorities in effect were suggesting simple proto-matrices, but without distinguishing between *bra* and *ket* events or providing any physical, phenomenological support.

Limitations of space preclude presenting the work of these early pioneers in any detail, but by the time of Kashmir Shaivism (850-end of first millennium CE), a more down-to-earth Tantric approach based on empirical experience was brought to bear on this issue. We find in Lakshman Jee (1998: 72-83, 84) data that present, without mathematical formalism, a 4x4 matrix of what are still being called states within states. However, the interpretation by Abhinavagupta (950-1016 CE), one of the leading thinkers in this school, of what each defining state/“level” means in terms of balancing inner and outer experience functionally suggests *bra* levels rather than *ket* states. What is probably of most value to this audience is that here we get more humanist, phenomenological, “psychological” types of content, which I went ahead and organized into a formal 4x4 matrix (Table 1).

I placed the “*bra*” events as defined in the vertical axis in Roman numerals and with *Waking* at the bottom. As can be seen, the clarity of objectivity at the waking state (materialism) becomes attenuated as we move up the first column, until it disappears at Level III and by Level IV we arrive at observation, not through human perception, but by super-perception by “some observing agency”, as Abhinava laconically puts it. For deists, such an agency could be termed *God*, but in this tradition the emphasis is on what the human individual him- or herself experiences, and the super-perceiver is considered to be an innate possibility within the human psyche, to be accessed through the rigorous disciplines advocated by the Indian schools.

The overall dynamic here is the focus on moving from identification with the outer world (“objectivity”) to direct experience of the depths of the inner world (subjectivity, fully expressed only in IV and 4). This dynamic holds good in both the vertical (I-IV) and horizontal axes (indicated in Arabic numerals 1-4) and is indicated by the aforementioned data within the cells. Because there is a more accessible “content” to this matrix than in those cited previously, it is possible to ascertain just how the *bra*-level defines the *context* of each row: *Waking* is definitely the theme of Row I, along with its firm grip on objectivity of the material world. But as each spontaneous *ket* event “enters” this context “horizontally” or in a specified moment of time, the scope or depth possibilities and *content* of waking itself appear in succession, culminating (I.4) in the remarkable condition of being poised in pure subjectivity (Self-consciousness) and yet able to move about [and presumably be able to function in] the physical world. The same is true of the *ket* events (exegesis) along all of the rows of levels. In these materials, this is the basic dynamic of the matrix: a continuous, horizontal modification of context of the level in a manner that expands content and meaning and in the vertical axis seamlessly interrelates all items on the matrices.

Noteworthy is the fact that when the “numerical” stage of *bra* and *ket* in any cell up to the third, are a “match”, i.e. I.1, II.2, III.3, the resulting content is the most typical and full expression of both the context (*bra*, level) and content (*ket*/state). This might be considered a presaging of *samadhi*, to be discussed below. The second observation on this matrix is that IV.4, where we would expect a major exemplification of the Level/state conjunction, we meet another Sanskrit word: *turiyatita*, which means *beyond the fourth*. This seems to imply a fifth, but without demonstrating it in any way. The “fifth” appears later in the matrices I present, full-fledged and arising from the fourth, in keeping with the construction of the vertical axis of levels.

For now I present in Figure 1 two graphics constructed from this data, which may aid readers unfamiliar with the materials to visualize the overall dynamic.

The convention I use here is that I/1 are colored red, II/2 orange, III/3 yellow, and IV/4 green, the natural progression of color in the artists’ spectrum, based ultimately on the wavelengths of white light. In both images it is assumed that the *bra* level holds good across the matrices. In what we might think of as the

Table 1: **Formal Matriceal Presentation of the Data in Kashmir Shaivism by Lakshman Jee**

