

CHAPTER – 2

LITERARY REVIEW

CHAPTER	TITLE	PAGE No.
2.0	REVIEW OF TRADITIONAL LITERATURE	18
2.1	AIMS AND OBJECTIVES	19
2.1.1	AIMS	19
2.1.2	OBJECTIVES	19
2.2	METHODOLOGY	19
2.3	MATERIALS AND METHODS	19
2.3.1	SOURCE MATERIAL	19
2.3.2	METHODS	20
2.4	MECHANICS OF MEDITATION	20
2.5	THE FOUR STATES OF CONSCIOUSNESS AND REALISATION OF SELF	34
2.6	THE MAHAVAKYAS	41
2.7	THE PANCHAKOSHAS AND THE MAHAKARANA DEHA	44
2.8	THE AKASHA: SPACES FOR CREATIVE COGNITION	49
2.9	COGNITIONS OF PERSONAL SELF AND COSMIC SELF	51
2.10	SUMMARY	53

TABLES & FIGURES

TABLE / FIGURE NO.	CHAPTER TITLE	PAGE NO.
	LITERARY REVIEW	
TABLE NO. 2.1	THE FOUR STATES OF CONSCIOUSNESS	36
TABLE NO. 2.2	SUMMARY OF MAHAVAKYA	43
TABLE NO. 2.3	PANCHAKOSHA MODEL AND STRUCTURE OF SUBJECTIVE SELF	48
FIGURE NO. 2.1	THE PANCHAKOSHA MODEL IN TAITTIRIYA UPANISHAD	46
FIGURE NO. 2.2	THE FUNCTIONING OF PRANA AND FIVE KARMENDRIYAS	47
FIGURE NO. 2.3	MEDITATION PRACTICE, REGIONS OF INTERESTS (ROI) AND ENERGY FLOW IN THE RETICULAR ACTIVATING SYSTEM	52
FIGURE NO. 2.4	MAPPING OF IMPORTANT REGIONS IN BRAIN, 3 A'S OF MEDITATION AND DHARANA, DHYAN AND SAMADHI	56
FIGURE NO. 2.5	MAPPING OF IMPORTANT REGIONS IN BRAIN, 3 A'S OF MEDITATION AND DHARANA, DHYAN AND SAMADHI	57

CHAPTER 2 – TRADITIONAL LITERATURE REVIEW

2.0 REVIEW OF TRADITIONAL LITERATURE

In this Chapter, classical Sanskrit literature from ancient Vedic texts that concerns creativity, its basis and process in conscious creative cognition, is presented in depth. It is examined in the context of various kinds of meditation, and development of creativity as a side effect of developing a person's full creative potential in higher states of consciousness.²⁴ The classical texts state various cognitions that arise as the aspirant attains the highest state of consciousness, in full self-realization. Concepts like Self, Creative Intelligence, and Brahman are explored as grounds for full development of Creativity. The main original text is *Maharṣi Patañjali Yogasūtra*.¹¹³ One verse lays out the foundation of Creative Cognition from this most ancient⁶¹ Vedic perspective.

ऋतम्भरा तत्र प्रज्ञा
ṛtambharā tatra prajñā

Meaning - In that state (lies) the power of creative perceptive insight, the faculty of supreme wisdom

Yoga Sūtra I: 48

The Chapter is laid out as follows: after examining the background and scope in this overview, and describing Aims and Objectives; Methodology, and Materials and Methods are discussed in the next three subsections. Topics concerning Meditation, Self, its cognition in different states of consciousness, are elaborated, as given in the *Mahāvākyā*¹²⁵; Levels of the mind, the *Pañcakoṣāḥ*⁹² and higher bodies of cognition;^{28,91,104} the various *ākāśaḥ*,^{90,124} spaces in which Cognition occurs are explained. Discussion about the 3 A's – states of arousal, awareness and attention, compared to stages of meditation;⁵⁹ and the channelizing of subtle energies in the great *nāḍī*.¹⁰ All are considered in the context of the development of a person's full potential of Creative Cognition. The contents of the Vedic literature are presented as evidence for such creativity in the Vedic Age. *Vedānta*, for example, the goal of Vedic studies, aimed to develop the full creative potential of the individual. The above verse is the key to gaining that ability.

2.1 AIMS AND OBJECTIVES

2.1.1 Aims

To explore the higher states of consciousness, nature of Self ¹²⁶⁻¹²⁹ and *Brāhman*, ¹³⁰ to elucidate the Concept of Creativity; to help devise pathways to be in the state of pure creative consciousness, ⁶¹ as a means to Self Realization, ⁶⁹ which is the highest goal of human life. ⁷⁹

2.1.2 OBJECTIVES

- a. To explore the Concept of Creativity from Ancient Scriptures
- b. To extract deep understanding of *Samādhi* and its links to Pure Consciousness
- c. To explore and establish links between *Ātman*, *Brāhman*, Creativity and Self.
- d. To understand pathways to the state of Creative Consciousness, as a means of Self-Realization.

2.2 METHODOLOGY

Texts were selected based on knowledge and understanding gained from courses taught during the first year of my PhD; secondly, from discussions with my guide and co-guide; thirdly, through advice from S-VYASA's Vice-Chancellor and Academic Dean; fourthly, special suggestions on developing the model from S-VYASA's Vedānta teacher, Mohanji; Dean, Prof. T.M.Srinivasanji and lastly and most importantly, direct blessings from my *Guru*, *Svāmī Mādhavānanda*, of Pune's *Nātha Sampradāyaḥ* and *So'harī* tradition. ⁷⁹

2.3 MATERIALS AND METHODS

2.3.1. Source Material

The sources for the literature search includes

A. Classical Yoga Texts,

- i. *Pātañjala Yogasūtra* ii. *Vyasa Bhashya* on *Pātañjala Yogasūtra*, iii. *Bhagavadgītā*, iv. *Shiva Samhita*, v. *Gheraṇḍa Saṁhitā*.

- #### B. Major and Minor Upaniṣat
- i. *Māṇḍūkya* ii. *Muṇḍaka*, iii. *Svetashwara*, iv. *Praśnopaniṣat*, v. *Garbhopaniṣat*, vi. *Taittirīyopaniṣat*, and vii. *Īsopaniṣat*.

C. *Adi Saṅkarācārya's* Commentary on *Prakaraṇa Grantha* such as;

- i. *Tatvabodha*, ii. *Ātmabodha*, iii. *Brahma Sūtra* and iv. *Vivekchudamani*

- #### D. *Sūtrāṅgi* Software for updated works of Lineage of Saints from the *Nātha* and *Haṭha Sampradāyaḥ*.

2.3.2. Methods

The above mentioned sources were first systematically compiled and then sorted according to the defined structure of the chapter. The relevant references are cited in the body of the text as well as in the reference section. Detailed selection criteria were that all translations of texts should be by authoritative, fully realized *Ṛṣi* and *Gurus*. All the main texts by and attributed to *Ādi Śaṅkarācāryaḥ* were examined for relevant *ślokā*; also seminal work on the Science of Creative Intelligence by my main guide's *Guru*, His Holiness *Maharṣi Maheṣ Yogi*; also the Collected Works of *Svāmī Vivekānanda*,¹³¹ and important books by my second guide, Dr *Nāgendraḥ*. Important *granthāḥ* on *sūkṣma* methodology composed in *Mahārāṣṭra*, like, *Jñāneśvarī*,¹³² *Daśabodha*,¹³³ *Param Amṛta* and amazing work on Self and Awareness attributed to *Nisargadatta Mahārāja* from Mumbai, and similar brilliant work by *Sri Ramaṇa Maharṣi*. My most important source was, 'The Science and practice of Meditation' taught by my *Guru*, *Svāmī Mādhavānanda* (Dr. *Mādhav Nagarakar, University of Princeton*).

2.4 MECHANICS OF MEDITATION

The reason for discussing meditation in the context of creativity, and listing the various classes of meditation is that, traditionally, meditation is held to give the mind access to states of enhanced creativity. We therefore start this section by examining how the Vedic sciences define meditation, and the context, in which they do so. Yoga Master *Pātāñjala* states clearly that, in order to achieve *Samādhi*,⁵⁸ the grounds for developing creative cognition, one has to follow the path of *Aṣṭāṅgayoga*.¹³⁴ He starts with a brilliantly concise summary of Yoga, its process and its goal (translations reflect our perspective):¹³⁵

अथ योगानुशासनम्
atha yogānuśāsanam

Meaning - Now, instruction in Yoga begins

Yoga Sūtra 1: 1

योगश्चित्तवृत्तिनिरोधः
yogaścittavṛttinirodhaḥ

Meaning – Yoga is the silencing of modifications of the mind.

Yoga Sūtra 1: 2

तदा द्रष्टुः स्वरूपेऽवस्थानम्
Tadā draṣṭuḥ svarūpe'vasthānam

Meaning - Then the seer dwells in his own nature, i.e. Self / *Svarūpaḥ*.

Yoga Sūtra 1: 3

The first chapter continues to lay out the states of silent mind, and the powers to which they afford access to cognition. *Maharishi Patañjali* then lays out the whole path of attaining purity of mind in the second *Pādaḥ* of his *Yogasūtra*, *Sādhanā Pāda*, which explains how Yoga has eight limbs, and defines each of them.¹³⁴

यमनियमासनप्राणायामप्रत्याहार धारणाध्यानसमाधयोऽष्टावङ्गानि

Yamaniyamāsanaprāṇāyāmapratyāhāra
dhāraṇādhyānasamādhayo'ṣṭāvaṅgāni

Meaning - States the eight aspects of yoga.

Yoga Sūtra 3. 29

Meditation is defined in *Pādaḥ* III. It is important to quote this definition of meditation as it represents humanity's first and original understanding of this profound subject. As far as we know, the Vedic culture was the first to make extensive use of meditation, with accounts of various aspects and structure of self; dating back some 5,000 or more years from the principal *Upaniṣat*.¹³⁶ Its first formal definition is given in *Pādaḥ* III of the *Yogasūtra* of *Maharṣi Patañjali*.^{75, 137}

देशबन्धश्चित्तस्य धारणा

Deśabandhaścittasya dhāraṇā

Meaning - Focusing the attention is *Dhāraṇā*.

Yoga Sūtra 3. 1

तत्र प्रत्ययैकतानता ध्यानम्

Tatra pratyayaikatānatā dhyānam

Meaning - Practice of *Dhāraṇā*, results in effortless linkage of attention and focus to a higher Self, this is *Dhyāna* and there is a continuous flow of creative cosmic consciousness.

Yoga Sūtra 3. 2

Dhyāna, seventh⁵⁸ of the eight limbs of *Aṣṭāṅgayoga*,¹³⁴ and second of the final three, inner limbs, *Antaraṅga*, is the process connecting *Dhāraṇā*, the sixth limb¹³⁷ involving focus of attention, to *Samādhi*,⁵⁸ the eighth limb, the Silent State of Mind.

तदेवार्थमात्रनिर्भासं स्वरूपशून्यमिव समाधिः

Tadevārthamātranirbhāsaṁ svarūpaśūnyamiva samādhiḥ

Meaning – When, by this practice, the personality self is gone, that state is *Samādhi*.

