# Some Realistic and Analytically Viable Applications of Vedic Wisdom in Modern Research Contexts

(An Overview of Contents of the Forthcoming Book on Vedic Psychoscience)

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#### **Abstract**

This paper focuses on down-to-earth applications of Vedic wisdom in various research fields rather than on its glorification aspect. The applications of this grand wisdom are demonstrated in various disciplines of knowledge. It is the same stitching thread of wisdom of *Srimad Bhagvad-Gita* (SMBG) that stitches these apparently different applications. The subject of psychophysics, propounded by psychologist G.T. Fechner about 160 years ago and presently considered as dead, is now investigated in its new incarnation. The patomic (philosophical atom-type) model of human Being so derived is shown to have far reaching consequences with regard to the clarity of this wisdom. With a view to understand human interactions and relations at the most fundamental level, this model is further employed to develop the subject of psychochemistry more on the lines of atomic and molecular chemistry. An explanation of the human tendency, namely "do less and accomplish more" is sought by way of formulating, the so-called 'the principle of minimum effort' in analogy with the 'principle of least action' in physics. Some possible and plausible modifications in the personality theory of Carl Jung are investigated in detail in the light of patomic model. Several realistic and viable modifications suggested in this theory, in fact, take it now towards perfection in the sense that one can now easily trace the 'spiritual content', if exists, in a personality.

# Full paper

Inspired by the wisdom content in the Verses 3.42 and 7.4 of *Srimad Bhagvad-Gītā* (SMBG), the author proposed (Kaushal, 1990;1994) a philosophical atom-like model (termed as 'patomic' model) for a functional human Being about thirty years ago. While the details of this model we postpone to Sect 2, it may be mentioned here that this model turns out to be a very viable tool not only in unveiling and bringing out the intricacies of Vedic science but also in presenting a framework in which the entire gamut of human behavior and experiences can be understood better (Kaushal 2011; 2015). Further applications of this model are investigated in this work by way of discussing and analyzing some realistic and analytically viable cases of practical life in the domain of psychoscience.

In the next section, we discuss the Vedic psychoscience as a bridge between the spiritual and behavioral sciences. In Sect 2, we briefly review the subject of psychophysics based on the working of the patomic model of human Being. In Sect 3, we briefly outline and list some more applications of this scheme of study in a computable and quantifiable spirit with reference to subjects like psychomechanics, psychochemistry, personality theory, etc.. Finally concluding remarks are made in Sect. 4.

# 1. Psychoscience As A Bridge Between yhe Spiritual and Behavioral Sciences

It may be mentioned that the Vedic literature is an ocean of wisdom and the author could pick only a few drops from this ocean because of his own limitations. This further limits the discussions in the book at various places. A flow chart showing the value and place value of psychoscience in the entire spectrum of Vedic wisdom is displayed in Fig.1. In accordance with the three-world concept (cf. Table 3.2 in the

book), the spiritual science while deals with the realization of Absolute Reality (world  $W_1$ ), the psychoscience, in fact, paves the way to achieve this state through the world  $W_2$ . The behavioral science (describing world  $W_3$ ), on the other hand, offers a practical ground for both spiritual science and psychoscience. As far as the feedback to spiritual science is concerned it constantly comes from both psychoscience and behavioral science, respectively in the form of subjective and objective realities, of course via a common thread of methodology as shown in this figure.

Whether it is the proliferation or the abstraction of knowledge, note that in either case the use of structural analogies (Kaushal, 2003) becomes an integral part of the study in general and that of the methodology in particular towards the development of a subject. The same, in fact, could not be avoided in the present case. The analogies of terms, concepts, phrases or the collection of phrases or of the phenomenon as a whole, are frequently borrowed from the hard disciplines like physics, chemistry and other mathematical sciences.