	1. Waking State	2. Dream State	3. Deep Sleep State	4. The Fourth State
<b>IV. The Fourth (Turiya)</b> p.85; Abhinavagupta: <i>Super-observation by some observing agency</i>	The subjective consciousness of turiya is without object and one is residing in one's own nature. All energies are simultaneous and without manifestation or distinction, and at the same time getting their power to function in that state without causing any agitation, p.81.  <i>Wakefulness in the fourth state</i> Beyond the span of mind, which takes rise in mindlessness, complete thoughtlessness. Consciousness of turiya is not vividly manifested, p.82	<i>Dreaming in the fourth state</i> Unlimitedness of the Self: no limitation of Being. The consciousness of turiya is more vividly manifested, p.82	<i>Deep sleep in the fourth state</i> Although unlimited, one finds existing all of the limitations of the universe p.83 The consciousness of turiya is most vivid p.82	<i>The fourth state in the fourth state</i> Turiyatita: absolute fullness of self, full of consciousness and bliss. Found not only in samadhi, but in each and every activity of the world p.85: Abhinava: <i>When objectivity is individually dead and found full of life in totality</i>
<b>III. Deep Sleep</b> p.85 Abhinavagupta: <i>Vividness of objectivity is gone completely</i>	<i>Wakefulness in the state of deep sleep</i> Unconscious subjectivity: Loss of all impressions and thoughts and remaining in an absolute Void with no knowledge, awareness, nor joy, pp.76-77	<i>Dreaming in the state of deep sleep</i> Some cognition of subjectivity emerges and begins to develop while in deep sleep, but is intermittent, pp.77-78	<i>Deep sleep in the state of deep sleep</i> The idea of subjective consciousness remains throughout and is accompanied by peacefulness, p.78	<i>The fourth state in the state of deep sleep</i> Traveling in the world of subjective consciousness, and experiencing the bliss of this state. One enters into samadhi and yet consciousness still remains in the background: one is full of bliss but not fully aware of that bliss, p.78
<b>II. Dream</b> p.85 Abhinavagupta: <i>Vividness of objectivity is shaky and unstable</i>	<i>Wakefulness in the state of dreaming</i> Alternating in waves of subjectivity and objectivity: seeing a pen or a knife as interchangeable without asking why. Everything seems normal to one, pp.74-75	<i>Dreaming in the state of dreaming</i> Individual subjective body travels only in the world of impressions without the least connection of one to the other. You travel here and there and yet you do not know anything, p.75	<i>Deep sleep in the state of dreaming</i> While traveling in the world of impressions and thoughts one develops some awareness of subjectivity and realize one is dreaming, but this consciousness comes and goes, p.76	<i>The fourth state in the state of dreaming</i> Becoming aware when observing an object of impressions that one is not awake. The world of impressions is rejected temporarily and one enters into samadhi, but only temporarily. One oscillates between samadhi and awareness of dream, p.76
<b>I. Waking</b> p.85 Abhinavagupta: <i>Vividness of objectivity</i>	<i>Wakefulness in the world of wakefulness</i> Loss of subjectivity and state of complete objectivity. Total self-identification with external objects, p.73	<i>Dreaming in the state of wakefulness</i> Imposing subjective impressions on objective perceptions: "Day-dreaming", pp.73-74	<i>Deep sleep in the state of wakefulness</i> One does not experience either the objective world nor the world of subjective impressions, p.74	<i>The fourth state in the state of wakefulness</i> After losing consciousness of both external and internal objectivity, one becomes quite aware internally of the consciousness of the Self. One moves in the objective world and also resides in Self-consciousness, p.74

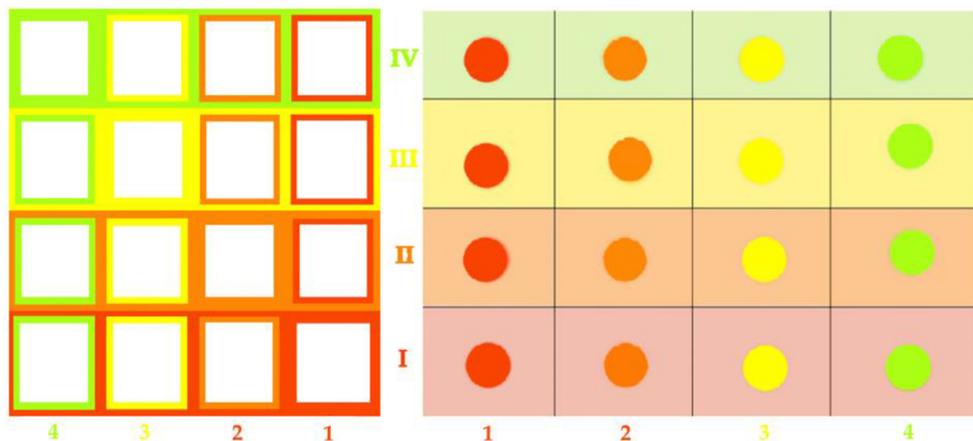


Figure 1: 4x4 matrix in generic format (left) and progression of states across levels (right).

conceptual presentation on the left-hand side: 4x4 Matrix in Generic Format the format is that the color of each level is presented as an outer line along each row, as it is within the level that the states are

considered to occur. Each cell within the row is lined with the color of the state that passes through it in a column. This is the format I used in my thesis. On the right: *Progression of States across Levels* we see what we might think of as the *experiential* mode of presentation: Levels are presented as atemporal horizontal fields in the progression red–orange–yellow–green. Superimposed on them are *ket* events occurring in time, represented as circles colored in the same manner and transecting the horizontal fields in columns.