Yoga Sūtra 3. 3

Another more general definition of meditation may be given as sitting with the eyes closed, focusing on an imparted technique of prayer or other mental activity. In these cases, long experience of focus, *Dhāraṇā*, gives way to the process of *Dhyāna*, and that, when allowed to continue without interference, leads to experience of the silent mind in initial states of *Samādhi*. *Svānī Vivekānanda*'s commentary on *Māṇḍūkyaopaniṣat* and *Rajayoga* states that a 12 second period of focus can be termed a '*Dhāraṇā*,' that 12 such *Dhāraṇā* results in one *Dhyāna*', and 12 such *Dhyānas* brings experience of a level of *Samādhi*.⁵⁸

From the modern perspective of 21st century Yoga, meditation is a process causing an active mind to become silent, leading to a second, more practical definition of the word ‘meditation’ as the process of reducing the mind’s information content to zero. Eliminating mental activity allows calmness and energy, and a sense of blissful well-being to infuse into mind and body, as depicted in Figure 1.1.above. *Pratyāhāraḥ* is the process wherein the attention turns away from the five senses and takes an inward direction,⁵⁹ as depicted in Chapter 1, Figure 1.1.

The attention is then naturally attracted to the source of thought by the bliss saturating it. As depicted in Figure 1.1, it dives deep within in meditation, and merges with its source, infusing qualities of infinite energy, infinite creativity and infinite intelligence into the mind, and coloring it with freedom, bliss and happiness. Based on preliminary experience of *Dhāraṇā*, *Dhyāna* and *Samādhi*, defined above, the *Yogasūtra* elaborate a process called *Samīyama*; 59

त्रयमेकत्र संयमः

Trayamekatra samīyamaḥ ॥

Meaning - The three together are called *Samīyama*

Yoga Sūtra. 3.4

A person performing *Samīyama* introduces a specific mental impulse, and returns immediately to the state of *Samādhi*, having previously gained good experience of accessing that state. The process starts from a mental state within the *Cittākāśaḥ*, and ends by immediately relaxing the mind back into the *Cidākāśaḥ*, where it is receptive to receiving impulses of cosmic creative intelligence. In this way, it constitutes a direct means to enhance the power of creative cognition, since such cognition resides in the *Cidākāśaḥ*, rather than the *Cittākāśa*.^{90, 91, 124} In its first chapter, the *Yoga Sūtra* name a particular level of awareness close to *Samādhi*, at which the mind becomes open to new knowledge, that it names *Ṛtambharā Prajñā*, discussed above.⁶¹ First it states how to develop internal clarity.¹⁰⁶

निर्विचारवैशारद्येऽध्यात्मप्रसादः

Nirvicāravaiśāradye'dhyātmapasādaḥ ॥

Meaning - The outcome of the above practices is the thoughtless / *nirvichara* state.

Yoga Sūtra. 1.47

This means that when one has sufficiently developed consciousness to go to *Nirvicharaa Samādhi*, one gains access to a state, in which the correct answers to any and all questions will arise. That state, quoted in *Yoga Sūtra* I.48, at the head of this chapter, constitutes the essence of the Vedic concept of creativity and cognition.⁶¹ Access is gained through *Nirvicāra Samādhi*. This is the essence of creative problem solving and creative innovation. *Yoga Sūtra* I.48 states Yoga's comprehensive solution to the challenge of developing creativity. This state also forms the basis for the original cognitions about the state itself. The Vedic literature seems to accept that such cognition takes place in the form of gestalts and patterns which can be justified from two perspectives, first, that of the phenomenon of name and form, *Nāmarūpa*;^{90,138} by which a spoken word or phrase immediately gives rise to the form, or gestalt¹³⁹ in the mind. Similarly, when words arise from *Smṛti* i.e. memory, as in chanting a text, the words derive from underlying ideas, which, according to the Vedic science of states of speech, *Parā*, *Paśyanti*, *Madhyamā* and *Vaikharī* exist at a deeper level of the mind, which is treated deeply in the concept of *Śikṣā* in the first chapter of *Taittirīya Upanisat* titled *Śikṣā-vallī*.⁶⁰

ॐ शीक्षां व्याख्यास्यामः । वर्णः स्वरः । मात्रा बलम् । साम सन्तानः । इत्युक्तः शीक्षाध्यायः

om śikṣām vyākhyāsyāmaḥ | varṇaḥ svaraḥ | mātṛā balaṃ |

sāma santānaḥ | ityuktaḥ śikṣādhyāyaḥ ॥

Meaning – Om. We will expound *Śikṣā-vallī*, or the science of pronunciation, which deals with sound, pitch, quantity, force, modulation and combination.

Taittirīya Up. 1.1

A particular instance of this is illustrated by the Vedic concept of the four levels of speech given in *Śikṣā-vallī*, the first of the six *Vedāṅgas*, the limbs of the *Veda*.⁹³ The Vedas proclaim that there are four categories of human speech or sound vibrations. The whole macrocosm of our thoughts and actions is a projection of these sound vibrations that prevail at different frequencies. *Śikṣā* tells us that human cognition encompasses four levels of verbal expression: (1) *physical* through sound, *Vaikharī*; (2) *mental speech*, *Madhyamā*; (3) *ideational*, *Paśyanti*; and (4) *transcendental*, *Parā*.⁶⁰ As a person speaks, either in a conversation, or in a speech on some matter, their expressed words are first apprehended at the level of mental speech, *Madhyamā*, before being spoken out as words of speech, *Vaikharī*. *Parāvāṇī* or *Parāvāk*, the Supreme Speech, which exists within all of us, is the inner vibration, the source of all sound. There exist four stages of speech - *Parā*, *Paśyanti*, *Madhyamā* and *Vaikharī* which correspond to our four states of consciousness i.e. *Turīyā*, *Suṣṭi*, *Svapna* and *Jāgrat*. Thus, *Parā*, represents transcendental consciousness, *Paśyanti*, represents the intellectual consciousness, *Madhyamā* represents the mental consciousness, and *Vaikharī* represents the physical consciousness. Our ability to experience different levels depends upon the elevation of our consciousness. *Vaikharī* is the grossest level of speech, the speech of the physical tongue, which is heard through the external senses. It is ordinary verbal speech, which we all hear and use in our day-to-day life. ‘*Vaikharī*’ literally means flowering. It is the stage when the seeds of thoughts flower into words or actions. *Vaikharī* is an expression of *Kriyāśakti* - the power of action. The second level of speech is *Madhyamā* is mental speech or thoughts, which corresponds to the subtle body. *Madhyamā* expresses *jñāna Śaktiḥ*, the power of knowledge and wisdom. It is verbalised but not audible. *Madhyamā* (in the middle or in between) as its name suggests, exists in between the formation of a thought and its expression in words or deeds. The third level of speech *Paśyanti* is where it is a state of visual imagery. Here sound leaves its audible nature and manifests as feeling. ‘*Paśyanti*’ means ‘that which can be seen’. In this stage, sound possesses attributes like colour, form, etc. Only those endowed with discernment can perceive these attributes. *Ichā Śaktiḥ* - the Power of Will exists in *Paśyanti*.

The fourth and highest level of speech is *Parā*, the *Parā* is all pervading and all encompassing. *Parā* is pure intention. It is unmanifest. It is the sound of one's soul, a state of soundless sound. It is the speech that flows directly from the Cosmic Creator. It expresses *Ambikā Śaktiḥ* - the Universal Mother. It exists within all of us. All mantras, infinite syllables, words, and sentences exist within *Parā* in the form of vibration in a potential form. In *Paśyanti* and *Parā* the power of one's words is manifested. The vow 'Ṛtaṁ Vacni Satyaṁ Vacni' from the *Ganapati Atharvaśīrṣa* in *Upaniṣat* (*Ṛgveda*), invoking Lord *Gaṇeśaḥ*, expresses the idea that one should speak words that will strengthen both *Ṛtaṁ* (cosmic truth) and *Satyaṁ* (worldly truth). It further says, *Tvam catvāri vāk padāni* (Thou art the very syllables of the four measures of speech). *Sikṣā* gives a detailed and important account of Creative Cognition in Vedic science, naming four levels of development, *Parā*, *Paśyanti*, *Madhyamā* and *Vaikharī*, symbolised as mother *Sarasvatī* and lord *Gaṇeśaḥ*, anchored at the *Om* *karā*.

The main areas responsible for language and speech in neuroscience are Wernicke's and Broca's areas, both in the lower left Parietal Lobe, but inspirational expressions arise by integrating both hemispheres. The integration supports the fluency and elaboration dimensions of creative verbal expression. This principle extends to all forms of creative expression in the symbolic form of ॐ and the verse is;¹⁴⁰

ॐ इत्येतदक्षरमिदं सर्वं तस्योपव्याख्यानं भूतं भवद् भविष्यदिति
सर्वमोङ्कार एवयच्चान्यत् त्रिकालातीतं तदप्योङ्कार एव :

om ityetaḍakṣaramidaṁ sarvaṁ tasyopavyākhyānaṁ bhūtaṁ bhavad
bhaviṣyaditi sarvamōṅkāra eva yaccānyat trikālātītaṁ tadapyōṅkāra eva ॥

Meaning - The whole universe is the syllable Om. Everything that was, is, or will be is, in truth Om. All else which transcends time, space, and causation is also Om

Māṇḍūkya Up.1.1

Whatever is visible, whatever is cognizable, whatever can come within the purview of sense-perception, inference or verbal testimony, whatever can be comprehended under the single term, creation – all this is *Om*. The first vibratory sound emanated from the seed creation, i.e. *Praṇava*, *bījamantra mantra* of all *Mantra*. It is both gestalt and pattern, i.e. *Nāmarūpa*, name as well as form, it is a cosmic vibration a divine source of creative cognition or *Buddhiḥ*. *Sikṣā* starts from a level at the source of thought that it calls *Parā*, which contains the potential for all possible expressions in unmanifest form. This gives rise to ideas at the level that it calls *Paśyanti*. Here ideas exist to be expressed in a form appropriate to the modality of expression, speech or writing etc.

The next level of development, *Madhyamā*, contains words and word strings generated by Broca's area, which are used to construct sentences with correct grammatical rules. Finally, these sentences are expressed as outward speech, *Vaikharī*. What is most important at the second and third levels are the effects of positive and negative thoughts on the flow of creative expression. Lack of interest and curiosity can, on occasion, close this down completely. Yoga expresses this in terms of *Buddhiḥ* and *Citta*, and the highest level, *Antakaraṇa*, which only functions under the influence of *Sattva*. It permits access to the infinite field of *Parāśaktiḥ*, where the infinite cosmic intelligence becomes available. Yoga's approach to creative cognition thus bases itself on the expanded states of mind described in sections of the Vedic literature like the *Upaniṣat*. The *Paśyanti* level of speech, in turn arises out of the transcendental level of all possible ideas; *Parā*, which can be equated with the level of the *Ānandamayamaya Koṣa*, the bliss sheath pervaded by infinite creativity. The *Yoga Sūtra* present the key to developing reliable creative cognition.¹⁰⁶

निर्विचारवैशारद्येऽध्यात्मप्रसादः

Nirvicāravaiśāradye'dhyātmapasādaḥ

Meaning - The outcome of the such practice is the thoughtless or nirvichara state.