When different flowers are connected through a thread, then the resultant product is termed as 'garland' and it is used for different purposes and in a much wider perspective. It matters a lot as to how one connects the flowers or as to how strong the thread is? Similar is the case with the pieces of Vedic wisdom which are distributed among various Vedic scriptures by varieties of names and in different contexts, propounded sometimes by different seers. The common thread adopted in the present scheme of study, is the natural science along with its time-tested methodology—analytical, mathematical and otherwise. Keeping the ever increasing scientific progress in mind, it appears that the thread of the garland cannot be stronger than this and the garland so prepared is definitely going to be somewhat more durable.

In Fig.1 we display different paths to Absolute Reality along with the characteristic features associated with each. In fact, the three zones for human existences causal (C), micro  $(\mathcal{M})$  and gross (G) are respectively identified here as spiritual, psychic and behavioral zones and are also in accordance with 'Cidākās", 'Cittākās" and 'Bhutākās'' concepts of Vedic wisdom (Adi Sankaracarya, in 'Vivek Cudāmaṇi'). As shown in this flowchart, the applied aspect of psychoscience is in the behavioral domain and the behavior of an individual in fact takes place in the lap of both society and Nature. Note that the behavior of an individual residing in a society, gives birth to soft disciplines including religion or to the subjective science in the spirit of the 'externalization of the interior', amazing are the ways of working of Nature on the other hand. The study of the latter gives birth to objective science in the spirit of 'internalization of the exterior'. In recent times the knowledge in both these sciences is separately proliferating through their respective components. No doubt, such a proliferation of knowledge continues to give a feedback to update both spiritual science and psychoscience, but at the same time it also suggests their further evolution with time. While this enriches psyche towards attaining peace, it also contributes to spirituality in terms of joy. This process will go on till the spiritual domain becomes stable or sustainable in the limit to a state of what is called mok a or salvation.

## 2. Psychophysics and Patomic Model of a Functional Human Being

As early as 1860, Gustav Theodor Fechner of Leipzig introduced (Fechner, 1860) the subject of psychophysics which, according to him, is an exact science of functional relations or the relations of dependency between body and mind or more generally between physical and psychic worlds. Thus, in historical perspective, psychophysics is the branch of psychology that deals with the relations between physical stimuli and sensory response. Unfortunately, in the Western way of thinking, while the sensory

# **Spiritual Science: Absolute Reality**

(Domain of ' $Cid\bar{a}k\bar{a}s$ '', pure consciousness prevails leading to moks'a or salvation, pure realization process only; aimed at eternal joy, peace & pleasure)







## **Psychoscience**

(Domain of psyche or of 'Cittākās'', consciousness (or cenergy) dominates but space-time mediated experiences also prevail; meditation process; aimed at joy, peace & pleasure)

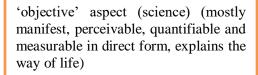


#### **Behavioral Science**

(Domain of interaction with external (physical) world or domain of '*Bhutākās*'', space-time dominated but with conscious experiences, perception process; aimed mainly at pleasure)



'subjective' aspect (Religion) (mostly unmanifest, perceivable, quantifiable but in a limited and indirect form, defines the way of life)





Both proliferation and abstraction of knowledge possible through three components  $J\tilde{n}\bar{a}na$  (J),  $Up\bar{a}san\bar{a}$  (U) and Karma (K), or knowledge methodology and practice, resp., exploration of 'subjective' reality in Nature



Both proliferation and abstraction of knowledge possible through three components  $J\tilde{n}\bar{a}na(J)$ ,  $Up\bar{a}san\bar{a}$  (U) and Karma (K), or knowledge, methodology and experiments, resp. exploration of 'objective' reality in Nature

**Fig. 1:** A flowchart explaining the philosophy of life and in some sense elaborating the theme of the present book. This Chart can be used as a guide in fixing the objectives in a scholarly mind.