#### 4 Samadhi: The Major Event of the Indian Matrices?

*Samadhi* is a Sanskrit term at the moment unfamiliar in the West. Arising in the process of concentration focused on self-transformation, its basic characteristic is, according to Vivekananda, that concentration is only on *meaning*, “unexpressed in any form” (Vivekananda, 1896, verses 1-3, 188). This seems to amount to a radical separation between *bra* (expression in forms) and *ket* (immediate meaning), permitting the subject to rise above the habitual entanglement of the two. It seems evident that such an event is not only humanly remarkable, but also a good candidate in Eventology for an event of major significance. Phenomenologically, what is striking in the classical Indian description of *samadhi* (Ibid., Chapter 3) is that after *samadhi* the subject acquires what the West calls paranormal mental ability and in India are called *powers*. In that condition, the subject is no longer subject to cause and effect, at least within the level within which *samadhi* has occurred, and is able to think, do and be according to his or her own highly original and creative determination. I would venture to suggest that these events are comparable to the celebrated *aha moment* in the lives of several distinguished scientists or the peak experiences described by Maslow, [16, 1993]. Though there are some works relating to this aspect of the subject it is not placed in a systematic aspect of the overall picture. As an Indian, Aurobindo talks at some length about *samadhi*, but not factoring in where it occurs in his “matriceal system” (Banerji, loc. cit.). From the Western side, Harald Walach and his colleagues, [28, 2009] focus on paranormal psychological events, which they attribute to non-local events in the brain, but without going into the ins and outs of an underlying psychological structure (Ibid., 299). I have presented in a brief form how it might be possible to combine the insights about non-locality of the German group with the phenomenology of *samadhi* given by Patanjali [13, MacPhail, 2015c].

#### 5 *Learning in Depth: Building Matrices on the Integral Vedanta Spectrum of “Bra” Levels*

##### 5.1 The Occurrence of Stages of Understanding in Vivekananda’s Biography

The discovery of five levels of highly original context in Vivekananda’s work raised big questions in my mind: how did Vivekananda, at the beginning a rabid positivist, a supporter of Darwinian evolution, etc., etc., arrive at all of this highly unusual and counterintuitive material? The answer was not far to seek: clearly it must have come from his interaction with Ramakrishna, an unlettered shaman, for all practical purposes, but one steeped in the actual experiences, not only of all of the various branches of Hinduism and Buddhism, but also of Christianity and Islam, and able to transmit them to his student.

Another issue here is that for Westerners, the actual database of this historical process is extremely difficult to follow, as it is very long and couched, from Ramakrishna’s side, in the language of Indian spiritual practice and experience as well as philosophical categories of explanation. However, in order to make it more acceptable to Westerners, in the thesis I do supply, along with every entry, how Vivekananda himself later articulated — largely in English, of which he was a master — the meaning of the same stages in his own later teaching in both India and the West. The validity of this database, on which these matrices are based as well as my analysis of it, is also vouched for by the reception of my articles published in India: “How Sri Ramakrishna Taught Vedanta to Swami Vivekananda” from [6, 1995-1998]. Several Indian scholars, such as Professor Rabindra Kumar Dasgupta, warmly received it:

I have not read anything on the subject which is as profound and illuminating as your work. I have read [it] with great interest and a sense of personal profit and I look forward to being able to make use of your observations in my lectures at the Ramakrishna Institute of Culture, Kolkata, as its Vivekananda professor. (Personal communication, December 28, 1996).

This acceptance from the Indian side encouraged me to compare my data in detail with that of Lakshman Jee and, having verified the same line of thought in both, to bring forward in Table 1 his simpler matrices here in order to introduce to my present readers the whole notion of “qualitative matrices” without distorting the model or getting bogged down in the intercultural struggle involved in sorting through the Ramakrishna materials.