Yoga Sūtra.1.47

That is the basic reason behind this study to investigate the influence of Cyclic Meditation also known as *Āvaratana Dhyān* on creative cognition. Of the three classifications of meditation by Lutz, Travis and Shear,⁶⁷ only dhyana methods specifically designed to take one's mind and awareness to *Samādhi*, and bring the mind experience of its silent state. This kind has most promise to develop creativity, as depicted in Figure 1.1 earlier.

The concept of mind in yoga philosophy is somewhat different from modern psychology. Yoga regards mind as a conglomeration of thoughts.¹⁴¹ According to *Adi Saiṅkarācārya*;²⁰ mind has four components (*Antakaraṇa*): *Manah* (mind), *Buddhiḥ* (intellect), *Ahaṅkāra* (ego) and *Citta* (memory). From the perspective of mental fluctuations experienced in meditation, *Manah* is that which wavers, *Buddhiḥ* is decisive; the *Ahaṅkāra* is the creator of the sense of 'I', while the *citta* is that which makes us cognitive.

संकल्पविकल्पात्मकं मनः । निश्चयात्मिका बुद्धि । अहंकर्ता अहंकारः । चिन्तनकत चित्तम् :

Saṅkalpavikalpātmakaṁ manaḥ | Niścayātmikā buddhiḥ

Ahaṅkartā ahaṅkāraḥ | Cintanakartṛ cittaṁ ॥

- Meaning** – There are four functions of Mind, i. *Manah*, sensory, processing mind;
 ii. *Buddhiḥ*, decides, judges and discriminates knows, iii. *Ahaṅkāra*, 'I-maker' or ego;
 iv. *Citta*, storage of impressions.

Tatvabodha Ch: 35.5:1

An important aspect of meditation techniques is observing and discriminating, for developing self-awareness, by enhancing the four functions of mind, and is a key to Self-Realization. All the above kinds of meditation originated in ancient traditions, and have been practiced from time immemorial. The particular technique being studied in the experiments reported in this thesis, Cyclic Meditation i.e., *Āvaratana Dhyān* also has an ancient origin, in the sense that the form of its practice was laid out by *Gauḍapāda*, the Guru of *Adi Saiṅkarācārya*. Cyclic meditation is based on a concept that a combination of both 'calming' and 'stimulating' measures help in reaching a state of mental equilibrium. It is derived from a statement in Sage *Gauḍapāda*'s *Māṅḍūkya Karika*:^{52,73}

लये सम्बोधयेत् चित्तं विक्षिप्तं शमयेत् पुनः ।

सकषायं विजानियात् समप्राप्तं न चालयेत् ।

Laye sambodhayet cittam vikṣiptam śamayet punaḥ
Sakaṣāyam vijñāniyāt samaprāptam na cālayet.

Meaning - “In a state of mental inactivity awaken the mind; when agitated, calm it; between these two states realize the possible abilities of the mind. If the mind has reached the state of perfect equilibrium then do not disturb it again”

Gaudapada Karika in Māṇḍūkya Up. 3. 44

For the most people, mental states during routine activities (not necessarily associated with yoga) is neither ‘inactive’ nor ‘excited’, but somewhere between these extremes. Hence, a combination of ‘awakening and calming’ measures may be better suited to reach a balanced, relaxed state. This idea, drawn from traditional texts, is the basis for this meditation practice called ‘*Āvaratana Dhyāna*, Cyclic Meditation.¹⁴² This was hypothesized to create a resonance which results in synchrony.

Another meditation technique, not yet studied, is a *Nātha-Sampradāya* technique, the *So’hanu* meditation described in detail in *Svāmī Mādhavānanda’s Science of Meditation*.¹⁰ It starts by focusing attention on the *Ajñā Cakra*, i.e. medial prefrontal cortex (mPFC), point between the eyebrows, inducing expansion of awareness to unboundedness beyond space-time, thus transcending all focus of attention to enable the state of Pure Consciousness. There is a contrast between these two systems of meditation; the first is a step-by-step technique, which is combination of Yoga meditation and modern deep relaxation, aimed at fine-tuning the attention to increase awareness and optimal arousal. The second is a specific technique, which is only taught in the context of the *Guru-paramparā* lineage of Masters to which it belongs, such as *Adi Saṅkarācārya*, and *Santa Jñāneśvar*. The *Bhagavadgītā* explains in specifics the mechanics of the different levels of meditation, presenting an entire science of the field of meditation, consciousness and access to creative cosmic intelligence.^{143,144}

स्पर्शान्कृत्वा बहिर्बाह्यांश्चक्षुश्चैवान्तरे भ्रुवोः ।
प्राणापानौ समौ कृत्वा नासाभ्यन्तरचारिणौ ॥

Sparśānkṛtvā bahirbāhyāṁścakṣuṣcaivāntare bhruvoḥ ।

Prāṇāpānau samau kṛtvā nāsābhyantaracāriṇau ॥

Meaning - without contemplating on external objects, steady the attention between the two eyebrows, balance the movement of outgoing and incoming breaths through the nostrils, and let the mind become one pointed.

Bhagavadgītā 5. 27

तत्रैकाग्रं मनः कृत्वा यतचित्तेन्द्रियक्रियः ।
उपविश्यासने युञ्ज्याद्योगमात्मविशुद्धये ॥

Tatraikāgraṁ manaḥ kṛtvā yatacittendriyakriyaḥ ।

Upaviśyāsane yuñjyādyogamātmaviśuddhaye ॥

Meaning - In that place, sitting comfortably, making the mind one pointed, Sub-duing the organs of mind and sense, practice meditation for purification of mind.

Bhagavadgītā 6. 12

Svāmī Mādhavānanda's instructions are as follows. “Close your eyes and focus attention on the *Ajñā Cakra* i.e. the centre of the forehead i.e., (mPFC). “Inhale and exhale slowly and gently. Do not make a loud noise while inhaling and exhaling.” “Do not try to look at the centre of the forehead by slanting the eyeballs. Keep them straight.” (Only focus the attention there.) “While inhaling, chant ‘So’, and while exhaling chant ‘*hauṁ*’. ‘So’ means ‘*Saha*’ i.e. God or spirit that exists in this world and ‘*hauṁ*’ means ‘*Ahaṁ*’, i.e. ‘I’. “The ‘I’ and the spirit in me are one.” “Chant ‘*So’hauṁ*’, ‘Om’, ‘*Śrīrāma*’ or any other name of Lord, but do this by focusing the attention in the forehead only.” *Svāmījī* comments on these *Ślokāḥ* as follows: “The one-pointedness practiced in meditation proves beneficial in the attentional fields (ventral & dorsal). The essential goal of this practice is to make the mind uniquely purified. This happens when the mind, without getting distracted by any thought, through appreciation of pure consciousness, becomes one with the *True Self*.”⁷⁹

असंशयं महाबाहो मनो दुर्निग्रहं चलम् ।

अभ्यासेन तु कौन्तेय वैराग्येण च गृह्यते ॥

Asaṁśayaṁ mahābāho mano durnigrahaṁ calam ।

Abhyāseṇa tu kaunteya vairāgyeṇa ca gṛhyate ॥

Meaning - The mind is restless and indecisive. But with practice, by constantly attempting self-realisation and renunciation, it can be governed.

Bhagavadgītā 6.35

This meditation practice means earnestly and repeatedly attempting to silently part from all thoughts and attain a thoughtless or ‘no-mind’/zero state. To leave worldly thoughts, one needs to possess the approach of renunciation. In the context of meditation, the term ‘*abhyāsa*’ means holding self-consciousness, while the term ‘*Vairāgya*’ means leaving aside worldly thoughts during meditation, i.e. detachment by totally forgetting about our relationship with this world during the meditation.¹⁴⁷

अभ्यासयोगयुक्तेन चेतसा नान्यगामिना ।

परमं पुरुषं दिव्यं याति पार्थानुचिन्तयन् ॥

Abhyāsayogayuktena cetasā nānyagāminā ।

Paramaṁ puruṣaṁ divyaṁ yāti pārthānucintayan ॥

Meaning - One who experiences Oneness with the Divine Principle by practicing meditation and does not allow the mind to move (turn outside) elsewhere and continuously contemplates only on the Supreme (Self), becomes one with Him.

Bhagavadgītā 8.8

Svāmījī comments, “The procedure of this contemplation is: Focus attention on the pure consciousness realised at the centre of the forehead, and let all the thoughts subside, so that the intellect can comprehend and appreciate that Divine Principle. This focusing becomes easy when it is done with the help of ‘*Nāma Mantra*’.¹⁴⁶

शनैः शनैरुपरमेद् बुद्ध्या धृतिगृहीतया ।

आत्मसंस्थं मनः कृत्वा न किञ्चिदपि चिन्तयेत् ॥

Śanaiḥ śanairupamed buddhyā dhṛtigrhītayā ।

Ātmasaṁsthaṁ manaḥ kṛtvā na kiñcidapi cintayet ॥

Meaning – slowly and steadily, using the intellect, firmly resolve to become established in the self; do not let the mind think of anything else, even a bit. That is the ‘*Uparama*’ state.

Bhagavadgītā 6. 25

By regular practice of meditation one should with steadily attain more and more tranquil states, patiently making the intellect fasten the mind on the ‘Self’; without letting it contemplate even a bit anything else. Attain that state where no thought arises in mind. All thoughts and emotion, on the basis of which we live, should be completely foregone during the period of meditation. Even the ‘personality self’ should be foregone. For this the intellect should patiently control the mind.¹⁴⁶

प्रशान्तमनसं ह्येनं योगिनं सुखमुत्तमम् ।

उपैति शान्तरजसं ब्रह्मभूतमकल्मषम् ॥

Praśāntamanasaṁ hyenaṁ yoginaṁ sukhamuttamaṁ ।

Upaiti śāntarajasaṁ brahmabhūtamakalmaṣam ॥

Meaning - During meditation, the dynamism (*rajoguṇa*) subsides; so the yogi (meditator) whose mind has become tranquil, free from taint, and experiencing oneness with the omnipresent (*Brahman*), attains the supreme bliss characteristic of that state.

Bhagavadgītā 6. 27

As the thoughts recede, the mind becomes tranquil, and increasingly passive. The duration of being in a state of thought-free and tranquil state, increases.

सर्वभूतस्थमात्मानं सर्वभूतानि चात्मनि ।

ईक्षते योगयुक्तात्मा सर्वत्र समदर्शनः ।।

Sarvabhūtasthamātmānaṁ sarvabhūtāni cātmani ।

Īkṣate yogayuktātmā sarvatra samadarśanaḥ ॥

Meaning - With conducive behaviour and regular practice of meditation, the yogi experiencing oneness with the True Self (self realisation) and the evenness – of existence of the same Divine Principle everywhere; perceives the Self in all beings and all beings in Self.¹⁴⁶

Bhagavadgītā 6.29

On becoming the ‘Witness’ , the yogi experiences union of the spirit residing in the Soul, the spirit residing in the Universe and that residing in all living beings.¹⁴⁶ How the mind is transformed to *Citta*, a state conducive for the higher states of consciousness is explained further; three subtle transitions are witnessed. *Pātañjala Yogasūtra* explains how the transition process happens, how transformation in cognition takes place at the above four mentioned levels of mind; the mind merges into *Citta* by the parinama of *Nirodha*, *Ekagrata*, and *Samadhi*. The sutras explained as below;¹⁰⁷

सर्वार्थतैकाग्रतयोः क्षयोदयौ चित्तस्य समाधिपरिणामः ॥

Sarvārthataikāgratayoḥ kṣayodayau

cittasya samādhipariṇāmaḥ ॥

Meaning – One becomes witness to the process of transitioning into the higher state of meditation, linking mind to the higher forces of concentration, enabling a flow of spiritual peace.