world is well understood through the subject of physics (for example, the sense eye takes over the subject of optics, the sense ear takes over the subject of sound, the sense skin takes over the subject of heat through touch, etc.), the psychic or mental world is not explored to the same extent. As a result, the development of the subject matter of psychophysics somehow has not been kept in tune with other philosophies of the mental world or of mental processes and also with the progress made over the years in physical theories and brain sciences as well. While neuroscience has already started investigating the processes of learning, feeling and thinking in terms of neuron (carriers of sensation or nerve impulses in human body) dynamics, the Indian philosophy, on the other hand, does offer (Kaushal, 2011) an elegant framework to study and analyze the entire gamut of human experiences in the finest possible manner and in terms of the so-called essences of life (EOLs). In fact, the same stimulant of the physical world can leave different imprints on the minds of different persons depending upon the level of development of their individual faculties of understandings (FOUs). As a result, the role of FOUs of an individual in the perception process needs to be understood prior to relying on any conclusion drawn from the observations on the stimulant. In what follows we briefly discuss a well-studied framework of Vedic science for this purpose and highlight some undeniable facts about the human Being.

(a) Essences of Life (EOLs) And Their Arrangement: We all have biological body (B) consisting of inner and outer organs in it; we do have ten senses of knowledge and action (SE) (five senses of knowledge or of perception are eyes, ears, nose, tongue and skin, respectively sensitive to light, sound, smell, taste and touch and five senses of actions or motor organs are hands, feet, speech, anus and copulatory organ). They, in conjunction with the stimuli from the worldly objects (WO), constitute the set of outer EOLs. The other set of inner EOLs consists of mind (M), intellect (I) and ego (self-sense) (E) which respectively are responsible for defining the faculties of 'emotion', 'decision' and 'memory' inside the human Being. Notably they all are like inanimate objects but work and become functional only in the presence of another nonphysical element called 'consciousness' that originates from, what is termed as 'soul' (SO)— the innermost existence present in a Being and cannot be denied (since a dead body, in spite of having all these EOLs, cannot act and becomes functional in the absence of SO alone). A human Being (b) (also called as 'Jiva' or life principle) is a composite entity of all these inner and outer EOLs who, while having a strong base in SO, does work consistently in the field of WO.

With regard to the arrangement of these EOLs in a human Being (cf. Fig. 2), in tune with Verses 3.42 and 7.4 of SMBG, they follow an atom-like picture at the mental level. For this purpose, a patomic atom-type) model of human Being has been proposed (Kaushal,1990;1994;2011;2015) by the author in which the nucleus WO is in the center and the discrete (energy) states B, SE, M, I and E are placed around it in accordance with their increasing fineness and the strength of meditation. (Meditation is a process in which one uses the focused and/or directed consciousness or the so-called attention to peep into his own inner Self). Much beyond the state E it is all continuum of SO. Note that this gradation of various states, in which an electron-like object, Jiva or Being b can stay and accordingly perform upward and downward transitions, is based on the space of meditation (Kaushal, 2019) and not with respect to the physical space time. Further, while the upward transitions of b are rare, the downward transitions are natural and more frequent. Even on the meditation scale the increasing spacing between successive states, in fact, analogously corresponds to a rigid binding/rigid rotator in quantum mechanics between the Being b and the worldly objects WO.

Further note that such an arrangement of EOLs in a human Being, if considered, this includes the role of SO and is subjected to expose to a finest possible cosmic consciousness field in the Universe, in the same way as a functional mobile handset (which contains a cell or battery in it) is exposed to the electromagnetic signal spread all over in the space. Interestingly, such a philosophical picture of a human Being has suggested several new dimensions of study.