Returning to the actual dynamics of the matrices, my first goal was to ascertain the evidence for Vivekananda’s process of digesting and integrating all that was involved in his radical transformation. It seemed that it must involve a series of *ket* experiences within the structure of the spectrum of levels; but because it is more difficult to ascertain the phenomenology of a gamut of state experiences than it is to lay out a conceptual spectrum of levels, I had to utilize a number of indirect methods, which I review here.

Baseline information on the subject is that in the materials I work with we find that Ramakrishna, who was not a didactic teacher, refers to the classical system of spiritual (state) development only indirectly in his singing Tantra-based songs that refer to the kundalini (Gupta, *The Gospel of Sri Ramakrishna*) [9, 2000]. Vivekananda, in his presentation in New York of the traditional Patanjali’s *Yoga Sutras*, (loc. cit.) perforce, in following the text, discusses each stage of development in experiential (*ket*) terms and its meaning and impact on human life, but as with Ramakrishna, using the terminology of the kundalini. But neither overtly relate state experiences — at least, systematically as a complete gamut related to levels — to their own life experience. The construction of matrices was for me largely a matter of filling in a whole series of “dots” between the five known levels and my familiarity with the literature on states and how they are developed. At the time of constructing the matrices I had no access to any literature on the subject, and simply followed the data where it seemed to be taking me. The literature I present in this paper is what I studied after I had created the matrices. But in researching the data I relied on two major primary sources, first *Sri Ramakrishna, the Great Master* [22], by Swami Saradananda. Saradananda was one of Ramakrishna’s trainees, a close friend and confidant of Vivekananda, as thoroughly educated in Western mode as Vivekananda himself, an authority on Tantra and latterly on Vedanta, much admired and appreciated by all whom he met in New York and Boston between 1896-1898, including William James, Josiah Royce, Arthur Lovejoy and other distinguished Harvard luminaries, who described his work and teachings, as well as Vivekananda’s, as having:

more than a speculative interest and utility — they are of great ethical value in cementing the ties of friendship and brotherhood between distant peoples, and in helping us to realize that solidarity of human relationships and interests which has been affirmed by all the great religions of the world [3, Basu, 1969, 176-177].

The first edition of Saradananda’s book (1952) is a motherlode of data and accompanying explanation that throws floods of light on the stages of Vivekananda’s training by Ramakrishna. One of this venerable swami’s remarks at the beginning of his history of the events, is that Ramakrishna taught Vivekananda in five stages (Saradananda, 1952, 751-752). *The Great Master*, in keeping with Western norms of historicity, gives actual periods of the various stages, and when it is not crystal clear precisely when they were happening, it is possible to find evidence or very strong clues as to when in the *Gospel*. Like Saradananda, the author of the *Gospel* Mahendranath Gupta had been brought up in Western “mode” and had undertaken to almost stenographically take down the interchanges Ramakrishna had with the large crowds of people who visited him. The author also noted the date of the exchanges, as well as a list of all who were present, which made it possible to find when Vivekananda was present and what he had heard. This information, combined with the massive process described by Saradananda, made it possible to pinpoint with a fair degree of accuracy the occurrence of the five events in the overall timeframe and what had happened before, during and after them. What remained to be discovered was the “operating system” that brought the whole mass of data into a coherent pattern, which I at least ascertained was matriceal.

## 5.2 Exposure to the Complete Range of Levels at All Times

My first reaction on reading these texts in tandem was the validation of my own perception of the five-fold nature of Vivekananda’s thought (the “*bra*” element of levels). I assumed that Saradananda’s “stages” related to these important elements of the interchange between Ramakrishna and Vivekananda. However, a close study of the *Gospel* revealed that Ramakrishna, rather than taking Vivekananda

“stepwise” through one level after another, invariably presented them *as a group* at every stage of the process. His strategy to move Vivekananda forward was not taking up levels in sequence in didactic presentation, but through remarks relating to Hindu and other norms and traditions relevant to states and their experience. He did this in a pattern that followed the traditional sequence of states, introducing each one in turn until Vivekananda had accessed the meaning and actual experience of the state and related it fully to the complete spectrum of levels. At that point, Ramakrishna would drop that “state” and would move on to the introduction in the same mode of the “next” state in the sequence. These were highly illuminating and made a big impression on Vivekananda’s mind, as in his own teaching he seems to advert to all of them as, a decade later and in English, he takes his own students, Indian and Western, through a similar process.