PYS. 3.11

ततः पुनः शान्तोदितौ तुल्यप्रत्ययौ चित्तस्यैकाग्रतापरिणामः ॥

Tataḥ punaḥ śāntoditau tulya pratyayau cittasyaikāgratāpariṇāmaḥ ॥

Meaning – One becomes witness to the process of transitioning into one-pointedness of mind, *ekagrata*.

PYS. 3.12

एतेन भूतेन्द्रियेषु धर्मलक्षणावस्थापरिणामा व्याख्याताः ॥

Etena bhūtendriyeṣu dharmalakṣaṇāvasthāpariṇāmā vyākhyātāḥ ॥

Meaning – These transitions explain the process of transformations of mind into *Citta*; giving mastery over thought process, goes beyond to experience the centre of consciousness.

PYS. 3. 13

This section has explored the definition and concept of meditation, and examined various systems of meditation, ancient and modern, including cyclic meditation, so that the relationship of meditation to creative cognition can be laid out. The last verses show how meditation purifies the mind, giving it the ability to maintain focus and gain input from the *Cidākāśaḥ*, so that powerful capacities for creative cognition, expounded in the rest of *Yoga Sūtra Pāda III*, can be achieved.

Three transitions discussed with the context of elements and the senses, mind and *Citta*, which has something (*sūtrātma*) in common within, or a part underneath all of them. The point of witnessing of these subtle processes is to find the substratum, the object existing, underneath and unchanging, that is common to all. After all else is eliminated we experience the true Self⁷⁷ the source of Creativity.

2.5 THE FOUR STATES OF CONSCIOUSNESS AND REALISATION OF SELF

Having defined meditation and creative states to which it brings access, the nature of pure consciousness is described in the *Māṇḍūkyaopaniṣat*, the *Jñānakāṇḍa* of the Vedas. The *Māṇḍūkyaopaniṣat* describes the waking, dreaming and deep sleep states of consciousness, in its third, fourth and fifth verses, respectively:²⁴

जागरितस्थानो बहिष्प्रज्ञः सप्ताङ्ग एकोनविंशतिमुखः स्थूलभुग्वैश्वानरः प्रथमः पादः ॥

Jāgaritasthāno bahiṣprajñāḥ saptāṅga ekonaviṁśatimukhaḥ

sthūlabhugvaiśvānaraḥ prathamāḥ pādaḥ ॥

Meaning – The first quarter is *Vaiśvānara*, in waking field, with outward consciousness, has seven limbs and nineteen mouths, enjoys gross-objects.

Mandukya Up. 1. 3

स्वप्नस्थानोऽन्तः प्रज्ञाः सप्ताङ्ग एकोनविंशतिमुखः
प्रविविक्तभुक्तैजसो द्वितीयः पादः ॥

Svapnasthāno'ntaḥ prajñāḥ saptāṅga ekonaviṁśatimukhaḥ
praviviktabhuktaijaso dvitīyaḥ pādaḥ ॥

Meaning – The second quarter is *Taijasa*, the dream state, with inward-turned consciousness, has seven limbs and nineteen mouths, and enjoys subtle-objects.

Mandukya Up. 1. 4

यत्र सुप्तो न कञ्चन कामं कामयते न कञ्चन स्वप्नं
पश्यति तत् सुषुप्तम् । सुषुप्तस्थान एकीभूतः प्रज्ञानघन
एवानन्दमयो ह्यानन्दभुक् चेतो मुखः प्राज्ञस्तृतीयः पादः ॥

yatra supto na kañcana kāmam kāmayate na kañcana svapnam paśyati tat suṣuptam ।
suṣuptasthāna ekībhūtaḥ prajñānaghana
evānandamayo hyānandabhuk ceto mukhaḥ prājñastṛtīyaḥ pādaḥ ॥

Meaning - The second quarter is *Prajñā*, one in asleep neither desiring anything nor beholds any dream, that is deep sleep; in deep dreamless sleep, undivided, undifferentiated mass of consciousness, consisting of bliss and feeding on bliss, his mouth is consciousness.

Māṇḍūkya Up. 1. 5

It follows these by defining the 4th state of consciousness, pure consciousness:

एष सर्वेश्वरः एष सर्वज्ञ एषोऽन्तर्याम्येष योनिः
सर्वस्यप्रभवाप्ययौ हि भूतानाम् ॥

Eṣa sarveśvaraḥ eṣa sarvajña eṣo'ntaryāmyeṣa yoniḥ sarvasya
prabhavāpyayau hi bhūtānām ॥

Meaning – Known as the 4th quarter, or *chaturtham*, this is the Lord of all, the Omniscient; the indwelling controller, the source of all, the beginning and end of all things.

Māṇḍūkya Up. 1. 6

सर्वं ह्येतद् ब्रह्मायमात्मा ब्रह्म सोऽयमात्मा चतुष्पात्

sarvaṁ hyetad brahmāyamātmā brahma so'yamātmā catuṣpāt | |

Meaning – All this, verily, is *Brahman*, the Self is *Brahman*, and the Self has four quarters,
(as named in above verses)

Māṇḍūkya Up. 1. 2

These states of consciousness are listed in Table 2.1, below.

Table 2.1 – The Four States of Consciousness

Sr.No.	Knower of the SOC	Four States of Consciousness	Identified As	Knower	Bodies
1.	Vaiśvānara	Jāgrat	Waking	Bahiṣprajñā	Gross
2.	Prajñā	Svapna	Dream State	Antahprajñā	Subtle
3.	Taijasa	Suṣupti	Deep Sleep	Prajñānaghanam	Causal
4.	Turiyātīta	Caturtham / Turiyā	Pure Consciousness	Caitanya	Ātman

Table 2.1 summarizes the four states of consciousness presented in Māṇḍūkya Up connecting them to the dimensions of the gross and subtle bodies, and the Ātman, or Self.

Teachings about these states of consciousness are central to the whole Vedic Philosophy, which is why *Māṇḍūkyaopaniṣat* plays such a central role, and why *Gauḍapāda Kārika* quoted in the previous section is such an important text. Later, the same text then implies that, in higher states of consciousness, the sense of the fourth state can be maintained along with the other three normal states of consciousness, waking, dreaming and sleeping. This is often referred to as the ‘witness’ quality of pure consciousness.¹⁴⁸ *Upaniṣat* reveals the witness quality in the analogy of two birds in a tree.^{148, 149} In its image of ‘two birds in a tree’, the *Muṇḍakopaniṣat* describes the witness quality:

द्वा सुपर्णा सयुजा सखाया समानं वृक्षं परिषस्वजाते ।
तयोरन्यः पिप्पलं स्वाद्वत्त्यनश्नन्नन्यो अभिचाकशीति ॥

Dvā suparnā sayujā sakhāyā samānaṁ vṛkṣaṁ pariśasvajāte ।
Tayoranyaḥ pippalaṁ svādvattyanaśnannanyo abhicākaśīti ॥

Meaning – On one same tree, two birds are perched, associated as a pair, of these, one eats and tastes the fruit, the other of the pair is that which does not eat, but just looks on.

Muṇḍak Up. 3.1.1

The tree referred here is the tree of *Jīva* and *Ātman*, as a metaphysical metaphor concerning the soul. Two birds, one perched on the branch of the tree, which signifies the body, and eating its fruit, the other merely watching. Two birds associated together, and mutual friends, take refuge in the same tree; one of them eats the sweet fig; the other abstaining from food, merely looks on. The first bird represents a *Jīva*, or individual self, or soul. She has a female nature, being a *Śakti*, energy of God. When the *Jīva* becomes distracted by the fruits (signifying worldly pleasure), she momentarily forgets her lord and lover and tries to enjoy the fruit independently of him. This separating forgetfulness is *Mahāmāya*, or enthrallment, spiritual death, and constitutes the fall of the *Jīva* into the world of material birth, disease, old age and death. The second bird is the *Paramātmna*, an aspect of God who accompanies every living being in the heart while she remains in the material world. He is the support of all beings and is beyond worldly pleasure. Subjectively it is described as entering a completely abstract state of ‘Pure Consciousness’, in which consciousness becomes ‘**Fully Awake within Itself**’,⁷⁷ in a state of ‘Pure Self-Knowledge’.^{78, 79}

Vedanta’s perspective on pure consciousness is that, in that state of consciousness, *the knower knows him/herself directly*: “*the Self knows ItSelf through Itself*”, and “by ItSelf”^{148,149}. In other words, Self-Knowledge is an intrinsic attribute of the Self.⁴⁶ This insight, however, creates an inherent paradox, that demands either its resolution or its rejection: normally, information flows from the object of knowledge, the known, to the knower, so by what kind of information process could “*the knower know him/her self*”? The *Svetasvatara Upaniṣat* says;¹⁴⁹

समाने वृक्षे पुरुषो निमग्नोऽ-नीशया शोचति मुह्यमानः ।

जुष्टं यदा पश्यत्यन्यमीशमस्यमहिमानमिति वीतशोकः ॥

samāne vṛkṣe puruṣo nimagno'-nīśayā śocati muhyamānaḥ ।

juṣṭam yadā paśyatyanyamīśamasyamahimānamiti vītaśokaḥ ॥

Meaning – On the same tree, the individual self (*Jīva*), deluded by forgetfulness of his identity with the divine Self, bewildered by his ego, grieves and is sad. But when he recognizes the other as the Lord worshipped by all and His glory, he becomes free from grief.

Svetasvatara Up. 4.7

These statements from the *Upaniṣat* are supported by Vedanta and Yoga philosophy. One of the most difficult puzzles of human life, self and knowledge has been dealt with by *Bhagavadgītā* in the thirteenth chapter on the Knower, Process of knowing and the Known. *Arjunaḥ* puts the question under three couples of concepts: one pair being based on the concept of *Prakṛti* (nature) of which the counterpart is *Sāṅkhya* (rationalist) Philosophy is the *Puruṣa* (spirit); another pair is based on the concept of what is Lord *Śrī Kṛṣṇa* calls *Kṣetra* (the field), i.e. the perceptual counterpart of actuality.

The third pair belongs to a subject of a subtler philosophical order *jñeyani* (that which is to be known) has its counterpart in *jñānani* (knowledge or wisdom). The field and the knower of the field may be said to belong to the duality implied in *Sāṅkhya* Philosophy. *Bhagavadgītā* enunciates and explains the principle of Self, i.e. Self-science, wherein the Self is of the central value.