- (b) Grouping of EOLs Simplifies Understanding of The Underlying Mechanism Responsible For Human Actions: While trying to analyze the human behavior in terms of the dynamics of EOLs, no doubt the role of each EOL needs to be accounted for at a deeper level but some gross features of behavior and personality traits can be understood just by grouping the outer EOLs as gross body,  $G = \{WO, B, SE\}$ , inner EOLs as 'micro' body,  $M = \{M, I, E\}$  and the only EOL SO as 'causal' or astral body,  $C = \{SO\}$  as per Vedic science. In this way the (perfect human) Being b basically is a union of G, C0 and C0, i.e., C1 be C2 correctly or else it is a set of all EOLs, i.e., C3 be C4 where C5 correctly one EOL, or more EOLs in b constitute the classes of physically or mentally challenged persons or of nonhuman Beings (cf. 'fractured' patomic model (Kaushal, 2011)). As a matter of fact, such a grouping of EOLs has been helpful in explaining a variety of aspects of human actions, human and nonhuman interactions, etc. at least in the lowest order.
- (c) Faculty of Understanding And The Level of Its Development In An Individual: In analogy with a generalized version of 'pancikaran' rule of Vedic science known for the perception of five cosmic element (panca mahābūtās) namely, earth, water, air, fire and ether, a 'tri-karan' rule for inner EOLs M, I and E and a 'dvi-karan' rule for the outer EOLs B and SE is proposed (Kaushal, 2011). These rules in fact define the dressing of an object with consciousness in different orders through some sort of symbolic recurrence relations and thereby suggest a mechanism to differentiate clearly between dressed (perceived) and undressed (unperceived or nascent) versions of entities which are generated in a self-consistent manner. These rules, have greatly helped (Kaushal, 2015) in understanding the perception process in a more logical manner. Here we consider this dressing through discrete evolution of an EOL with consciousness or as an effect of meditation. Also, we emphasize here only on the tri-karan rule for the dressing of inner EOLs from their nascent versions M, I and E. As a matter of fact, the faculty of understanding of an individual is a composite (set) of differently dressed versions of his inner EOLs with his own consciousness, viz.,  $\tilde{F}^{(l,m,n)} = \{\tilde{M}^{(l)}, \tilde{I}^{(m)}, \tilde{E}^{(n)}\}$ , where  $\tilde{M}^{(l)}, \tilde{I}^{(m)}$  and  $\tilde{E}^{(n)}$  are the  $\ell$ -th, m-th, and n-th order dressed versions of  $M = \tilde{M}^{(l)}, \tilde{I}^{(m)}, \tilde{E}^{(n)}$  and  $\tilde{E}^{(n)}$ , respectively and according to the tri-karan rule they are given by the following symbolic recurrence relations.

$$\widetilde{M}^{(\ell)} = \frac{1}{2}\widetilde{M}^{(\ell-1)} + \frac{1}{4}\widetilde{I}^{(\ell-1)} + \frac{1}{4}\widetilde{E}^{(\ell-1)} , \qquad (1a)$$

$$\widetilde{I}^{(m)} = \frac{1}{2}\widetilde{I}^{(m-1)} + \frac{1}{4}\widetilde{E}^{(m-1)} + \frac{1}{4}\widetilde{M}^{(m-1)} , \qquad (1b)$$

$$\widetilde{E}^{(n)} = \frac{1}{2}\widetilde{E}^{(n-1)} + \frac{1}{4}\widetilde{M}^{(n-1)} + \frac{1}{4}\widetilde{I}^{(n-1)} , \qquad (1c)$$

where  $\ell$ , m, n= 1,2,3, ....,  $\infty$ . (For the details of dressing rules, we refer to earlier works (Kaushal, 2011)). Here, we have however demonstrated in a nut-shell that all three, mind, intellect and ego of an individual get enriched with their respective intrinsic characteristic when they are constantly exposed to his consciousness through the process of meditation.

In relations (1), the three limiting cases corresponding to  $\ell$ , m, n $\to\infty$ , while separately define three ideal personalities, namely the most emotional, the most intelligent, the most learned, respectively, for a common man, however, one can define an index r as a set of integers  $\ell$ , m and n, viz.,  $r = \{\ell, m, n\}$  which characterizes the level of development of one's FOU. Further note that the order of dressing of an EOL, in general, is a measure of intensity of meditation attained by an individual. Such interplay of inner EOLs has already offered explanations of a variety of aspects of human behavior and experiences (Kaushal, 2011;2015). We refrain ourselves from going into these details here. These dressing rules become an asset when defining the intensity of meditation (consciousness) (Kaushal, 2019).