This constant introduction of the full array of levels also factors in the entire range of *bra* experience across the matrices, creating “fields” of context (Figure 1: *Progression of States*). It seems likely that this unusual approach has a lot to do with how such complete matrices could be generated in the amazingly short time of five years. The corollary is, of course, that Vivekananda had a super-normal ability to handle the intense counterintuitivity of being challenged by all five levels simultaneously, especially at the beginning, when his reductionistic mentality was rabidly against any such structures, as also the methodology to move between them.

### 5.3 The Evidence for Two Forms of Matrices

The other phenomenon I noticed in Ramakrishna’s training of Vivekananda was that at every step of the way he introduced whatever he had to communicate in two complementary ways: as a *Conceptual idea*, instruction, command or story, and as a *phenomenological fact* closer to actual experience. As this was true all the way across the database I decided that not one, but two matrices were in process of development: one conceptual, which I placed on the left, and the other experiential, placed on the right. As before, everything that passed between Ramakrishna and Vivekananda found later expression in a teaching of Vivekananda in the same two modes of presentation. What particularly struck me was that Vivekananda expressed the matrices in the West in “phenomenological mode” and the “conceptual” in India. In both places this created quite a lot of backlash, but if viewed impersonally, this phenomenon could be seen as Vivekananda responding to the conceptual overload of the Western psyche, as documented as “left brain function” in McGilchrist, loc. cit., and to the excessive experientialism of India that to this day stoutly resists any attempts to systematize or explain anything (personal experience). I present this phenomenon as a pointer toward the fact that the *bra* material is susceptible, not only to familiar verbalization and conceptualization but also to another element in Ramakrishna’s presentation that partook more of a shamanic energy that expressed itself more phenomenologically. I regard this fact as an indirect indication of the *ket* events Vivekananda was going through at the time, but by definition not susceptible to direct verbal expression.

Figure 2 demonstrates how I resolved the issue of depicting twin matrices, one related to verbal, “conceptual” prompts from Ramakrishna which Vivekananda later shaped up in more contemporary language into a new form of Vedanta, and the other to a phenomenology of what Vivekananda first heard about and then experienced in response to the prompts from Ramakrishna and was later to invoke in his own students during his own period of teaching from 1892 to 1902 (MacPhail, 2013, 887-989).

Equating “conceptual” with dualism/materialism represented by the color red, I opted to indicate the conceptual *bra* materials with a red tone to the color spectrum, as seen in Figure 2, both in the Roman numerals of the levels and in the outer color of each row. Following the same line of reasoning, the phenomenological “experiential” matrix colors take a blue coloring, as seen again in the Roman numerals and outside colors of each row. I opted to color the proposed *ket* events with a yellow tone, which, according to the artists’ spectrum occur half way between red and blue. These colors are seen in the Arabic numerals and the inner color of each column of the matrices.

This “*bra-ket*” concept is not part of the old Indian matrices, possibly because they did indeed turn a blind eye to the conceptual mind and therefore saw states within states rather than states within levels. But when the conceptual mind gets a hold on data, dualism or nowadays complementarity is immediately evident. I propose that that is why Ramakrishna interacted as he did with Vivekananda in two “modes”, no doubt to heal the Western/Indian split in Vivekananda’s own psyche. It also seems to have enabled Vivekananda to speak to Indians and to Westerners in the mode most useful to them in their present circumstances. The figure S present in every row of Figure 2 indicates the most striking events of the

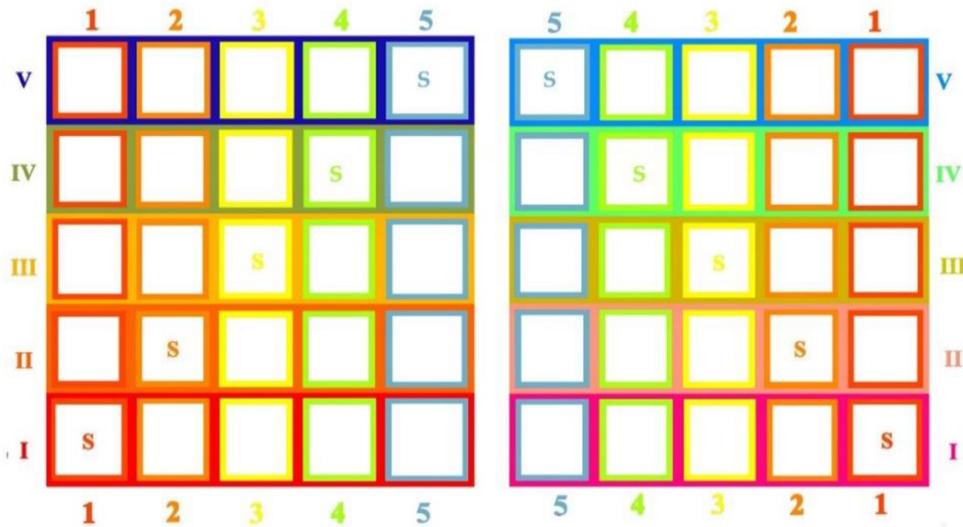


Figure 2: Conceptual (left) and experiential (right) matrices in learning in depth.

database: *samadhi*, which I shall now discuss.