Yoga is the common link running through the series of question and answers between Lord *Śrī Kṛṣṇa* and *Arjunaḥ*. The relation between *jñānani* (wisdom) and *jñeyani* (what is to be known) or the knower and the known, is one of the most important discussions in *Bhagavadgītā*. This wisdom is made possible by the equation of the aspects of the Self such as the perceptual and the actual i.e. field (*Kṣetra*) and knower (*Kṣetrajñā*). The dialogue between *Arjunaḥ* and Lord *Śrī Kṛṣṇa* is as follow;¹⁵⁰

अर्जुन उवाच । प्रकृतिं पुरुषं चैव क्षेत्रं क्षेत्रज्ञमेव च ।

एतद्वेदितुमिच्छामि ज्ञानं ज्ञेयं च केशव ॥

Arjuna uvāca ।

Prakṛtiṁ puruṣaṁ caiva kṣetraṁ kṣetrajñameva ca ।

Etadveditumicchāmi jñānaṁ jñeyaṁ ca keśava ॥

Meaning - Arjuna said: Nature and spirit; field and the knower of the field; knowledge (wisdom) and what is to be known; these I should like to know, “O” *Keśavaḥ* (*Śrī Kṛṣṇa*).

Bhagavadgītā. 13.1

Knowledge itself as a proper subject requires to be understood as a systematic whole, as belonging to a definite body of philosophic wisdom. The word jñeyaṁ, what is to be known shows that knowledge is in this case, not merely subjectively presented, but discussed more consciously, positively and objectively. *Śrī Kṛṣṇa* says,

श्रीभगवानुवाच ।

इदं शरीरं कौन्तेय क्षेत्रमित्यभिधीयते ।

एतद्यो वेत्ति तं प्राहुः क्षेत्रज्ञ इति तद्विदः ॥

Śrī Bhagavānuvāca ।

Idaṁ śarīraṁ kaunteya kṣetramityabhidhīyate ।

Etadyo veti taṁ prāhuḥ kṣetrajña iti tadvidaḥ ॥

Meaning - Krishna said: This body, “O” *Kaunteya* (*Arjuna*), is called the field, and he who knows this, thus they call, who know, the knower of the field.

Bhagavadgītā. 13.2

The two different aspects of same neutral and central self, one of the field and one of the knower and their distinction and of the Self, to which both of these belong to. This is evident in the following verse;

क्षेत्रज्ञं चापि मां विद्धि सर्वक्षेत्रेषु भारत ।

क्षेत्रक्षेत्रज्ञयोर्ज्ञानं यत्तज्ज्ञानं मतं मम ॥

Kṣetrajñam cāpi māṁ viddhi sarvakṣetreṣu bhārata ।

Kṣetrakṣetrajñayorjñānaṁ yattajjñānaṁ mataṁ mama ॥

Meaning - And also know Me as the 'knower' of the field in all fields, Bhārata (*Arjunaḥ*); that knowledge (which refers to the knowledge) of the field and the 'knower' of the field, that, in my opinion, is the knowledge.

Bhagavadgītā. 13.3

According to this verse, wisdom consists in rightly understanding the relation between the field and the knower of the field, the actual and the perceptual. The expression '*sarva kṣetreṣu*' (in all fields) implied a delicate paradox inevitable to all truly dialectical forms of philosophical reasoning. The '*Knower*' of the field (the perceiver), suggest a unity as well as Singularity; but when we say he is in every field, it seems to imply multiplicity, the one in many; Unity in Diversity, experienced in pure consciousness. Thus, understand that whatever is elegant, whatever is beautiful and divine to the human mind, that is my presence. The verse in the tenth chapter of *Bhagavadgītā* is; ¹⁵¹

यद्यद्विभूतिमत्सत्त्वं श्रीमदूर्जितमेव वा ।

तत्तदेवावगच्छ त्वं मम तेजोऽशसम्भवम् ॥

Yadyadvibhūtimatsattvaṁ śrīmadūrjitameva vā ।

Tattadevāvagaccha tvam mama tejom'śasambhavam । ।

Meaning – Know that all beautiful, glorious, and mighty creations, spring from a spark of My creative cosmic intelligence and splendour, that is my Creativity.

Bhagavadgītā. 10. 41

Whatever entity is unique in perfected value, in grace or in radical strength, understand that to have manifested itself from a (mere fractional) spark of 'My Brilliance'. Any glorious or beautiful existence should be understood to be but a fragmental manifestation of *Śrī Kṛṣṇa's* opulence, whether it be in the spiritual or material world. Anything extraordinarily opulent and creative should be considered to represent *Śrī Kṛṣṇa's opulence*.

Pātāñjala yoga Sūtra describe the way to attain such a creative flow state by the experience of pure consciousness in terms of '*Dhyāna*', the process of allowing the awareness to expand to infinity as the attention on a specific point of focus, *Dhāraṇā*, is relaxed to attain *Samādhi*.

The first *Pāda* emphasizes the importance of attaining this class of states, ‘*Samādhi*’, in which pure consciousness can be experienced; and with increasing levels of clarity, as ‘*Dhyāna*’ style meditation is regularly continued.

The *Yogasūtra* only partially describe the dynamic structure of this state: in *Pāda* 3, *Samādhi* is defined as the state where ‘the mind is as if empty of content’, while the transformation ‘from a distracted to an undistracted state’, *Samādhi Parīṇāma*, is described in the previous section. .

2.6 THE MAHĀVĀKYA

The first experience of pure consciousness, one without any object of experience, is often confusing to practitioners of meditation. In response to disciples’ questions, Yoga Masters traditionally quote great statements from the *Upaniṣat*, the *Mahāvākya*. Commentaries on the *Sanskṛta* literature list five principal *Mahāvākya*, which are given in **Table 2.2**. These present true cognitions concerning the state of *Brahman*. They include: ¹⁷

तत्त्वमसि

Tat Vam Asi

Meaning - That thou art

Chāndogya Up. 6.8.7

The context in which this is usually quoted is a section of the *Chāndogya Upaniṣat*, where the young *Śvetaketu* is questioned by his father *Uddālaka Āruṇi*, if he has been exposed to that knowledge, by which all other knowledge is understood and known. On replying that he has not learned it, *Śvetaketu* receives repeated instruction in the knowledge of the source of every aspect of creation, as ‘That’, at the end of each, *Uddālaka Āruṇi* states the *Mahāvākya*, “*Tat Tvam Asi*” which means, “That Thou Art, *Śvetaketu*”, i.e. ‘the Absolute basis of all existence is also the inexpressible, absolute basis, ‘*Tat*’, of your own existence.’¹⁸

अहं ब्रह्मास्मि

Ahaṁ Brahmāsmi

Meaning - I am Brahman

Bṛhadāraṇyaka Up. 1.4.10

This says that the inmost consciousness of the individual is identical to the supreme level of 'Divine Being' that underlies relative and subtle creations. The *Upaniṣat*, teach that our own Self is the true being underlying Divinity that, it is the presence of the absolute within our heart and the entire universe. ¹⁵²

अयमात्म ब्रह्म

Ayamātma Brahma

Meaning - The Self is Brahman

Māṇḍūkya Up. 1. 2

This *Mahāvākya* states the person's own 'Self' experienced within is identical to the Absolute Being of all that exists, but it does so in a less direct manner than the first *Mahāvākya*. Not only is our Self the same as the Self in all beings, it is the Absolute. ¹⁵³

प्रज्ञानं ब्रह्म

Prajñānaṁ Brahma

Meaning - Cosmic Creative Intelligence is *Brahman*

Ṛgveda, Aitareya Up. 5.3

This indicates that the Divine intelligence is present within us and has the power to return us to the Divine. Our inmost intelligence is that supreme intelligence through which we can merge into the Absolute. ¹⁵⁴

सोऽहं

So'haṁ

Meaning - He am I

Isavasya Upaniṣat 5.16

This shows the identity of the self with the Divine Lord is inherent within the natural movement of our breath. "So" is the natural sound of inhalation, "'hanii" of exhalation. The *Prāṇaḥ* itself contains that identity inherent within it.

Table 2.2 – Summary of Mahāvākya

Sr. No.	Mahāvākya	Meaning	Upaniṣat	Veda
1	प्रज्ञानं ब्रह्म Prajñānaṁ Brahma	Prajñānaṁ is Brahman	Aitareya V.3	Ṛgveda
2	अहं ब्रह्मास्मि Ahaṁ Brahmāsmi	I am Brahman, or I am Divine	Bṛhadāraṇyaka I.4.10	Śukla Yajurveda
3	तत्त्वमसि Tat Vam Asi	That thou art	Chāndogya VI.8.7	Sāmaveda
4	अयमात्म ब्रह्म Ayamātma Brahma	This Ātman is Brahman	Māṇḍūkya I. II	Atharvaveda
5	सोऽहं So'haṁ	He Am I	īśāvāsya V.16	Ṛgveda

Table 2.2 summarizes the five important 'Mahāvākya' from the major *Upaniṣat* connecting the individual self to the *Ātman*, or Universal Self.

All these *Mahāvākya*, great statements, represent cognitions of the highest truth, cognized from and about the state of pure consciousness, the 'Self' or *Ātman*. They represent the highest creative cognitions in the Vedic literature, where the Seers, *Rṣis*, cognize ideas that are key to attaining liberation from the world of form, in which their souls had been entangled. These statements of realization are key to attaining liberation from it. In the *Prakaraṇa Grantha*, like *Brahmasūtra Bhāṣya*, *Viveka Cūḍāmaṇī*, *Tatvabodha* and *Ātmabodha*, *Adi Saiṅkarācārya* distinctly specifies the abstract forms of Self, *Ātman* and *Brahman*, merging into the infinity from *Jīva* to *Śiva*, from *Ātman* to *Paramātma*, and from the microcosm to macrocosm.

In accordance with the 5.16, he emphasized that these are states of *Pūrṇa*, Fullness or Completeness. That is consistent with the perspective of the *Prāṇamaya Koṣa*, in which unrestricted Fullness of flow of *Prāṇaḥ* is enabled; ¹⁵⁵

ॐ पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते ।

पूर्णस्य पूर्णमादाय पूर्णमेवावशिष्यते ॥

ॐ शांतिः शांतिः शांतिः ॥

om pūrṇamadaḥ pūrṇamidaṁ pūrṇāt pūrṇamudacyate ।
pūrṇasya pūrṇamādāya pūrṇamevāvaśiṣyate ।।
om śāntiḥ śāntiḥ śāntiḥ ।।

Meaning - This is Full, That is Full, From Fullness, Fullness Emerges, When this fullness is removed from that fullness, fullness alone remains.

Iśopanīṣat 1.1

In contrast, *Nāgārjuna*, the great scholar and exponent of *Buddhist* philosophy, discussed experiences from deep meditation in terms of the concepts, *Anātma* and *Śūnya*,¹²² ‘No-Self’ and ‘Emptiness’. We may consider these to be characterizations of the same experience from a different perspective. In other words, the *Śūnya* ‘emptiness’, represents a characterization of the experience of *Ātman* from the perspective of the *Manomay Koṣa* and *Vijñānamaya Koṣa* since the mind and intellect have no content – they experience Emptiness.