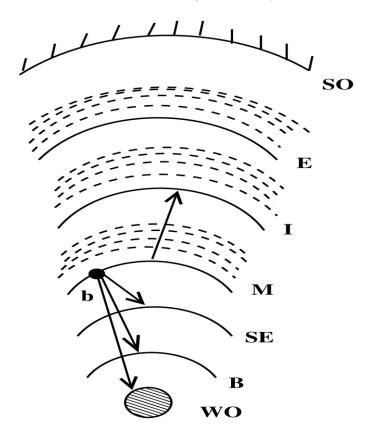


Fig.2: A modified version of patomic model

(d) An Interesting Outcome of Dressing Rules: Origin of Sub-(Energy)-States In Patomic Model: In quantum mechanics, the discrete values of orbital quantum number give rise to sub-energy-levels in the atom. Here we have traced other alternative for this kind of discretization i. e., in terms of discrete dressing rules expressed through relations (1). This in fact leads to infinitely many discrete sub-levels of each of M, I and E, which are not equally spaced. This kind of extension of patomic model makes it more viable towards the studies of human/nonhuman behavior. This also suggests a possible explanation for distinct levels of development of FOUs for different individuals in this framework. Interestingly in the present mathematical setting, the spacing between successive sub-levels for each M, I and E decreases by a factor of four at each order of dressing. This fact for inner EOLs can easily be demonstrated (Sharma et al, 2020).

## 3. Some Other Realistic and Analytically Viable Applications of the Present Scheme of Study

Some other applications carried out in the present scheme of study are as follows: (a) Psychomechanics and the 'principle of minimum effort': After defining the meditation variable,  $\mu$ , in a quantifiable form and treating it at par with the time variable t, the principle of minimum effort is formulated through a set of psycho-dynamical equations of motion (Kaushal, 2019). (b) Psychochemistry: With a view to understand human interactions and relations at a deeper level, the subject of psychochemistry is developed using the patomic model of human Being, mainly on the lines of atomic and molecular chemistry (Kaushal, 2015; Sharma et al, 2020). (c) Using the patomic model and the proposed dressing rules modifications in the personality theory of Carl Jung are suggested at several stages that makes the theory viable in searching the 'spiritual content' in a personality, if it exists (Jung, 1921; Rajoria et al, 2018). (d) A formal theory of sub-conscious mind has been traced using the present scheme of study (Kaushal, 2023a). The concept of mind waves developed out of these studies (Kaushal, 2022) offers a basis for explanations of a variety of phenomena in occult sciences. For details we refer to our earlier works.

#### 4. Concluding Discussion: Future Prospects

Vedic wisdom tells us that it is the subtlest possible all-pervading cosmic consciousness field that creates physical universes via theories like Big Bang etc. and thereby creating cosmic space time. As a part of this consciousness field, a microcosm, termed as soul, manifest through each Being in general and human Being in particular as a result of a process like second quantization. As far as the evolution of anatomy, physiology and the working of mental world of these Beings is concerned, the human Being is considered as a perfect creation among all Beings. Based on the patomic model of a human Being, the subject of psychoscience is developed in this book (Kaushal,2023). The psychoscience is presented here in its new incarnation that not only links spiritual and behavioral sciences but also carries the spirit of physical sciences for its further development and immediate applications in analytical terms.

Among other applications of Vedic wisdom highlighted in this work are: (i) the divination of the hand-held pendulum is analyzed with reference to occult sciences; (ii) the concept of mind waves is introduced, perhaps for the first time, which in fact is based on aṣṭāṅga prakṛti of SMBG. The viability of this concept is further investigated with reference to neuroscience, tele-therapy and foundations of Āyurveda. (iii) In analogy with the conservation laws and dynamical invariants in physics, the concepts of eternity, universality and sustainability are investigated with reference to Vedic wisdom. In other words, attempts are made in scientific spirit to find the answer of the question as to what is 'Sanātana' in the 'Sanātana Dharma' with reference to the 'elements of basic goodness' and other human qualities in Vedic wisdom. While more applications of this scheme of study are due as future research, some are demonstrated here by way of analyzing a variety of human actions, behavior and experiences.

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