#### 5.4 The Occurrence of Five Samadhis

As discussed previously (p.62), *samadhi* events arise when the subject succeeds through practice in totally separating experience from its verbal, conceptual counterpart in his or her psyche, revealing non-local phenomena relative to the level in which the event occurs. In the matrices, quantitatively it was crystal clear that these *samadhi* events took place when there was a match between the place in progression of both the *bra* and proposed *ket* events, i.e. I.1, II.2, III.3 IV.4, V.5, as indicated in Figure 2. As the state or *ket* experiences seem to play the crucial role in bringing about these open windows into the whole system I indicate the *S* event in yellow colors, the “state” colors. Not only was this finding about the generation of the *samadhis* supportive of *ket* events going on, but also in and of itself seems to be a new discovery, made possible by the utilization of these historical materials in matriceal mode.

In order to facilitate understanding of the changes appearing before and after the occurrence of *samadhi*, and therefore driven by state experiences, I present Figure 3, based on an extensive logical analysis of the data that showed that along each row in both matrices, there is a recognizable development of logic and coherence related to the *samadhi* event, though in a different pattern for each level. In the Figure, *P* stands for the situation where the context/content conjunction plays the role of offering a *preparatory* stage in the understanding of the context of the levels up to *samadhi* itself; *S* stands for *samadhi*; and *A* stands for material after the *samadhi* that demonstrates stages of *assimilation* of the level/context in progressive experiential states. This analysis is represented in Figure 3 by numerical and visual symbols. Cells where the level is of higher degree than the state experience (e.g. V.1-4; blue over red through green) are preparatory, related to doubt, entropy, and constriction in the student; Cells where the state experience is higher than the level (e.g. I.2-5 red over orange- blue) are assimilative, removing doubt and entropy and manifesting expansion of the level itself.

These findings tend to support the understanding that *samadhi* involves a shift from more conceptual to less conceptual perception and thought, what McGilchrist might call a shift from the left to the right brain function. By the fact that the post-*samadhi* materials demonstrate a step-by-step increase in integration and expansion of the context of the level, it would perhaps be more accurate to say that *samadhi* not only “releases” right brain function, but also promotes increasing integration with the left brain function, as represented by the level itself.

#### 5.5 Ramakrishna’s Use of Language and Topics in the Emergence of the Final Matrices

Historically, the whole interaction between Vivekananda and Ramakrishna began with a *samadhi* (I.1), brought on in Vivekananda by Ramakrishna’s shamanic influence after some conversations with Vivekananda. This was, in a way, Vivekananda’s entry into a whole realm of understanding that up till

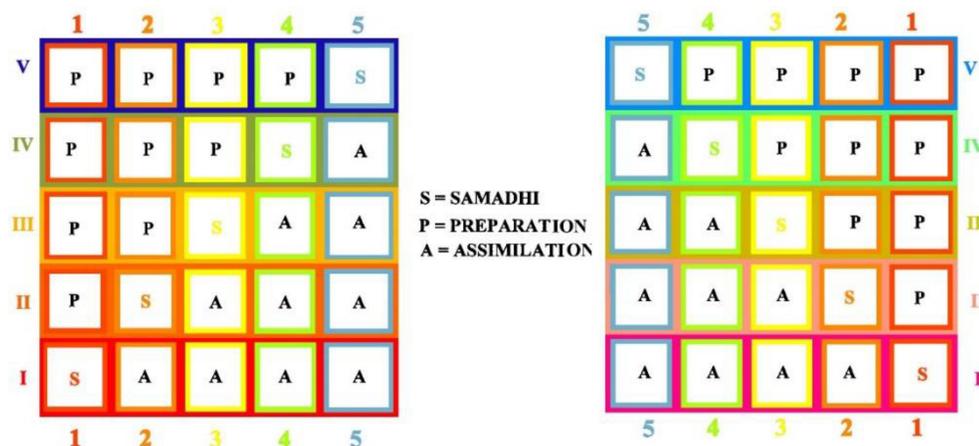


Figure 3: Process of preparation-samadhi-assimilation over the logical (left) and experiential (right) matrices.

then had been confined in his mind to the standard Western binary dialectic with the notion of the excluded middle that is characteristic of the “left”, conceptual mode of thought, not only in Level I, but also in the notion of levels themselves.