2.7 THE PAÑCAKOṢĀḤ AND THE MAHĀKĀRAṆA DEHAḤ

The *Manomay Koṣa* apprehends what is to be said, before the *karmendriya* of the mouth and tongue express it through the *Prāṇamaya* and *Annamaya Koṣa*. The mental level of speech in turn arises from a more intellectual level of the ideas that the person wishes to express, the ideational level of *Paśyanti*, the functioning of which can therefore be attributed to the *Vijñānamaya Koṣa*, the *Koṣa* that embodies the power of the intellect to organize and manipulate ideas.

As we have seen while discussing forms of meditation in section 2.4 above, the Vedic system names several levels of the mind, the *Manaḥ*, *Buddhiḥ*, and *Ahaṅkāra*, together with the *Citta* that constitutes the underlying driving force behind all of a person's actions. These are regarded as linked to four independent vehicles for conscious experience, or *Koṣa* that exist separately from the gross physical body. Their existence can be cognized by Yogis with abilities like *Ṛtambharā Prajñā* developed through prolonged practice of meditation. These 'bodies' are generally classified variously as 'Subtle bodies' (*Sūkṣma śarīra*) and 'Causal bodies' (*Kāraṇa śarīra*), and act as overall 'coverings' of the Self, or *ātman*, together with the gross physical body, these three bodies forms Vedanta model of Self known as the *Pañcakoṣāḥ*, explained in *Taittirīya Upaniṣat* (Refer Figure 2.1).

Moving from the grossest to the subtlest, the *Pañcakoṣāḥ* consist of the *Annamaya Koṣa*, the gross physical body that everyone perceives through the senses, and then the *Prāṇamaya Koṣa* the 'body' of life-force subtle energy connected to the 'life-breath' enhanced by Yoga *Prāṇamaya* exercises. The *Prāṇamaya Koṣa* is held to consist of the five *Prāṇaḥ* and five subordinate, *Upaprāṇāḥ*, (Refer Figure 2.2) together with the five *karmendriya*, the organs of action. Next come the subtle bodies connected to *Manaḥ*, and *Buddhiḥ*, the *Manomay Koṣa* and *Vijñānamaya Koṣa*, respectively, which are said to form aspects of the transmigrating soul, and which are connected to emotional and intellectual functions respectively. The *Manomaya Koṣa* is said to contain two components, the *Manaḥ*, or information receptacle for experience, and the five *jñānendriya*, the senses which endow the mind with the ability to perceive. According to *Adi Saṅkarācārya Tatvabodha*, the *Vijñānamaya Koṣa* has two components, the *Buddhiḥ* and the *karmendriya*, the organs of action, which connect to both this *Koṣa* and the *Prāṇamaya Koṣa*. The fifth *Koṣa*, the *Ānandamayamaya Koṣa* is known as the *Kāraṇa śarīra*, or causal body. It is considered 'causal', because it motivates action through the other *Koṣa*. *Paramahansa Yogānanda*¹⁵⁶ states that it is point-like, meaning that it is formless. It carries the level of little ego, or *Ahaṅkāra*, responsible for maintaining the sense of having a separate identity. If actions are impure or done for selfish motives, the *Ānandamayamaya Koṣa* is clouded or even blocked, e.g. by *Citta-vṛttayaḥ*, and the full light of consciousness cannot shine through.

Figure – 2.1 – The Pañcakoṣāḥ Model in Taittirīya Upaniṣat



Figure 2.1 depicting the five sheaths, Annamaya, Prāṇamaya, Manomaya, Vijñānamaya and Ānandamayamaya Koṣa, and extending beyond them takes the individual self to the higher Self and God Consciousness, by the practice of Aṣṭāṅgayoga.

In this way, the *Taittirīya Upaniṣat* lists five bodies covering the highest 'Self' or *ātman*, the *Ānandamayamaya Koṣa*, *Vijñānamaya Koṣa*, *Manomay Koṣa*, *Prāṇamaya Koṣa*, and the *Annamaya Koṣa*. Of these, the earlier *Koṣa* carry higher levels of creativity; in fact the *Ānandamayamaya Koṣa* carries by far the highest capacity for creative cognition, which may explain why those with creative capacities find their creative work so fulfilling – they gain greater experience of *Ānanda*, infinite bliss and freedom, as mentioned in the Fig. 1.1.

Fig 2.2 – The Functioning of Prāṇaḥ

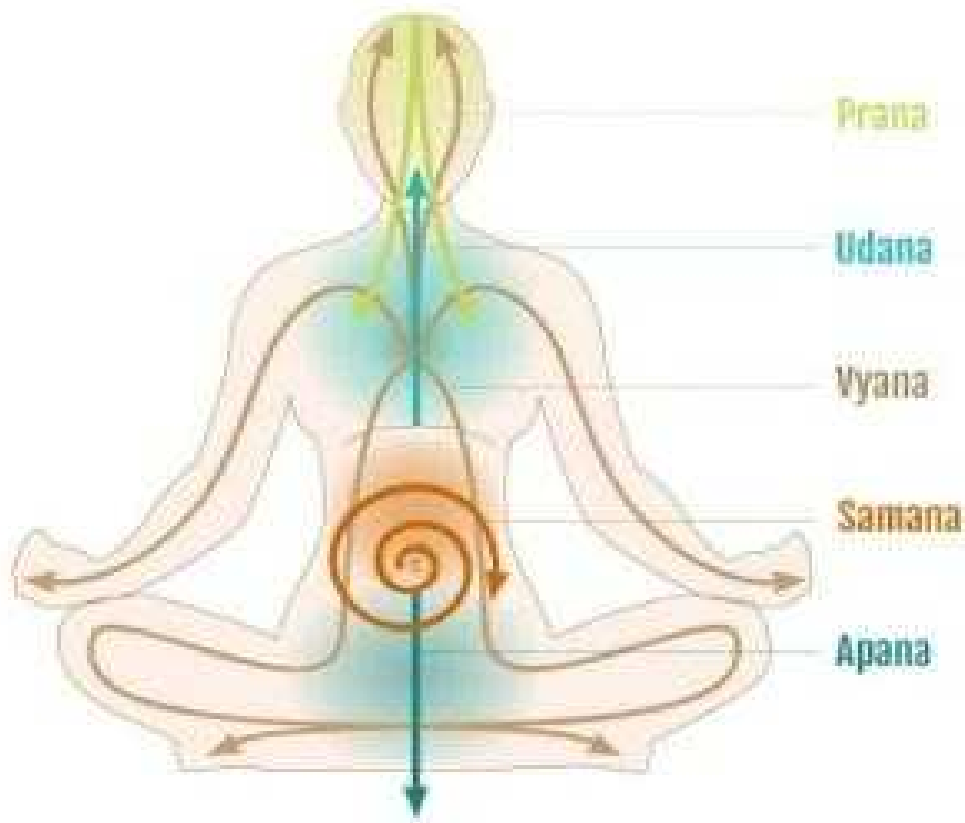


Figure 2.2, depicting the functioning of five kinds of *Prāṇaḥ* and *Upaprāṇāḥ* and their co-relation to the five *karmendriya*, i.e. five body organs.

Table 2.3, below, summarizes the model of *Pañcakoṣāḥ* and subjective structure of Self, unfolding the different layers of self within the three bodies; i.e., from gross (*Sthūla*) to subtle (*Sūkṣma*) to causal (*Kāraṇa*) and the dimensions of *Pañcakoṣāḥ*; its correlates to the physical and the neuro-biological dimensions self; which leads to higher states of realisation, freedom, bliss and creative cognition.

Table 2.3 – Pañcakoṣāḥ Model and Structure Subjective Self

Sr. No.	Koṣa	Bodies	Self	Levels of Mind
1.	<i>Annamaya</i>	Sthūla / Gross	Personality	Ahañkāra
2.	Prāṇamaya	Sūkṣma /Subtle	Narrative	Citta
3.	Manomaya	Sūkṣma /Subtle	Auto	Manaḥ
4.	Vijñānamaya	Kāraṇa / Causal	Proto	Buddhiḥ
5.	Ānandamayamaya	Mahākāraṇa/ Bliss	Core	Antahkarana

Table 2.3 presents the five sheaths. *Pañcakoṣāḥ*, encasing the Self, *Ātman*, giving the English terms for the bodies, and the aspect of self from modern neuroscience, to which each refers.

The aim of Table 2.3 is to bridge the gap between western concepts of self, as understood in modern neuroscience, in the works of Antonio Damasio, such as ‘*Self comes to Mind*’, and the Vedic concepts of Soul, Self and levels of mind, and their functional associations with the bodies known as *Pañcakoṣāḥ*. Once these bodies (or sheaths) are fully blossoming, full potential of creative cognition is attained. Natural blossoming happens from one *Koṣa* to the next *Koṣa* leading to higher creativity, higher freedom, and higher bliss, which gets merged into the higher level *Koṣa* and finally established in Self, (**Refer Fig. 1.1.**), beyond the *Vijñānamaya* and *Ānandamayamaya* *Koṣa*. These in turn become expanded into the higher levels of spaces of the *Cidākāśaḥ* and *Mahākāśaḥ*. At that time, when a person is placed in the highest spaces named above, the full expression of creativity happens. This expression of creativity is also referred to in the *Bhagavadgītā* as the Cosmic Self. In the *Bhagavadgītā*, Lord *Śrī Kṛṣṇa* says whatever you see as pleasant, elegant, and beautiful, that is my presence that is the presence of Lord *Śrī Kṛṣṇa*, the presence of the Universal Self. ¹⁵⁰

ज्योतिषामपि तज्ज्योतिस्तमसः परमुच्यते ।

ज्ञानं ज्ञेयं ज्ञानगम्यं हृदि सर्वस्य विष्ठितम् ॥

jyotiṣāmapi tajjyotistamasasḥ paramucyate ।

jñānaṁ jñeyaṁ jñānagamyam hṛdi sarvasya viṣṭhitam ।।

Meaning – Then one gets established in the Self, the source of light in all luminous objects. beyond the darkness of matter and is un-manifested, is cosmic intelligence, knowledge, the goal of knowledge and is situated in everyone's heart.

Bhagavadgītā. 13. 18

Once the individual self establishes in the Cosmic Intelligence, he accesses luminous effulgence, and everything can then be illuminated by this cosmic consciousness. This is confirmed in the Vedic literature, ‘*Āditya varṇani tamasaḥ parastāt*’, he is now eternally luminous, situated in everyone’s heart as supreme teacher and controller.

2.8 THE ĀKĀŚĀḤ: SPACE FOR CREATIVE COGNITION

Yajnavalkya in *Bṛhadāraṇyaka Upaniṣat* expresses that the intelligence, *Prajñā*, creative intelligence is accessed by learning about the Self alone. This has to be practiced by the skill of Wisdom i.e., *Prajñā* and *Buddhiḥ*; by becoming thought free. Further he reveals the pathway of getting into *Prajñā* residing specific spaces, which he distinctly calls *Ākāśāḥ*. *Yajnavalkya* tells *Janaka* that *Cidākāśāḥ*, the nature of such space is ‘*Shabda Brahman*’ whose primary form is ‘Om’, the inmost of the Consciousness, which gives *Prajñā* (knowledge) when chanted, this is the Universal Self in the cavity of heart, ‘*hriday*’ behind all creative intelligence, witnessed in the experience of the ‘*Anāhata*’ sound. *Pātañjala Yogasūtra* states the word which expresses the Self is ‘Om’, i.e. ‘*Tasya Vācakaḥ Praṇavaḥ*’. This cognition of *Maharṣi Bhṛgu*, is known as the ‘*Bhargavi Vāruṇi Vidyā*’. Lord *Varuṇaḥ*, represents knowledge derived from being established in the Self or *Svarūpaḥ*, the supreme space, *Mahākāśāḥ*. As he states in the *Taittirīya Upaniṣat*, “He who knows this is also established in that Supreme State of Cognition.” This raises the question of Which State is Supreme? Which culminates in the Supreme *Brahman*?