In this first *samadhi* Vivekananda was, therefore, inducted into the prospect of going “horizontally” through the first level (humanism) in the classical mode of Indian spirituality, which I have dubbed *exegesis* (p.60), i.e. along the horizontal *bra* direction: I.1, I.2, I.3, I.4, I.5. From the evidence I have just discussed, the *ket* events that provide such exegesis not only impinged on the first level, but on all of the others (i.e. vertically), which Ramakrishna was presenting simultaneously. The net result was that, on entering Level I Vivekananda entered all of the levels and perforce worked through all of them horizontally together as his state experiences unfolded one after another, though his recognition that such a process was going on was not necessarily very clear at many of the stages he passed through. If we look at the vertical dimension related to *Samadhi* at 1.1, we see State 1 conjoining with all of the levels, as just stated. At that moment, Vivekananda was in thoroughly materialistic, humanistic mode, related to the “waking” (physicalist) state. At that point Ramakrishna’s language took on a humanistic “color” to introduce his student, not only to humanism itself on Level I, but also to the whole array of unfamiliar *bra* levels in its entirety, i.e. Levels II through V, though such language would not usually be applicable to such levels in ordinary converse. One infers that the purpose of speaking in this mode was to respond to Vivekananda’s then “*ket*” state and also to awaken in Vivekananda’s mind, through the use of first state language with which he was most familiar, some kind of awareness of the other levels, though most of them were at the time would not have been accessible or acceptable to his valiantly materialistic stance. After the first *samadhi*, which “opened up” the exploration of meaning in the first level through the experience of the gamut of states, we find Ramakrishna inducting the previously rebellious Vivekananda into the Level II practice of self-transformation and his use of language changing to that more associated with “dream”, creativity, and self-transformation, i.e. compatible with State 2. This change “opens out” humanism at I.2 to a more interior dimension that under normal circumstances would be incompatible with Level I; but instead what we find is that Vivekananda not only accepts it but also uses this “combination” to expand the meaning of humanism by introducing the element of yoga or self-transformation into it. This is the first example of assimilation, as shown in Figure 3. At the same time Ramakrishna is also languaging Levels II through V in State 2 language, with the result that the conjunction in Cell II.2 produces the second *Samadhi*, building on the “preparation” in II.1. Levels III-V show more or less inability to digest second state experience, but the content of the cells in their interior progression is certainly expanded, preparing the level for the final *samadhi*, as in Figure 3.

These are the first few steps of a process that repeats over the entire matrices: A *samadhi* enables Vivekananda to “digest” rationally/horizontally within the level state-experience “beyond” the immediate locus of the *Samadhi*. On the vertical axis, the articulation of the array of levels from the standpoint of each succeeding state experience leads to a *Samadhi* unique to that particular Level *N*/state *n* conjunction, which then opens up the remainder of the level *N* to “expansion” with succeeding states within that level. Level/state combinations prior to *Samadhi* show that the context of the level is gradually being opened up in “preparation” format. The evidence that Ramakrishna’s mode of language was key to these radical transformations is supported by the fact that especially before *Samadhis* 3-5, Ramakrishna

not only used the “state” mode of speech that corresponds to the level, but also introduced actual topics, such as maya, that had direct bearing on what Vivekananda was struggling to make his own. And, after the *Samadhi*, Ramakrishna would drop the topic, strongly suggesting that he was indeed guiding the process with the use of concepts and language.

To summarize this section on the evidence indicating substantive state experiences, I have mentioned the development of stages in Vivekananda’s training (pp.62-63); the presentation of the entire range of *bra* events simultaneously, which ultimately rests on a series of previous *samadhis* providing support for a settled, complex “*bra*” phenomenon (p.63); the formation of two possible matrices, which would require both *bra* and *ket* events for their creation (p.63-65); the phenomena related to the occurrence of *samadhis*, which by definition relate to the interrelationship of *bra* and *ket* events (pp.65-65); the modulations of preparation and assimilation over the matrices that are interpreted as due Ramakrishna’s use of “*ket*” languaging, which changed in tandem with the modulations related to each *samadhi* (pp.65-67). Further support for these arguments is found in my thesis (MacPhail, 2013, 887-989) in the study of Vivekananda’s own teaching work from 1892-1902, primarily in English in both India and the West, where he reproduces in his own language adapted to the circumstances he finds himself in, precisely a five-level ontology with the interior development paralleling the state dynamic in his “learning matrices”. I conclude that Vivekananda’s teaching of his own students in India and the West progressed in the same “matriceal” manner as his own learning pattern, although the “*samadhis*” that occurred in groups of less noetic persons than Vivekananda was the enactment of a major event, such as building a meeting place, publishing books, or other comparable initiatives, all of which have had enduring and recognizable consequences, as do *samadhis*.

## 6 Other Contemporary Matrices Based on the Indian Model

To my knowledge (after I had completed my own study) there are two other current presentations of the matriceal structure applied to the Indian system of transformation of consciousness. One is by Ken Wilber and Leslie Combs [30, 2006, 88-93], which came to my attention ten years after I had completed my study in 1996. This is a single 5x5 matrix (i.e. including *turiyatita*), which employs the standard state nomenclature on the horizontal axis but labels the vertical axis, also termed levels, in a variety of ways, including those propounded by Gebser, 1991. This matrix is put together from the results of conceptual thinking, not from a documented database such as my own. Over time the emphasis has been very heavily on the vertical conceptual axis. Subsequently, groups such as that of O’Fallon, are applying the contents of the cells, i.e. both level and state to “customized” psychotherapy, which appears to be working well [20].

The compilation of Aurobindo’s works on self-transformation by Banerji (2012) embraced the fifth state, *vijnana* or *turiyatita*, resulting in what is termed Integral Yoga<sup>2</sup>, i.e. integrating the world of the fourth with the previous three to produce a fifth level. However, the notion of matrices is not introduced, though the materials certainly lend themselves to it. Like Vivekananda, Aurobindo’s work has been validated in several fields of endeavor, gaining considerable prestige and following. The model presented by Aurobindo is based on his own experiences explicated in largely Indian mode, but not in a specific, unified framework of time and circumstance, as in the matrices I present. What stands out is that he presents two sides to all of his proposed “levels”, thus setting up the materials for twin matrices similar to those I discovered in my data. This feature is not present in any of the other matrices, either from India or the West. The unifying key to the whole presentation is his understanding of *vijnana*, *turiyatita*, or the fifth state, an understanding of which he ascribes to spiritual experiences with Vivekananda a number of years after Vivekananda’s death (MacPhail, 2013, 27-28).

The matrices I present in this article differ from both of these in being based on an inductive study of actual historical facts recorded in the life of Vivekananda and his interaction with his spiritual teacher, Ramakrishna over a period from 1881 to 1886. These occurred in a specified place (Kolkata, India), with the same two protagonists, and with the central purpose of transforming through a series of state-changes in Vivekananda’s worldview from that of a convinced materialist to that of a fully integral thinker. In short, unity of time, place and purpose, based on the millennial traditional view of Vedanta.

<sup>2</sup>This term was coined by Sen, Indra and Chaudhuri, Haridas in Banerji [21, 2008].

## 7 Summary and Conclusions

My discussion of the data, analysis and construction of twin matrices of consciousness in Integral Vedanta differs from previous and also contemporary ones in that: (“*bra*”) levels are more developed and are conceived of transculturally; how a recently developed conceptual approach may lie behind a fifth level/state of consciousness; two mirror- image forms of the matrices; a number of ways of assessing the occurrence of the traditional gamut of experiential state (“*ket*”) events moving through the spectrum of levels, and how the all-important samadhis occur at conjunctions of *bra* and *ket* elements of the same “rank” in their respective arrays. The humanistic emphasis in the materials coupled with rational approaches to traditional transcendental states makes this study potentially applicable to empirical materialist interpretation as well as to more access by secular “everyone” to traditional transcendental methods of approach. The introduction of systematic methods of expansion of consciousness akin to the Indian model could produce similar coherent matrices with potential to raise awareness of universal interconnectedness that could help to resolve many issues that the West is facing today. Perhaps what is required is the “choice” emphasized as a key feature in determining events in Vorobyev’s presentation. There its content is not specified, but this presentation is related to a millennial Indian choice to validate the interiors of things, enhanced in Integral Vedanta by the full acceptance of the reality of the material world.

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