Vedānta mentions three spaces. 1. *Cittākāśaḥ*, 2. *Cidākāśaḥ*, and 3. *Mahākāśaḥ*. We set this scene, against the Gross Space containing all gross, physical objects, the *ākāśaḥ*, the mental space, which contains the world of thought, *Cittākāśaḥ*, and the space of pure intelligence, *Cidākāśaḥ*, which makes possible all cognition and through it, all cognized existences, both gross and subtle, from the *Ajñā Cakra* and *Sahasrāra Cakra*. *¹

In the above, by supreme space is meant Brāhman or the *Cidākāśaḥ* – the residence of Supreme Creative Intelligence. This Space is also the ‘Cavity of the Heart’, where *Brahman* is meditated upon in the form of a Flame, in which its spiritual effulgence is realised and witnessed both as creative insight and its expressions. ^{114,124,138}

It seems to me that in the *Purāṇa*, this is the frontier of Lord *Gaṇeśaḥ*. lord of knowledge and creativity, in the frontal brain, while his companions *Ridi* and *Siddhi* represent his insights coming from the left brain, giving rise to scientific creativity, and the right brain, giving rise to artistic creativity, respectively. The Vedic understanding of knowledge, cognition and creativity is summarized in the following *ṛca*:¹⁵⁷

ऋचो अक्षरे परमे व्योमन्यस्मिन्देवा अधि विश्वे निषेदुः ।

यस्तं न वेद किमृचा करिष्यति य इत्तद्विदुस्त इमे समासते ॥

Ṛco akṣare parame vyoman yasmin devā adhiviśve niṣeduḥ ।
yastannavedakimṛcākarīṣyati ya ittaḍvidusta imesamāsate ।

Meaning - Knowledge is structured in Consciousness, in which reside the impulses of creative intelligence.

Rig Veda 1.164.39

¹ * Svāmī Mādhavānanda, Swaroopyog Pratishthan Pune (SYP), personal training and in private communication on Science of Meditation, Natha Sampradaya, with first author.

The *Garbhopaniṣat*¹⁵⁸ and the *Praśnopaniṣat*¹⁵⁹ state that in the macroscopic aspect i.e. personal self, the *Virāja* and *Hiraṇyagarbha* i.e., the Cosmic Self, constitute the aggregate of all physical and mental creative consciousness and awareness. The verse's implication is that, by accessing the field of pure consciousness, creativity can be activated. Any technique, which enhances one's capacity to experience pure consciousness, or clarifies one's experience of that state, also enhances one's capacity for creative cognition and its expression.

2.9 COGNITIONS OF PERSONAL SELF AND COSMIC SELF

When we talk about cognitions of personal self and levels of mind, these constitute the basis for understanding the nature of individual self as a soul, *Jīva*, which is made up of certain subtle bodies. As discussed above, three *Pañcakoṣāḥi* contribute to the soul's overall structure, the *Manomay*, *Vijñānamaya*, and *Ānandamayamaya Koṣa*. These may be considered to map onto the *Ajñā Cakra*¹⁰ which in the Vedic system can be looked upon as representing the central nervous system (See Figure 2.1). In neuroscience, the Self - Referential Network with its Cortical Midline Structures; and the Default Mode network, appear to play roles in the functioning of the *Ajñā Cakra*, which can be regarded as a model of the central nervous system in *Vedānta*, where it is linked to the *Kuṇḍalinī*^{160,-162}

In *Vedānta*, it is called the *Ajñā Cakra* centre, located in the pre-frontal region; and the parietal centre i.e. *Sahasrāra Cakra* can similarly be attributed to functioning in the dynamics of fronto-parietal-temporal regions of the brain¹⁶³ These parallels are supported by their being the most critical brain regions for generation of consciousness and control of conscious activity.^{160 -162} In Chapter 3, we shall see how neuroscience names a specific network for this, the self- referential network with its cortical midline structures and default mode network. *Vedānta* understands it as the *Ajñā Cakra*, located in the frontal lobe, and the *Sahasrāra Cakra* in the parietal lobe.

Figure 2.3 – Meditation Practice, Regions of Interests (ROI) and Energy Flow in the Reticular Activating System

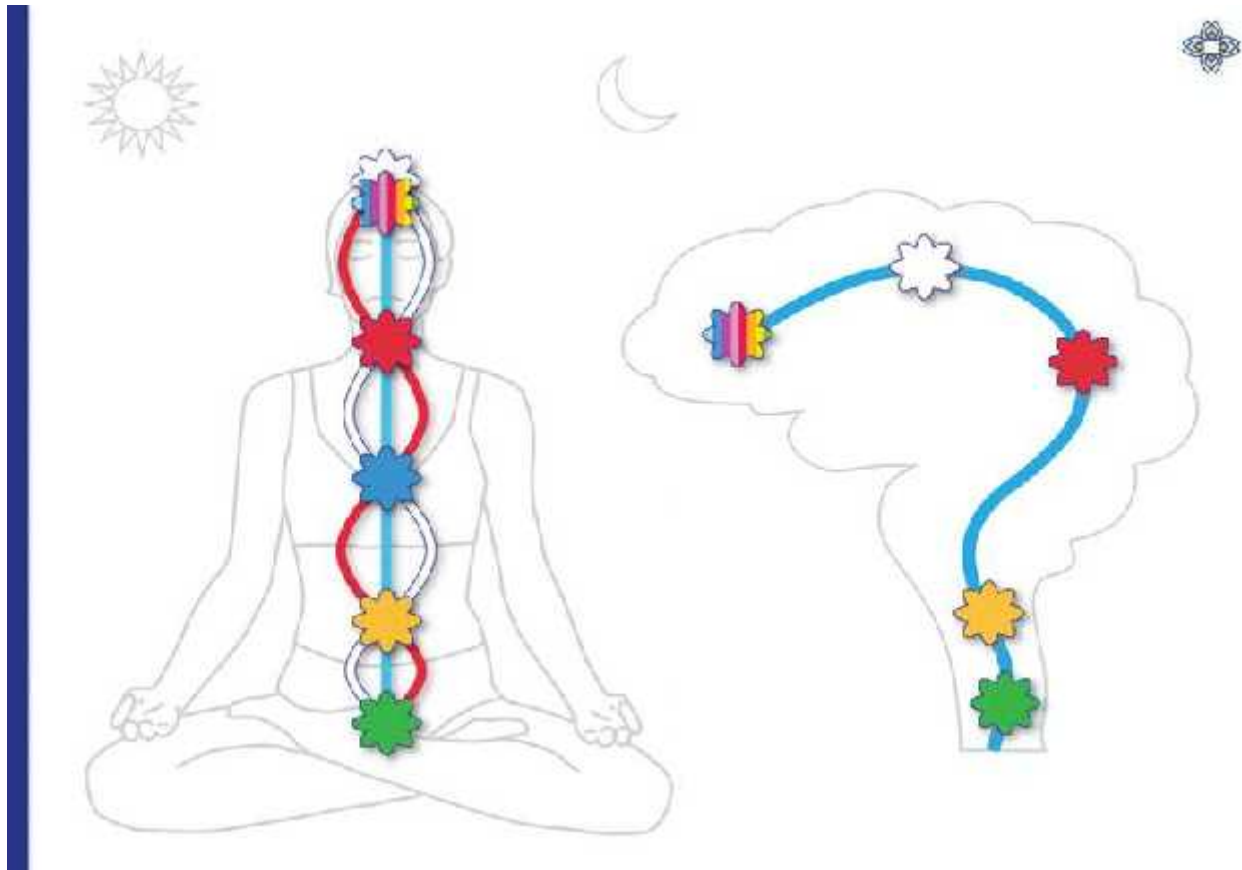


Figure 2.3 - depicting the flow of energy, balance and optimal harmony within the two Nadis i.e., Ajñā Cakra & Sahasrāra Cakra, m(PFC) & Parietal cortex in modern neuroscience, see Chapter. 3 for details.

We talk about ‘cognitions’ of personal self and levels of mind, constituting the individual self, which is made up of the different subtle bodies, some of which constitute the Jiva. These map onto the *Ajñā Cakra*. By drawing on these parallels, this study aims to bridge this gap between the eastern and western models of the central control of the body-mind system, the *Pañcakoṣāli* including the *Prāṇamaya Koṣa* and the *Kuṇḍalinī* system, on the one hand, and the Central Nervous System including the brain, with its various lobes divided into the different brain cortices, on the other. The power of these systems, from whichever perspective you view them, is their power of self-knowledge, and self-reference.

The Vedic sciences state such abilities most compactly in the words of *Adi Saiṅkarācārya*, in his original texts, *Ātmabodha* and *Tatvabodha*, describing the completely abstract state of ‘Pure Consciousness’, in which consciousness becomes ‘**Fully Awake within Itself**’, in a state of ‘**Pure Self-Knowledge**’; *Ramaṅa Maharṣi* describes such highest state in the most simple words as, ‘*Suṣupti in Jāgrat Avasthā*’.¹⁶⁴ In *Ātmabodha*, *Adi Saiṅkarācārya* states: “The Self appears to be finite due to lack of understanding and experience. As these develop, it is recognized as infinite and absolute. The Self reveals itself by itself – like the sun when the clouds are blown away”.

Similarly, the great modern sage, *Ramaṅa Maharṣi*¹¹⁴ stated, in answer to a question concerning how the Self is to be known, that the subject-object relationship must be transcended until only the seer (*dhyāka*) remains knowing ItSelf, within the cavity of the heart. *Vedānta*’s perspective on pure consciousness is that, in that state, *the knower knows him/herself directly*: “the Self knows ItSelf through Itself”, and, “by ItSelf”.^{148,149} In other words, Self-Knowledge is an intrinsic attribute of the Self.^{13, 14}

This insight creates an inherent paradox that demands either its resolution or its rejection: normally, information flows from the object of knowledge, the known, to the knower, so by what kind of information process could “*the knower know him/her self*”? This will be explored in Chapter 3, which will present a scientific model of “the Self knowing Itself”; a process with a completely abstract nature, with no form (*āgama*) or quality (*Nirguṇa*).

2.10 SUMMARY

The whole Vedic way of life aimed to develop full capacity of the right brain and creative cognition. In this chapter, we have tried to integrate the model of creativity from eastern philosophy with that of western brain science of the central nervous system. This was achieved mainly by connecting the concept of Self, individual and cosmic, levels of mind, gross, subtle and causal bodies, (*Sthūla, Sūkṣma, Kāraṇa*), the various kinds of *ākāśaḥ* (*Cittākāśaḥ, Cidākāśaḥ and Mahākāśaḥ*), with the meditation process of *Dhāraṇā, Dhyāna* and *Samādhi*, described in *Yoga Sūtra*.

First identified during *Samādhi* in *Turīyā*, pure consciousness, the *Self*, *Ātman*, is beyond feelings and emotions. Its form, *Svarūpaḥ*, is of the nature of pure bliss. The final realization is that ‘*Ātman, is Brahman*’, the Ultimate Reality, lying behind all appearances. Traditional texts on Creative Cognition, like *Yoga Sūtra Pāda* III, with their profound knowledge were fully examined for means to enhance the full potential of Creative Cognition. Those means enable all on the path to enliven *Suṣupti* qualities lying dormant in *Smṛti* form, which is expressed as an ‘Awakening’⁶¹ and so experience and witness the infinite ocean of consciousness, and derive therefrom information for their creative pursuits. This expresses the journey of the lower, individual personality self towards realisation and enlightenment through the process of cognition of the Higher Self, which makes life complete and fulfilling, as mentioned by Lord *Śrī Kṛṣṇa* in *Bhagavadgītā* as the “*Art of Creative Living*”. The journey to realizing Self develops a comprehensive sense of self, with several components: Exploration of our inner Being through meditation, which deepens understanding of experiences of its Nature; developing conscious Creative Intelligence, which activates creativity in daily life; Integration of heart and mind, by developing EEG coherence between right and left hemispheres; enabling feelings and reason to function in harmony, and coordinating visual and linguistic (auditory) senses.

Later, we reviewed *Pūrṇa*, the Vedic concept of fullness and completeness, with its Infinite Freedom, Expansion and Bliss, and how they are experienced through the *Prāṇamaya Koṣa* and expansion into *Ānandamayamaya Koṣa*, as unrestricted fullness of the flow of *Prāṇaḥ* itself. As our research focus is both eastern and western, it enabled the process of cognition and its corresponding brain mechanics to be presented from the perspective of the process of meditation, and how it is fundamental to increasing creativity.

The model leads to various stages of realization, in step by step manner and creative cognition described in different schools of *Vedānta* linking the eastern and western sciences of self and self realization.

The mechanics of creativity is seen to be that given in *Yoga Sūtra, Pāda I.47-48, Ṛtambharā Prajñā*, in which intuitive apprehension of right knowledge arises. By identifying EEG conditions for increased creativity, when actions required in any given situation arise in the mind, brain states of *Ṛtambharā Prajñā* may be identified. Means to enliven and optimize this most important cognitive faculty should be included in modern Indian education at its highest potential excellence and creative frontier, for both youth and adults. This will channelize the creative energies of youth to be constructive and make the nation competitive.

The present chapter has studied what is involved in creative cognition from the perspective of Vedanta and the developing Science of Self. The next chapter will explore what these creative states are from the perspective of brain function; the current chapter attempted to construct a model to integrate the central nervous system (CNS) and the Kundalini, mainly the efficient channelization of the flow of energies between the *Ajñā Cakra*, located in the frontal lobe, and the *Sahasrāra Cakra* in the parietal lobe, see (fig 2.4 and 2.5) as below, this model is explained in the Chapters 3 and 8, in detail.

Fig 2.4 – Ascending and Descending RAS - Mapping of Important Regions in Brain, 3 A’s of Meditation and Attention, Awareness and Arousal

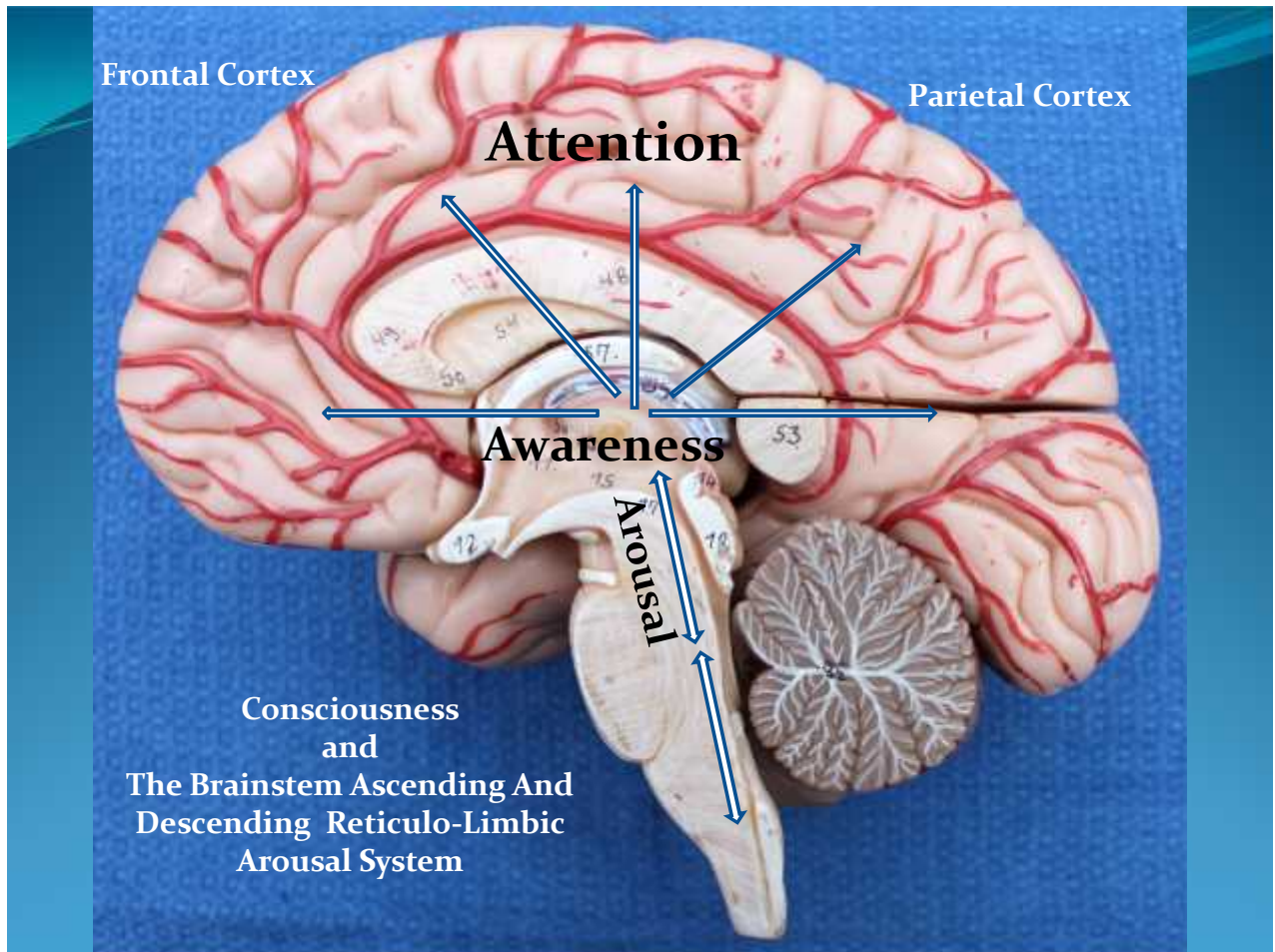


Figure 2.4 - depicts the regions & components of Consciousness i.e. attention, awareness and arousal and main areas involved in the process, forming the ascending and descending reticulo-limbic arousal system (RAS), which is parallel to the Vedanta ‘Theory of Meditation depicted in the next slide,(fig 2.6)

Fig 2.5 - Mapping of Important Regions in Brain, 3 A's of Meditation and Dharana, Dhyana and Samadhi

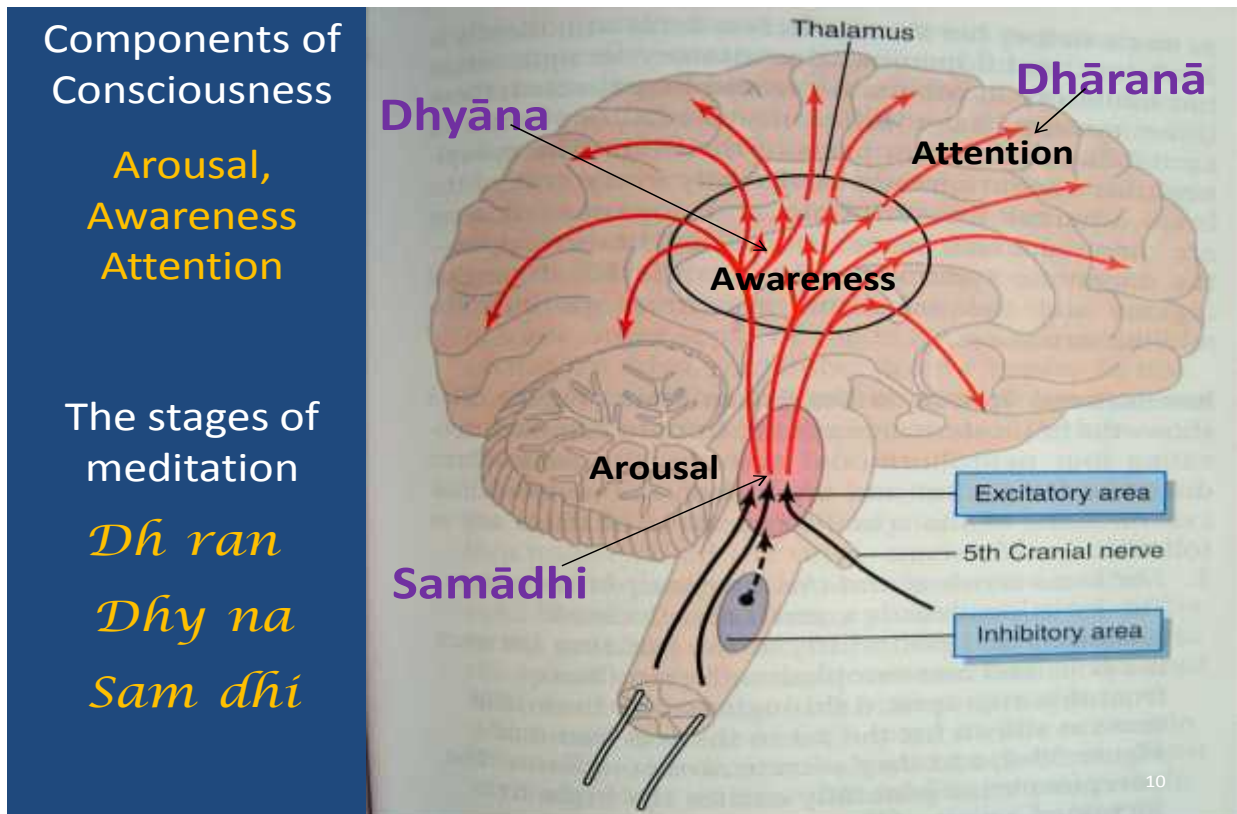


Figure 2.5 - depicts the regions of interest (ROI), in central nervous system in modern neuroscience & Vedanta giving the main components of Consciousness, stages in meditation, Dhāraṇā, Dhyāna & Samādhi, along with the 3A's of meditation.